THE ARCHAEOLOGY OF THE MYCENAEAN

ACHAEA

VOLUME I. TEXT

Thesis submitted to the University of London for the degree of Doctor of Philosophy

by

Athanassios John Papadopoulos

- 1972 -
Abstract of the thesis
List of maps in the text
List of catalogues, diagrams and charts
List of figures in the text
List of abbreviations
Acknowledgments
Introduction
TO MY FATHER
AND
TO THE MEMORY OF MY MOTHER
Terpenes and Geographical Features
Prehistoric Sites in Schles - Mindo
Settlements - Architecture
Roads
Settlements
Artefacts
Commentary and General Conclusions
Bibliography
List of Plates
# CONTENTS

A comprehensive study of the archaeological remains of the Mycenaean Achaea is the central object of this thesis. The entire work is divided into three main parts: seven chapters of which two chapters are devoted to a detailed reconstruction of the topography, providing the basis for the study of the topographical section. The prehistoric sites of Achaea are the main subject of the first part, the part on the prehistoric sites of Achaea, and the part on the topographical section (Part Three), the three chapters which follow, deal with the prehistoric sites of Achaea.

## Introduction

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Topography and Geographical Features</td>
<td>1</td>
</tr>
<tr>
<td>II</td>
<td>Prehistoric Sites in Achaea - Finds</td>
<td>4</td>
</tr>
<tr>
<td>III</td>
<td>Settlements - Architecture</td>
<td>53</td>
</tr>
<tr>
<td>IV</td>
<td>Tombs</td>
<td>66</td>
</tr>
<tr>
<td>V</td>
<td>Pottery</td>
<td>113</td>
</tr>
<tr>
<td>VI</td>
<td>Artefacts</td>
<td>431</td>
</tr>
<tr>
<td>VII</td>
<td>Summary and General Conclusions</td>
<td>502</td>
</tr>
<tr>
<td></td>
<td>Bibliography</td>
<td>550</td>
</tr>
<tr>
<td></td>
<td>List of Plates</td>
<td>572</td>
</tr>
</tbody>
</table>
ABSTRACT OF THE THESIS

A comprehensive study of the archaeological remains of the Mycenaean Achaea is the central object of this thesis.

The whole work is divided into three main parts and seven chapters. Of the opening two chapters of Part One the first gives a brief account of the topography and geographical features of the district, while the second describes the distribution of prehistoric sites, paying special attention to the sites where Mycenaean material is most abundant.

The next four chapters are devoted to a detailed analysis of the material. A large part of this section (Part Two) is taken up with the discussion of the Mycenaean pottery. I do not apologize for this, as the ceramic material (which is quite considerable) has never before been adequately published.

In the seventh concluding chapter (Part Three) the main conclusions are summarized and a reconstruction of the situation existing in Achaea during the Late Bronze Age is attempted.

Much of the material is unpublished. In particular what I have presented for the first time is as follows:
I Over thirty new prehistoric sites;
II A great number of new chamber tombs and at least three new kinds of other tombs (cist, tumulus, intramural) either not known or never studied in detail before;
III Almost twice as many vases as those known before (520-961);
IV Many small finds and bronze objects, either entirely unknown or treated very summarily before.

A quite new picture of Achaea then emerges, which is to a great extent different from that given by most of the previous researchers.
<table>
<thead>
<tr>
<th>List of Maps in the Text</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sketch map of the Paralimni area</td>
<td>9</td>
</tr>
<tr>
<td>Sketch map of the Kangadhi area</td>
<td>9</td>
</tr>
<tr>
<td>Sketch map of the Kato Achaea plain</td>
<td>13</td>
</tr>
<tr>
<td>Sketch map of the Patras area</td>
<td>28</td>
</tr>
<tr>
<td>Sketch map of the Chalandritsa area</td>
<td>28</td>
</tr>
<tr>
<td>Sketch map of the Leontion, Vrisarion, and Manesi areas</td>
<td>33</td>
</tr>
<tr>
<td>Sketch map of the Kalavryta area</td>
<td>37</td>
</tr>
<tr>
<td>Sketch map of the Tritaia area</td>
<td>37</td>
</tr>
<tr>
<td>Sketch map of Akarnes</td>
<td>43</td>
</tr>
<tr>
<td>Sketch map of the Kamarai area</td>
<td>43</td>
</tr>
<tr>
<td>Sketch map of the Aigion area</td>
<td>51</td>
</tr>
<tr>
<td>Sketch map of the Aigeira and Akrata areas</td>
<td>51</td>
</tr>
<tr>
<td>Prehistoric Achaea</td>
<td>52</td>
</tr>
<tr>
<td>Distribution map of EH sites in Achaea</td>
<td>538</td>
</tr>
<tr>
<td>Distribution map of MH sites in Achaea</td>
<td>539</td>
</tr>
<tr>
<td>Distribution map of LH.I-II sites in Achaea</td>
<td>540</td>
</tr>
<tr>
<td>Distribution map of LH.IIIA sites in Achaea</td>
<td>541</td>
</tr>
<tr>
<td>Distribution map of LH.IIIB sites in Achaea</td>
<td>542</td>
</tr>
<tr>
<td>Distribution map of LH.IIIC sites in Achaea</td>
<td>543</td>
</tr>
<tr>
<td>Distribution map of SM sites in Achaea</td>
<td>544</td>
</tr>
<tr>
<td>Distribution map of LH sites in Achaea</td>
<td>545</td>
</tr>
<tr>
<td>Distribution map of PG sites in Achaea</td>
<td>546</td>
</tr>
<tr>
<td>Map to show the assumed life-span of occupation in Achaean prehistoric sites</td>
<td>547</td>
</tr>
<tr>
<td>Map to show the external relations of the Mycenaean Achaea</td>
<td>549</td>
</tr>
<tr>
<td>Colour map of Achaea (Placed in a separate envelope at the end of Volume 1)</td>
<td></td>
</tr>
</tbody>
</table>
# List of Catalogues, Diagrams and Charts

## I Catalogues

<table>
<thead>
<tr>
<th>Catalogue</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalogues of chamber tombs</td>
<td>105-110</td>
</tr>
<tr>
<td>General catalogue of tombs and chronology</td>
<td>111-112</td>
</tr>
<tr>
<td>Catalogue of EH and MH pottery</td>
<td>123</td>
</tr>
<tr>
<td>Catalogue of LH pottery</td>
<td>401-424</td>
</tr>
<tr>
<td>Catalogue of PG pottery</td>
<td>430</td>
</tr>
<tr>
<td>Catalogue of artefacts</td>
<td>496-501</td>
</tr>
</tbody>
</table>

## II Diagram

<table>
<thead>
<tr>
<th>Diagram Description</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagram to show the assumed life-span of occupation in</td>
<td>534-537</td>
</tr>
<tr>
<td>Achaean prehistoric sites</td>
<td></td>
</tr>
</tbody>
</table>

## III Charts

<table>
<thead>
<tr>
<th>Chart Description</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chart to show the frequency of patterns in LH pottery</td>
<td>425-427</td>
</tr>
<tr>
<td>Chronological table of LH pottery</td>
<td>428-429</td>
</tr>
<tr>
<td>Chart to show the external relations of the Mycenaean</td>
<td>548</td>
</tr>
<tr>
<td>Achaea</td>
<td></td>
</tr>
</tbody>
</table>
LIST OF FIGURES IN THE TEXT

CHAPTER THREE
1 Achaean Settlements
   (1) Katarraktis-Ayios Athanasios house plan (after Zapheiropoulos) 65
   (2) Katarraktis-Drakotrypa house plan (after Zapheiropoulos) 65
   (3) Paralimni-Kastro tis Kalogrias, acropolis plan (after Mastrokostas) 65

CHAPTER FOUR
1 Ano Sychaina (1960) Chamber tombs IX and X 89
2 Kallithea Chamber tomb A 90
3 Kallithea Chamber tomb B 91
4 Kangadhi Chamber tomb II 91
5 Chalandritsa (A. Vasilios) Chamber tombs I and III 92

CHAPTER FIVE
1 Four-handled storage jars, shapes 136
2 Four-handled storage jars, shoulder zones 141
3 Four-handled storage jars, shoulder zones (cont.) 142
4 Four-handled storage jars, body zones 142
5 Two-handled storage jars, shapes 143
6 Two-handled storage jars, decorative patterns 151
7 Stirrup-jars, shapes 160
8 Stirrup-jars, shapes (cont.) 161
9 Stirrup-jars, shapes (cont.) 162
10 Top-discs of false necks 170
11 Handles of the stirrup-jars 170
12 Stirrup-jars, shoulder zones 196
13 Stirrup-jars, shoulder zones (cont.) 197
14 Stirrup-jars, shoulder zones (cont.) 198
15 Stirrup-jars, shoulder zones (cont.) 199
16 Stirrup-jars, shoulder zones (cont.) 200
17 Stirrup-jars, shoulder zones (cont.) 201
18 Stirrup-jars, shoulder zones (cont.) 202
19 Stirrup-jars, shoulder zones (cont.) 203
20 Stirrup-jars, shoulder zones (cont.) 204
21 Stirrup-jars, shoulder zones (cont.) 205
22 Stirrup-jars, shoulder zones (cont.) 206
23 Stirrup-jars, shoulder zones (cont.) 207
<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 Stirrup-jars, body zones</td>
</tr>
<tr>
<td>25 Stirrup-jars, body zones (cont.)</td>
</tr>
<tr>
<td>26 Piriform-jars, shapes</td>
</tr>
<tr>
<td>27 Piriform-jars, decorative patterns</td>
</tr>
<tr>
<td>28 Small handleless jars, shapes and decorative patterns</td>
</tr>
<tr>
<td>29 Rounded alabastra</td>
</tr>
<tr>
<td>30 Rounded alabastra, decorative patterns</td>
</tr>
<tr>
<td>31 Rounded alabastra, decorative patterns (cont.)</td>
</tr>
<tr>
<td>32 Square-sided alabastra, shapes</td>
</tr>
<tr>
<td>33 Square-sided alabastra, shapes (cont.); Alabaster pyxis, shape</td>
</tr>
<tr>
<td>34 Square-sided alabastra, decorative patterns</td>
</tr>
<tr>
<td>35 Square-sided alabastra, decorative patterns (cont.)</td>
</tr>
<tr>
<td>36 Narrow-necked jugs (Oinochoe), shapes</td>
</tr>
<tr>
<td>37 Narrow-necked jugs (Oinochoe), decorative patterns</td>
</tr>
<tr>
<td>38 (1) Small globular jugs, shapes and decorative patterns</td>
</tr>
<tr>
<td>(2) Hand-made miniature jugs, shapes</td>
</tr>
<tr>
<td>39 Amphoriskoi, shapes</td>
</tr>
<tr>
<td>40 (1) Amphoriskoi, shapes (cont.)</td>
</tr>
<tr>
<td>(2) Globular wide-necked jugs, shapes</td>
</tr>
<tr>
<td>(3) Squat jars with one vertical handle, shapes</td>
</tr>
<tr>
<td>41 Amphoriskoi, decorative patterns</td>
</tr>
<tr>
<td>42 Amphoriskoi, decorative patterns (cont.)</td>
</tr>
<tr>
<td>43 Globular flasks, shapes</td>
</tr>
<tr>
<td>44 Askoi, shapes</td>
</tr>
<tr>
<td>45 Globular flasks and Askoi, decorative patterns</td>
</tr>
<tr>
<td>46 Duck-askoi, shapes</td>
</tr>
<tr>
<td>47 Duck-askoi, decorative patterns</td>
</tr>
<tr>
<td>48 Ring-vases, shapes and decorative patterns</td>
</tr>
<tr>
<td>49 Kylikes, shapes</td>
</tr>
<tr>
<td>50 Composite vessels, shapes and decorative patterns</td>
</tr>
<tr>
<td>51 Kraters, shapes and decorative patterns</td>
</tr>
<tr>
<td>52 Conical Kraters, shapes</td>
</tr>
<tr>
<td>53 Deep bowls, shapes and decorative patterns; deep bowls with two vertical handles and stemmed bowls, shapes</td>
</tr>
<tr>
<td>54 Feeding bottle, shape</td>
</tr>
<tr>
<td>55 Shallow angular bowls, shape</td>
</tr>
<tr>
<td>56 Conical rhyton, shape</td>
</tr>
<tr>
<td>57 Kylikes, shapes</td>
</tr>
<tr>
<td>58 Shallow cups, shapes and decorative patterns; One-handled deep bowls, shape</td>
</tr>
<tr>
<td>Page</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>59</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>61</td>
</tr>
<tr>
<td>62</td>
</tr>
</tbody>
</table>
LIST OF ABBREVIATIONS

A: PERIODICALS

AA. Archäologischer Anzeiger: Beiblatt zum Jahrbuch des Deutschen archäologischen Instituts
AAA. Ἀρχαιολογικά Αναλέκτα ἐκ Θεουργί
ADelt. Ἀρχαιολογικών Δελτίον
AE. Ἀρχαιολογική Εφημερίς
AJA. American Journal of Archaeology
AM. Mitteilungen des deutschen archäologischen Instituts; athenische Abteilung
Annuario Annuario della scuola italiana di Atene e delle missioni italiane in oriente
Arch. Rep. Archaeological Reports
BCH. Bulletin de Correspondance Hellénique
BRGK. Bericht der römish-germanisch Kommission
Boll. d'Arte Bolletino d'Arte del Ministero della pubblica Instruzione
BSA. Annual of the British School at Athens
Ergon Τὸ Ἐργον τῆς Ἀρχαιολογικῆς Εταιρείας κατὰ τὸ έτος...
EEIS. Ἐπετηρίς Εταιρείας Κρατικών Επούξων
ILN. Illustrated London News
Jahrbuch Jahrbuch des deutschen archäologischen Instituts
JHS. Journal of Hellenic Studies
K. Chr. Κρατικά Χρονικά
LAAA. Annals of Archaeology and Anthropology of the University of Liverpool
Mon. Ant. Monumenti antichi pubblicati a cura... dei Lincei
OA. Opuscula Archaeologica
PAE. Πρακτικά τῆς Ἀθηναίων Ἀρχαιολογικῆς Εταιρείας
PPS. Proceedings of the Prehistoric Society
QDAP. Quarterly of the Department of Antiquities in Palestine
RDAC. Report of the Department of Antiquities, Cyprus
## B: PUBLICATIONS

<table>
<thead>
<tr>
<th>Location</th>
<th>Author(s)</th>
<th>Title</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aegina</td>
<td>A. Fürtwängler</td>
<td>Aegina, das Heiligtum der Aphaia</td>
<td>1959</td>
</tr>
<tr>
<td></td>
<td>O. Frödin and A. W. Persson</td>
<td>Asine: Results of the Swedish excavations</td>
<td>1938</td>
</tr>
<tr>
<td>Asine</td>
<td>P. V. C. Baur</td>
<td>Catalogue of the Rebecca Darlington Stoddard Collection of Greek and Italian Vases in Yale University, New Haven 1922 (Yale Oriental Series; Researches, Vol.VIII)</td>
<td>1938</td>
</tr>
<tr>
<td></td>
<td>G. Säflund</td>
<td>Excavations at Berbati, 1936-37</td>
<td>1965</td>
</tr>
<tr>
<td></td>
<td>British Museum</td>
<td>Catalogue of Vases</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>H. W. Catling</td>
<td>Cypriot Bronzework in the Mycenaean World</td>
<td>1964</td>
</tr>
<tr>
<td></td>
<td>A. Furumark</td>
<td>The Chronology of Mycenaean Pottery</td>
<td>1941</td>
</tr>
<tr>
<td></td>
<td>A. J. B. Wace</td>
<td>Chamber Tombs at Mycenae</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>R. Hope Simpson and Lazenby</td>
<td>The Catalogue of the ships in Homer's Iliad</td>
<td>1970</td>
</tr>
<tr>
<td></td>
<td>A. Snodgrass</td>
<td>The Dark Age of Greece</td>
<td>1971</td>
</tr>
<tr>
<td></td>
<td>M. Ventris and J. Chadwick</td>
<td>Documents in Mycenaean Greek</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>A. Snodgrass</td>
<td>Early Greek Armour and Weapons</td>
<td>1964</td>
</tr>
<tr>
<td></td>
<td>P. Alin</td>
<td>Das Ende der Mykenischen Fundstätten auf dem Griechischen Festland, Lund 1962</td>
<td>1962</td>
</tr>
<tr>
<td></td>
<td>P. Dikaios</td>
<td>Enkomi I-IIIA, Mainz am Rhein 1969</td>
<td>1969</td>
</tr>
<tr>
<td></td>
<td>H. Goldman</td>
<td>Excavations at Eutresis in Boeotia</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>C. Blinkenberg</td>
<td>Fibules grecques et orientales</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>A. Fürtwängler-G. Löschcke</td>
<td>Mykenische Vasen, Berlin 1886</td>
<td>1886</td>
</tr>
<tr>
<td></td>
<td>J. K. Brock</td>
<td>Fortetsa</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>J. N. Coldstream</td>
<td>Greek Geometric Pottery</td>
<td>London 1963</td>
</tr>
<tr>
<td></td>
<td>Harriet Boyd-Hawes</td>
<td>Gournia, Vasiliki and other sites on the Isthmus of Hierapetra, Crete</td>
<td>n/a</td>
</tr>
<tr>
<td>Term</td>
<td>Reference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kerameikos</td>
<td>Kerameikos; Ergebnisse der Ausgrabungen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korakou</td>
<td>C. W. Blegen, Korakou: a Prehistoric Settlement near Corinth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levant</td>
<td>E. H. Stubbings, Mycenaean Pottery from the Levant, Cambridge 1951</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMTS</td>
<td>V. R. d’A. Desborough, The Last Mycenaeans and their Successors, Oxford 1964</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locriens</td>
<td>L. Lerat, Les Locriens de l'Ouest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maltbi</td>
<td>N. Valmin, The Swedish Messenia Expedition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MMA</td>
<td>R. A. Higgins, Minoan and Mycenaean Art, London 1967</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MMN</td>
<td>X. Τεούντα, Μυκηναϊκά και μυκηναϊκός πολιτισμός, Αθήνα, 1893</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP</td>
<td>A. Wurmurt, The Mycenaean Pottery, Analysis and Classification, Stockholm 1941</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPI</td>
<td>Lord W. Taylour, Mycenaean Pottery in Italy and Adjacent Areas, Cambridge 1958</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N.T.</td>
<td>A. W. Persson, New Tombs at Dendra near Midea, Lund 1942</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outils de Bronze</td>
<td>J. Deshayes, Les Outils de Bronze de l’Indus au Danube (IV au II millénaire), Paris 1960</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palace of Nestor</td>
<td>C. W. Blegen-Marion Rawson, The Palace of Nestor at Pylos in Western Messenia, 1, Princeton 1966</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perati</td>
<td>Σ.Ε.Ιακωβίδην, Περατί, Τό Νεκροταφείον, Α-Γ.Ευκρήνας 1970</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM</td>
<td>Arthur Evans, The Palace of Minos, London 1921-1936</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P.P.</td>
<td>V. R. d’A. Desborough, Protogeometric Pottery, Oxford 1952</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problems</td>
<td>E. Sjöqvist, Problems of the Late Cypriote Bronze Age, Stockholm, 1940</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prosymna</td>
<td>C. W. Blegen, Prosymna, The Helladic Settlement preceding the Argive Heraeum, Cambridge 1937</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R.T.</td>
<td>A. W. Persson, The Royal Tombs at Dendra near Midea, Lund 1951</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCE</td>
<td>The Swedish Cyprus Expedition, Stockholm 1934 onwards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schachtgräber</td>
<td>G. Karo, Die Schachtgräber von Mykenae, München, 1930</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submycenaean Studies</td>
<td>C.-G. Styrenius, Submycenaean Studies, Lund 1967</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stavropoulou</td>
<td>Α. Σταυροπούλου, Υποτελεία των πόλεων Αιγίου από των μυκηναϊκών χρόνων μέχρι των προϊερών μας, Πάτραι 1954</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Syriopoulos</td>
<td>Κ. Συριόπουλος, Η προϊστορία της Πελοπόννησου, Αθήνα 1961</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thomopoulos</td>
<td>Στ. Ν. Θωμοπούλου, Υποτελεία των πόλεων Πατρών από θρακειατικό χρόνον μέχρι 1883, ... Πάτραι, 1950.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Triantafyllou</td>
<td>Κ. Ν. Τριανταφύλλου, Υποτελεία των Αρχαϊκών των Πατρών, Πάτραι, 1959.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vrokastro</td>
<td>Edith H. Hall, Excavations in Eastern Crete, Vrokastro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wiesner</td>
<td>J. Wiesner, Grab und Jenseits (Religionsgeschichtliche Versuche und Vorarbeiten, XXVI. Band), Berlin 1958</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**C: MISCELLANEOUS**

<table>
<thead>
<tr>
<th>a/a</th>
<th>Serial number (αἰσθήματος) of my Catalogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM.</td>
<td>Aigion Museum's Catalogue number</td>
</tr>
<tr>
<td>BE.</td>
<td>Entry Book's (ἐπίθετος ἑισαγωγής) number</td>
</tr>
<tr>
<td>PM.</td>
<td>Patras Museum's Catalogue number</td>
</tr>
<tr>
<td>PMX.</td>
<td>Patras Museum's Bronzes (μεταλλευτικά) Catalogue number</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

The subject of this work was suggested to me by my supervisor Mr J. N. Coldstream, to whom I am much indebted for his never-failing support, advice and encouragement.

I most gratefully acknowledge the financial assistance I have received from the Central Research Fund Committee of the University of London and from my College (Bedford College), without which it would have been inconceivable to undertake this research.

To my teacher at the University of Athens and now Inspector General of Antiquities of Greece, Professor S. Marinatos, I owe a great debt for the encouragement, advice and help of many kinds (especially during my excavations at Aigion in 1970) I received from him.

My study of the Achaean material, involving many days' labour in the Patras and Aigion Museums, could never have been accomplished without the cordial co-operation and friendly advice of Professor Ph. Petsas (then Ephor at Patras) and his staff, and I wish here to express my special indebtedness to him.

To Dr N. Yialouris, Director of Antiquities of Greece, who with exemplary generosity gave me much invaluable information about his excavations at Kallithea, Katarraktis, Ano Sychaina and Vrisarion, and has allowed me to use material from these excavations, I am deeply grateful. I am also indebted to the Ephors N. Zapheiropoulos and E. Mastrokostas for access to material from Katarraktis and Paralimni (Teichos Dymaion).

Furthermore, my grateful thanks are due to all those who have spared their time to read and comment on those aspects of the work on which they are acknowledged experts. First and foremost to Mr V. Desborough for his constant tuition, patient advice and constructive criticism; Professor S. Iakovides who not only read the chapter on tombs and made valuable suggestions, but has also never failed to encourage me and to give me help in many respects; Professor P. Åström for reading the chapter on pottery, for encouragement and
valuable assistance; Mrs V. Hankey for reading the chapter on tombs and making useful suggestions; Dr F. Stubbings for reading the chapter on pottery and making many helpful comments and suggestions; the late Professor C. Blegen and Mr M. Popham for advice, help and useful suggestions on dating the ceramic material; Dr R. Higgins and Miss N. Sandars for reading and commenting on the chapter on artefacts; Professor R. Hope Simpson for drawing my attention to some specific points concerning the chapter on prehistoric sites.

The responsibility, of course, for all statements and opinions found in this work remains mine alone.

My thanks are due to Dr M. Vickers of the Ashmolean Museum, Oxford; Dr U. Gehrig of the Staatliche Museen-Antikenabteilung, Berlin; and Dr G. Heres of the Staatliche Museen zu Berlin, Antikensammlung, for providing drawings and photographs of finds from Patras, Aigion and Aigeira now housed in these Museums, and for their kind permission to study and use some of them in my work. (Pls. nos. 51, 52, 57, 100a, 114e, 115a, 121f, 122b-c, 144c-d, 153d-e, 164d, 170)

To the late Librarian, Miss J. E. Southan, the present Librarian, Miss Ana Healey, and the Sub-Librarian, Mr F. H. Jenkins, of the Institute of Classical Studies, as well as to the Secretary, Miss A. Totolos, and the staff, I should like to express my sincere thanks for their kindness and for facilities for study in the Library of the Institute.

Deep gratitude and warmest thanks are due to my parents for their patience, understanding, financial assistance and encouragement. Many thanks go also to my brother Antonis, who accompanied me in my visits to several sites of Achaea, and for help in the Museum at Patras.

Last but not least I owe a deep debt of gratitude to my wife, who not only shared all the hardship and anxieties of the last five years, but also from the beginning to the end of my work has been a constant support in discussing it
with me. Her task has not been easy, as my gratitude may not always have been evident for every Mycenaean vase she found for me hidden in dusty boxes in the two Achaean museums, for her constructive criticisms and above all for her moral support, without which this work would never have been completed.

The drawings and photographs are, unless otherwise stated, my own work. All the maps are based on an original provided by the Greek National Statistical Service, to which I express my thanks for permission to use it.
INTRODUCTION

The main purpose of this work is to give a general account of the part taken by Achaea in the Mycenaean world in the second half of the second millenium B.C.

I have taken the province to cover the present-day administrative unit rather than the area as described by Pausanias, adopting the suggestion first made by Mrs E. Vermeule and accepted by all the previous researchers that Mycenaean Achaea "occupied practically the same territory as the modern nome".¹

The evidence provided up to the present day by archaeological excavation will provide the foundation on which, it is hoped, some structure may arise.

A short summary of the history of research should serve as an introduction to the work of several archaeologists in this comparatively neglected area of the Peloponnese.

Excavations have taken place on Achaea over a long period. From 1919-20 until nowadays several archaeological explorations were carried out exclusively by Greek archaeologists. The whole course of these can be divided into three main phases:

(a) The first began in 1919-20 and finished in 1939-40, after which a forced interruption (Second World War) followed for nearly ten years (till 1950). It was the late Ephor N. Kyparisséς who undertook and carried out these excavations, the results of which were mainly published in successive issues of "Πρακτικά τῆς Ἀρχαιολογικῆς Εταιρείας". The then Epimeletes Nerantzoulis was less energetic in exploring the region of Aigion.

(b) After 1950 excavations were resumed by the then Ephor of both Olympia-Elis and Achaea, Dr N. Yialouris, and continued by Ephor N. Zapheiropoulos until 1960. The new finds were impressive and the collection of the Patras museum was enriched.

¹. AJA (1960) 1 and 2 (map); Åström, Op.Ath. (1965) 96 and map; Αλίν, ΕΜΕ 63 ff.; R. Hope Simpson, GAHS 82 ff.
The excavations at Paralimni (Teichos Dymaion) and Aigion (1962-1967) conducted by the Ephor E. Mastrokostas produced new important finds. Our recent excavations at Aigion (1970) were also productive and added further new important material to the Achaean collection.

All the finds of the above mentioned excavations are housed in the museums at Patras and Aigion.

Achaea, in spite of its impressive material, was until 1960 one of the most neglected areas of the Peloponnese, and it was Mrs E. Vermeule who first published a valuable general article on the Achaean sites and their contents. Since then, further details of the situation in Achaea during the Mycenaean times have been published by Čalin, Åström, Hope Simpson and Desborough. But on the whole, the district is treated to a greater or lesser degree summarily by all of these previous researchers, since there was insufficient material available to them.

Now, having all the material at my disposal, I shall try to study and present it with the greatest possible accuracy and detail.

Archaeologically speaking the range of this work will extend from Early and Middle Helladic through Late Helladic and Sub-Mycenaean and finish with the Protogeometric period. Of the several periods, EH and MH may be considered to form an essential introduction to the rest, but they have not been treated as fully as they deserve. It is the Mycenaean period which will be examined in detail, while Protogeometric will be discussed very briefly. The conclusions reached will be summarized in the last chapter.

1. They were sponsored by the Greek Archaeological Service and supervised by Professors S. Marinatos and Ph. Petsas.
4. Thanks to the generosity and kindness of Professor Ph. Petsas (Ephor at Patras in 1970), who gave his help and encouragement and granted access to the store-rooms of both the Patras and Aigion Museums.
There are few accounts of the ancient topography of Achaea, none of them systematic or detailed.\(^1\)

An exhaustive description of the geographical features of the district is not called for - full accounts are to be found in official handbooks and elsewhere.\(^2\) Attention should, however, be drawn to a few salient features.

Much of Achaea is either mountainous or hilly country.\(^3\) It is dominated by its three mountain ranges of Panachaicon, Chelmos and Erymanthos, which form the bones of the province. The smallest of these, the Panachaicon range, leaves some comparatively broad plains open to the sea on the western and north-eastern side of Achaea between river Peiros and river Vouraikos. But on the Corinthian gulf it either descends abruptly on the shore, or is separated from it only by narrow plains. These small maritime plains and the slopes immediately above them are, however, for the most part highly fertile, and the soil is peculiarly adapted to some kinds of produce. They are watered by streams which, with one or two exceptions, carry water only in the rainy season or when the winter's snows are melting. Some of the richest springs rise in the Panachaicon range on its north, west and south-east sides, notably those which water the modern towns of Patras, Aigion and the villages of Chalandritsa, Leontion, Vrisarion, Katarraktis.

1. The only probable exception being the very valuable study of the district's geology and topography by Philippson. Cf. Philippson, A., *Die griechische Landschaften* Band III Teil (I) Pelopones.


3. See colour map of Achaea appended at the end of Vol.I.

4. Being surrounded by the Achaean regions of Patrae, Aigion, and Pharae and being the only great mountain which belongs entirely to Achaea, it was very properly called Panachaicon.

5. Achaea, like Messenia, abounds in springs.
On the northern shore of Achaea and farther east in the area between river Vouraikos and the borders of Corinthia the large Chelmos range leaves some more, also fertile, plains (Diakopton, Akrata) watered by the rivers Vouraikos and Krathis and some other smaller streams.

The third range, the big Erymanthos massif, together with the adjacent Chelmos range and its encircling complex of broken foothill country, occupies the greater part of the southern borders of Achaea with Corinthia and Arcadia.

It forms the watershed for the district's major rivers, Peiros, Selinous and Vouraikos.

Between the three ranges stretches a discontinuous series of narrow river valleys and small plains (Pharai, Lapathoi, Kalavryta, Manesi, Kleitoria).

The south-western part of Achaea, and especially the area enclosed between the western slopes of Erymanthos and the height Skollis, is mostly hilly country watered by two small streams. Generally it is not so fertile as the coastal parts of the district. Farther north-west and beyond the slopes of the hill Movri lies the largest and one of the most fertile plains of Achaea. It is for the most part open to the sea and extends from the Larissos river down to Cape Araxos to the west and to the gulf of Patras and the Kamenitsa-Peiros river to the north. It is bounded on the west by a small ridge of hills which is known as "Mavra Vouna".

The main communications in antiquity, as in modern times, of the very mountainous inland country with the rest of Achaea must surely have been by two ways: (a) by the important line of penetration along the inner circuitous route over plateau land from Patras to Kalavryta via Chalandritsa and (b) by the route which from Diakopton runs along the river Vouraikos and extends to the modern town of Kalavryta.

From the standpoint of modern ocean-going shipping Achaea is notoriously ill-equipped with harbours. Only at Patras and Aigion are ships able to berth alongside, and even there the space available is extremely limited. At several points around the western and northern coast of Achaea there certainly originally existed good harbours.
(Karavostasi, Drepanon, Helike, Akrata) which have subsequently disappeared through natural causes.

Many known travellers passed through Achaea in the last century and wrote about its antiquities, but they were interested mainly in identifying the Classical sites mentioned by ancient authors. The prehistoric sites were usually neglected until 1919-20, when the first important excavation of a prehistoric cemetery in Achaea was undertaken by Ephor N. Kyparissis at Katarraktis-Bouga. For a full and detailed discussion of the prehistoric sites so far known in the district the reader is referred to the following chapter.

1. The main works referring to Achaea are:

(a) Pouqueville, Travels in the Morea etc. (London 1815) and Voyage dans la Grèce iv (Paris 1827),
(b) Gell, Itinerary of the Morea (London 1817) and Narrative of a Journey in the Morea (London 1823),
(c) Dodwell, A Classical and Topographical Tour through Greece etc. (London 1819),
(d) Leake, Travels in the Morea i, ii, iii (London 1830) and Peloponesiacæ (London 1846),
(e) Blouet, Expédition scientifique de Morée, etc. i, ii, iii (Paris, 1837-8)
(f) Puillon Boblaye, Recherches géographiques etc. (Paris 1835)
(g) Bory de Saint-Vincent, Expédition scientifique de Morée etc. (Paris 1836),
(h) L. Ross, Reisen im Peloponnes (Berlin 1841) and Wanderungen in Griechenland i (Halle 1851),
(i) Curtius, Peloponnesos, etc. (Gotha, 1851-2),
(j) Bursian, Geographie von Griechenland ii (Leipzig 1862),
(k) Frazer, Pausanias's Description of Greece iv (London 1898)
Although the gaps in our knowledge of Bronze Age Achaea are still serious,¹ and a marked disparity remains between the state of our present information² and the importance suggested by literary tradition,³ it seems desirable to press on with the

1. The reports of the excavators, sometimes, are very brief (e.g. for Tsoukaleika), and the information about some finds not always absolutely clear and accurate.

2. Hope Simpson (GAMS) mentions about 50 prehistoric sites in Achaea. When I visited Achaea in 1969, I was able to add at least over 50 new sites not included in his gazetteer, and to correct some points concerning the location of the sites.

description of the prehistoric sites and finds available to us at this stage, rather than to wait until a complete and more systematic exploration of Achaea could be made. In the following description (with the greatest possible accuracy) of the Achaean sites and finds, we shall follow in the interest of clarity and efficiency the principles well set out by W. A. McDonald and R. Hope Simpson in AJA lxv (1961) 223-4. It may be advisable to refer to these principles of presentation briefly, as adapted in my work. In the catalogue which follows:

1. **Achaea is divided into three main areas** (South-western, Central and North-eastern) forming rough geographical units and a brief description is given of each of these.

2. Each site, reported site (probable) or find spot is numbered in a single series, running from the South-West (Dyme) to the North-East (Derveni-Aigion). These numbers correspond to the number in the maps at the end of my work.

3. The site is identified by the name of a town or a village (usually the nearest place the name of which occurs in the official Greek Government Census) followed by a local toponym where applicable. Map references are also given to the British War Office series G.S.G.S. 1:100,000 GREECE, in the standard form (e.g. 1.6 Patrai 784E/588E) where available.

---

1. Complete sets can be consulted in the libraries of the Institute of Classical Studies London, The Museum of Classical Archaeology, Cambridge, and the British School of Archaeology at Athens. Much valuable information can be obtained from other maps of Achaea. They are included in the list given here:

- **a** Greek Epitelikos Chartis 1:100,000 (1925)
- **b** British GSGS 8410/MDR 630 1:250,000 (1941)
- **c** " 8439/MDR 610 1:100,000 (1941)
- **d** Greek National Statistical Office 1:200,000 (1963)
- **e** E. Meyer "Neue Peloponnesische Wanderungen" (1937) Karten XI, XII.
- **f** Philippson III at the end, and Abb. 5, 6 (1959)
- **g** Curtius "Peloponnesus" (1851) Tafel IX.
- **h** Alin EMP.
- **j** AJA 64 (1960) 2 f.
4. Reference to local area or site plans (Maps in the text) and to site photographs (PLATES) if such are provided, are given for each place, but not to the key map (MAP.13) nor to the distribution maps for each period (MAPS.14-23) on which all sites are included.

5. Bibliography concerning the discovery and important discussions of each previously recorded site followed by a description of the site. The references are full, but not complete, especially for sites newly discovered.

6. Pottery summary and of other artefacts. We normally follow the abbreviations of the Messenia Survey - EH (Early Helladic), MH (Middle Helladic) LH (Late Helladic) PG (Protogeometric).

7. General remarks and estimation of the size and importance of each particular site.

Symbols used in the catalogue:
* denotes a site where excavations have been made.
* denotes a site which I have personally visited.

CATALOGUE OF SITES

I The Dyme Area

This part of Achaea is limited at the south by the River Peneios of Elis, at the southwest by the smaller River Larissos (Mana, Riolitiko) and the promontory of Araxos and at the north by the river Kamenitsa. At the east lies Mount Brymanhos. The nature of the area can best be seen from the top of Skollis, a limestone mass 965 m high and from that of Movri, a hill 692 m high. It includes three fertile plains, one at the foot of Mount Skollis, the second to the west of the hill Movri and the third at Kato Achaea and Araxos.

In general the north-western part of the area is much more fertile and more thickly populated because of its natural amenities, than the south-eastern part, which is mainly mountainous. In the latter, until recently, communication was very difficult, even by car.
Paralimni (Kastro tis Kalogrias)

(PLATE 1) (9.6.69) (Map. 1) 1.5 Mesolongion 'Kalogria' at 323 E/799N. EH; MH; LH I-IIIA; LH III B; LH III C; Submyc.

GAMS No. 282; Frazer, Pausanias IV, 112 ff; Polybius (iv 59.4; 83:1); Leake: Travels in the Morea II 163-65; Meyer: R.E. s.v. "Teichos"Cols. 126-7; Philippeon (III) 195-6; Triantafullou "Λεωφορία ταυτων Πατρών" p. 71 newspaper "Vima" 25.2.62; PAE (1962) 127 ff; (1963) 93 ff; (1964) 60 ff; (1965) 121 ff; Ergon (1962) 171 ff; (1963) 186 ff; (1965) 94 ff; (1966) 156 ff; JHS Arch for: (1961-2) 12 f; (1965-6) 10 f; (1966-7) 11 f; Archaeology 15 (1962) 133 f; BCH 67 (1963) 767; Dodwell, Tour. 2. p. 312 sq. Curtius, Pelop. I, 426 f; Bursian, Geogr. 2 p. 321 sq.

On the southernmost hill (80 m. high) of the range known as the Black Mountains (Mavra Bovna), near the Araxos promontory a well preserved prehistoric acropolis with Cyclopean walls has been excavated by Mr. Mastrokostas. It is well fortified. The steep side, toward Elis, was protected in ancient times by the sea, which once extended up to it, but which has now become a marsh. The acropolis is defended on both sides by the Cyclopean wall, built of massive unhewn blocks haphazardly placed one upon another. The spaces between the blocks are filled with smaller stones and clay. Two sections of the wall were repaired in ancient times with smaller stones. The whole length of the wall is 175 metres (about 576 feet). It is 5 metres thick, 8 metres high and at the south end projects a Gamma-shaped tower (7.60 m. from the curtain wall) made with concrete, built during the Middle Ages. The main entrance was probably at the south-eastern side of the wall. The Middle gate (2.85 m. wide, 8 m. high) was destroyed probably during Byzantine times and the walls were banked up inside all the way to the top. Subsequently the gate facing the sea was used as the main entrance. This was widened by troops stationed here during the German occupation, so that the door-jambs were destroyed. This gate is today the entrance. The travellers, Dodwell and Leake, who visited the site in
1806, and the archaeologist Ernst Curtius (1852) recognised, on the basis of its location, that this was the "Wall of the Dymaeans" mentioned by the historian Polybius, that is in the territory of the westernmost Achaean city of Dyme.

Mastrokostas, who dug there from 1962-1966, found fragments of vase and obsidian blades belonging to the Early Helladic period (ca. 2500 - 2000 B.C.). Middle Helladic sherds have also been found and Mycenaean pottery is plentiful. It seems that at the end of EH the acropolis was destroyed by fire but during the Classical and Byzantine periods it was again inhabited. We can assume that life on the acropolis was continuous. The area inside is small, but foundations of dwellings can be seen on the side of the hill outside the wall. Mastrokostas found the foundations of Mycenaean houses, inside the Teichas. There can be no doubt that it was a very important Mycenaean fortress and we must expect important finds, perhaps a palace, at this interesting site. During my visit to the site in 1969 I noted Neolithic, E.H., M.H. and Mycenaean sherds spread widely over the acropolis. The site has not been thoroughly examined and may well be worth further and systematic excavations and closer study. Then we shall be able to reconsider the role of Achaea in the Mycenaean world in the light of the important new evidence.

2 Gerbesi (Araxos) (Map 1)


Paul Aström says that there are some Mycenaean and Black glazed sherds from Gerbesi (Loutra Araxou) in the Patras Museum collected in 1961. I did not see these in 1969.

3 Kangadhi

1. Sketch map of the Paralimni area.

2. Sketch map of the Kangadhi area.
Kangadhi is about 15 kms. south-west of Kato Achaea. Some small Mycenaean chamber tombs were discovered on the road from Kangadhi to Riolos (just at the north-western border of the village, a few metres from the primary school). They contained a number of vases with an altogether peculiar style, bone beads from a necklace and two bronze rings. N. Yialouris excavated a small intact tomb with two burials, which produced a necklace of gold and another of bone beads, a small glass plaque with plant decoration, a large pin-head and spindle whorls and an animal-shape vase with several other vases. The inside of another larger tomb had been divided into compartments by means of stone walls. Chance finds of late Mycenaean tombs from near Kangadhi are also reported in earlier times (1951) at the locality "Sotiroula," north-east of the village and in a distance of 10 minutes. Sporadic new finds are reported from time to time. The site seems a place for prehistoric occupation, but further excavation is necessary. I visited the site, accompanied by my wife, in July 1969. We noted a small hill near "Sotiroula," which may have been the settlement site, because of the existence of a spring nearby and the presence of many Mycenaean sherds.

4 Pournari
(Map: 2) I.5 Mesolongion 450E/698N, LH IIIA2, C. - C. Triantafyllou, 508 f.

The village lies near the hill Movri and about 13 kms. south-east of Kato Achaea. From a newly found (6.12.1968) late Helladic tholos (?) tomb in the field of Chr. Zapheiropoulos come nine vases. No further information is at present available.

5 Fostaina
(Map: 3) I.5 Mesolongion, square 500E/700/5 LH III GAMS No. 284; JHS Arch. for (1961-62) 11 f; newsp. "Peloponnesos" (21.12.1961); Triantafyllou, 703 f.

A late Mycenaean tomb and signs of others were noted in the region between Fostaina, Elaichorion and Lousika, about 7 kms. south-east of Kato Achaea. This area still remains unexcavated and unexplored.
Kato Achaea (Bouchomata)

(Map. 3) * 1.5 Mesolongion 180E/770N. (10.8.69)

EH and LH.

Pae (1963) 98 f; Philippson III, 195 f;

E. Mastrokostas collected many EH and LH sherds belonging to several EH and LH pots "of the same quality" with those found at Teichos Dymaion at this locality, a small hill just outside the town of Kato Achaea.

II The Central Area (Patras – Pharai – Tritaea – Kalavryta)

The central area includes the regions of Patras, Pharai, Tritaea and Kalavryta, and is limited to the south and south-west by the Peiros river. Its eastern borders are the mountains Erymanthos and Chelmos and it is separated from the north-eastern area (Aigion) by the small river Salmeniko (near Kamarais). To the west it faces the gulf of Patras. The Patras region is the most accessible, richest and most heavily populated area of Achaea. Its advantages consist of the great fertility of the plain and surrounding hills, but still more in the convenience of the situation for communication by sea with the adjacent islands, with the whole western coast of Greece, with Italy and the Adriatic, as well as with eastern Greece and the Aegean Sea by the Isthmus of Corinth. About three miles to the east of Patras rises the mount Panachaikon, which is of a considerable height and a large part of which is covered with forests of oak and fir. The side facing Patras is divided into several green knolls and fertile glens. The plain is well watered by the Glafkos stream, about 3 miles to the south of Patras and from the Meilichos rivulet about 2½ miles to the east of Patras. The Pharai region is also a rich and densely populated area of Achaea, thanks to the River Peiros which makes the plain fertile. Like in the region of Patras, vines are grown here and there is good farming and pasture land, especially alongside the Peiros river and at the southern slopes of Panachaikon mountain, near Chalandritis.

The Tritaea and Kalavryta regions are in general rocky, mountainous and poor. There are plains at Kalavryta, Kato Kleitoria and Manesi in the region of Kalavryta and at
Erymantheia and Skoura in the eparchia of Tritaia. They are small but fertile and well-watered by the streams of Vouraikos, Selinous and Tethreas. But apart from these, there are only small valleys round which the mountains and the hills rise high and make communications difficult, particularly to the east (Chelmos mountain) and south (Erymanthos mountain).

There is evidence that this whole area was occupied during the Bronze Age. Sites have been found in several places by chance and there remains a great area, particularly of the higher and more remote ground to the east and south, which has not yet been explored. Further work is necessary here.

In general, the central area seems to be the most important and most flourishing part of Achaea during the late Mycenaean times, taking of course into account the archaeological remains found there so far.

A Patras Region

7. Tsoukaleika

(Map. 3) X (20.7.69) I.5 Mesolongion 556E/766N. LH III

Mycenaean tombs are reported at this village on the north coast about 8 Kms. east of Kato Achaea. It is worth noting here that this site and those of Vrachneika and Aigion (Psila Alonia) are the only few Mycenaean ones directly exposed to the sea. I found only traces of the tombs during my visit there.

8. Vrachneika (Ayios Pandeleimon)

(PLATE 5-6) X (20.7.69). (Map. 3) I.5 Mesolongion 570E/768N. LH III A:2/E; LH III B

Village in the bay of Patras (about 10 Kms. to the west). Mycenaean tombs were found here in 1954 and 1955.
3. Sketch map of the Kato Achaea plain.
N. Yialouris, N. Zapheiropoulos and A. Liagouras excavated a Mycenaean chamber tomb at this locality. The tomb lies 500 metres from the road to Elis on the property of N. Tsilidas, before reaching the church of Ayios Pandeleimon and on the eastern edge of the small fertile valley which runs inland from the Vrachneika village. It contained two skeletons, two vases and glass paste beads from two necklaces. Other Mycenaean vases have also been found in the area by chance. I visited the site, accompanied by my wife, and we collected Mycenaean sherds, so we suspect a late Mycenaean settlement at the locality Melissia-Dresthena. No other comparable site, except for Tsoukaleika, has yet been found close to the western coastal strip of Achaea.

9. Aroe - Samakia

(PLATE 3.b) (19.7.69). (Map. 4). 1.6 Patrai 668E/856N (Aroe). LH III B - SM.
GAMS No. 287; PAF (1933) 92 f; (1934) 114 f; (1936) 95 ff; Álin EMf 64 f. note 11; Op. Ath. V (1965) 107 f; Triantafyllou, 376-377 ff; Syrionopoulos 484, 108 ff.

Trial excavations on the hills behind the military barracks east of Patras by N. Kyparissis, proved the existence of extensive Mycenaean cemeteries there. Part of these lay at Aroe and part at a place, Samakia. Aroe is about 600 m. east of Patras castle. A fragment of a pithos with rope pattern, labelled Aroe in the British School at Athens is perhaps from this area. Hope Simpson says that "there must have been an important Mycenaean settlement somewhere in these foothills behind Patras castle, if not at the castle itself" (GAMS p. 84). When I visited the site, I found no traces of Mycenaean habitation or tombs, since the whole area is covered with modern buildings and houses.

1. Hope Simpson has misunderstood the original report and has confused the site, Eglykas, with Klauss-Koukoura, which are the same.
A Late Helladic cemetery was found on the hill Asprochoma. The site lies east of Patras, near the villages, Ano Sychaina Voundeni and Bala, by the river Melichos and below the spring, from which the modern settlement, Tzini, gets its water. N. Kyparissis followed up an accidental find and excavated here three Mycenaean chamber tombs in 1923, and five more plundered tombs in 1924. They resembled the chamber tombs of Kephallenia, but were much destroyed and their contents included: stirrup-jars and three-handled small vases, steatite buttons, fragments of a bronze dagger and some jewellery. Two untouched interments yielded, however, about fifty Late Helladic vases of "ordinary type" and rather badly preserved (1924). The finds have not been published and some of the pots described by me elsewhere in this work (e.g. PM. 7, 13, etc.) may well come from this site. The Ephor, N. Yialouris informs me, that he excavated two Late Helladic tombs east of Ano Sychaina in September 1960. He observed a Late Helladic cemetery west of the village. The collected sherds belong to alabastra, piriform jars and stirrup-jars. My wife and I noted a small hill (Tsouga) east of the locality, Asprochoma, which may have been the settlement site.
1.6 Patras in square 628 E/780 N; LH III A-C.

GAMS ³ No. 290; PAE (1934) 115 f; (1935) 70 f; AJA 64 (1960) 8, No. 17; Op. Ath. V (1965) 109 f; Álin EMF 64 f; Taylour: Mycenaean Pottery in Italy 130 f, No. 6; 141 f.

Wiesner 20, 71, 145 ff; No. 3. Triantafyllou 662 f; Syriopoulos 106, 483 ff.

To the south of the modern village, Thea, and at a distance of 200 m, lies the small hill Ayios Nikolaos, on the top of which and on its eastern slopes N. Kyparissês excavated some LH III A-C chamber tombs. The finds included alabastra, stirrup-jars, a Kylix, beads of agate, and glass paste buttons. When I visited the site I found all

---

Hope Simpson's topographical description and the map reference given (630E/77ON are wrong. The map reference should read 628E/780N.
the tombs completely destroyed, but I was able to
distinguish traces of four of them. The settlement site is probably to be found either beneath the small village, Thea, or on the opposite hill Kastron. Villagers told me that several finds come to light from time to time by chance (sherds and sometimes whole pots).

14. Pavlokastron

(Map. 4) * (24.7.69)
1.6 Patrai in square 618E/773N. LH IIIA-C.
PAR (1934) 114 f, fig. 1-3; (1935) 70 f; Triantafyllou 482 f; Philippson III, 193 f;

At Pavlokastron, 500 m. to the south of Thea, on the south-east foothills of the Panachaidon mountain, Kyparissés found some destroyed LH III A-C chamber tombs. The finds were similar to those found at Tsaplaneika. Nowadays no traces of tombs are visible, because the area is cultivated.

15. Kallithea

(PLATE 7.a) * (24.7.69) (Map. 4).
1.6 Patrai 655E/770N. LH III B-C; ŠM?

The site lies 10 kms. south of Patras. N. Yialouris excavated two LH IIIB-C chamber tombs about 1 kilometre north of Ano Kallithea, and about 2 kms. distant from Kato Kallithea and the main road, which leads inland to Chalandrissa and Kalavryta. These tombs are especially famous for the pair of bronze greaves and the cut-and-thrust swords which have provoked much discussion as to whether they are of Mycenaean or foreign make. The site remains still partially explored and may well be worth closer study.
16. Krini (Velizi)

(Map. 4) * (25.7.69)
I.6 Patrai 660E/790N LH III B-C.

The small village lies about 6 kms. south of Patras. The retired guard of Antiquities, A. Mitropoulos, informed me that there are some Mycenaean chamber tombs here, still unexcavated, one of which accidentally opened by A. Spanos in his field in 1958, has produced six LH III B-C vases (amphoriskoi, stirrup-jars, etc.), now in Patras Museum. This Mycenaean cemetery must be connected with the others found nearby at Koukoura, Kallithea, Tsaplaneika, Parlokastron and strengthens my opinion that a rich Mycenaean settlement was founded in this region. This settlement has not yet been identified, but probably lies either beneath the modern wine factory of Klaus or on the south-east foothills of the Panachaikon mountain.

17. Gerokomeion

(Map. 4) X * (25.7.69)

A few minutes before one arrives at the monastery of Gerokomeion there are small hills below which there are fields, olive groves and vineyards. Work on the road from Patras to the monastery revealed a Mycenaean chamber tomb at the locality "Vakrou" in 1965. It contained eight (8) Mycenaean pots, now in Patras Museum (alabastron, composite vessels, stirrup-jar, etc.). No traces of the tomb were visible during my visit there, and no further information is at present available.

18. Patras

(Map. 4) X * (25.7.69). I.6 Patrai 650E/860 N. LH III A-C.
There are a number of works summarizing the evidence about the ancient city\textsuperscript{1}. According to Pausanias the city took its first name of Aroe from its cultivation. It was built by Eumelos of Achaea, who cultivated the neighbouring plains under the instructions of Triptolemos. Afterwards Patreus, son of Preugenes, surrounded it with walls and gave it his name. Strabo calls it \textit{πόλις ἀρίστος} (E. 8 p. 387) and Pausanias gives it the title of \textit{ἐραί} as well as \textit{πόλις}.

The modern Patras occupies the same site as the Roman city, but its population and area has recently been considerably increased. It stands upon a gentle eminence, not a mile from the sea, which projects from the falls of Mount PanachaiCon, which rises to its east. The height at the northern end of the eminence, now occupied by the castle of Patras, was the ancient Acropolis. Although no traces of Mycenaean habitation have been found here so far, it seems to me quite probable that a late Helladic settlement existed on this height, if not just beneath the castle itself, because of the many Mycenaean tombs found in the neighbourhood (Samakia Gerokomeion, Odeion). Finis have been brought in recently from many parts of the city, of Mycenaean, Classical, Hellenistic, Roman and Medieval date. But Patras remains among the least known of important cities and almost totally unexcavated. I saw in the storeroom of Patras Museum a very large unpublished four-handled jar (PM. 1047) excavated by a bulldozer west of Patras. At Odeion some Geometric vases and one Mycenaean (PM. 625) have been found in 1960. Six Mycenaean vases, said to be from near Patras, are published by P.V.C. Baur. Controlled excavation in the city would surely be useful and rewarding.

\begin{multicols}{1}
\begin{itemize}
\item\textit{Pausanias, "Axaikás 18,4; Strabo H. 386;
\textit{Curtius A.437, 453, note 16; Müller "Dorien" II 86.}}
\end{itemize}
\end{multicols}
19. Akarnes (Map. 9)

1.6 Patrai 760E/950N. LH I

ESA 32 (1931-32) 238 f; map fig. 18; Op. Ath. (1965) 100 f; Alin EMP 65 f;

Locality at the north coast of Achaea, near the village of Drepanon. Epimeletes P. Nerantzoulis shewed Miss Sylvia Benton LHII sherds from this site in the Patras Museum. I was not able to find any of those sherds during my visit to Patras Museum last summer.

B Pharai Region

20-21. Platanovrisis (formerly Medzena)

(Map. 5) # (26.7.69)

1.6 Patrai 661E/740N. LH

GAMS No. 292; PAF (1930) 88 f; (1932) 61 f; ECH LIV (1930) 484 f; AJA 35 (1931) 199 f; Alin EMP 65 f; Op. Ath. V (1965) 106 f; Wiesner 19 f. No. 167; Thomopoulou 229 f; Triantafyllon 374 f; Syriopoulos 105, 481 ff; Philippson III, 193 f; A. Del. 17 (1961-62) 129 f.

The site lies 18 kms. south of Patras. On the right side of the road which leads inland to Chalandritsa and Kalavryta, N. Kyparissês discovered (1930) and investigated (1932) some plundered Late Helladic tombs on the property of Dimitrios Bithelis. He found four vases "of usual type" in one of the plundered and destroyed tombs. Mr. Mastrokostas informed P. Aaström that a new Mycenaean cemetery had been recently discovered at Medzena at the locality of "Kamini" near the Palaion Elaiotriveion Kouroubali." Further excavation at the site could be productive.

Chalandritsa

(PLATE 7) * (26.7.69) (Map. 5).

1.6 Patrai 692E/708N. LH III B-C:16; SM? LG.

GAMS No. 293; Triantafyllou 708 f; Syriopoulos 106, 482; Philippson III, 194 f;

The village is situated at a height of 334 m. on the south-western spur of the Panachaiton mountain, between the
twenty-first and twenty-second kilometre post on the road from Patras to Kalavryta. In the times of the Frankish overlords it was one of their important towns and was constituted as a separate barony in 1209, when its first Baron was Audebert de la Tremouille. Ruins of the Frankish tower are still preserved. Chalandritsa was apparently unknown in classic times. Under the heading "Chalandritsa" we have included the following prehistoric sites:

22. **Ayios Antonios LH.**
Hope Simpson says (GAMS p. 85) that the prehistoric settlement to which belong all the tombs excavated in this area so far, was at this locality, a little to the north of the village of Chalandritsa.

23. **Ayios Vasilios LH.IIIA?, IIIB-C , SM.**


A short distance before one arrives in Chalandritsa from Patras, to the right of the road, in the locality called Ayios Vasilios, there is a series of small hills of a soft sandy limestone in which were cut the tombs of an extensive Mycenaean necropolis. The Ephor Kyparissês excavated some of these tombs in 1928, 1929 and 1930. In the 1928 campaign he confined himself to the excavation of these chamber tombs, but found that in most cases the roof had fallen in and only one tomb showed the objects in a really good state of preservation. It included three skeletons and several Mycenaean pots (amphorae, stirrup-jars) bronze, etc. In 1929 Kyparissês excavated two more chamber tombs at the same locality. The first was intact
and contained four skeletons and Mycenaean pots of various shapes, the latter was less well preserved. Apart from these, two tombs, some others collapsed were noted there. In 1930 the second unplundered chamber tomb (found in 1929) was cleared and plans drawn. It contained skeletons and several Mycenaean vases. A pithos burial was found by N. Yialouris at this locality in the "Marnolaka" ravine near there. When I visited the site, accompanied by my wife, I found a newly discovered chamber tomb. Its roof had fallen in and many vases have been broken by the villagers. I was able to collect some sherds of late Helladic vases similar to those found in the adjacent excavated Mycenaean tombs.

24. Troumbes

PAE (1928) 110 ff; (1929) 89 ff; (1930) 83 ff; (1952) 407 ff; (1956) 199 ff; JHS (1928-29) 235 ff; (1929-30) 241 ff; 73 119 f; BCH (1929) 502; AJA (1960) 14, 17 ff; Op. Ath. V (1965) 101; Άlim EMP 64 f; LH?, G.

There are three (3) so called tholos tombs on the row of small hillocks called Troumbes, at a distance of five minutes walk from the Mycenaean cemetery of Ayios Vasilios. Kyparissé investigated primarily the middle one of the group in 1928 and found some bronzes (pins, rings) and Geometric vases. In a hill, also called Troumbe, to the right of the road to Chalandritsa, 2 Kms. before it, there is the large foundation of a wrecked tomb, where Kyparissé found an obsidian blade only.

25. Agriapidies


Beyond Chalandritsa, to the left of the road there are some hills, called Agriapidies, where Kyparissis excavated some cist tombs. In one of these he found bones, clay spindle whorls and four crude handmade vases.

1 They probably belong to tumuli tombs, see below p.98
26. Pori


A quarter of an hour after Chalandritsa, at the foot of a hill called "Korakofolea," at the locality "Pori" opposite another hill called "Varno," there are probably chamber tombs, according to Kyparissēs, but we were not able to find any.

I visited all these prehistoric sites around Chalandritsa; although the area appears to have been eroded by cultivation, further systematic exploration there is necessary, since it looks a promising area for more tombs.

27. Mitopolis

(Map. 3) * (27.7.69). I.5 Mesolongion 585E/657N. LH. GAMS No. 294; PAE (1929) 91 f; JHS (1930) 241 f; AJA (1930) 391 f; BCH (1929) 502 f; Wiesner 20 f. No. 168; Alin EMF 66 f; Op. Ath. V (1965) 106 f; Triantafyllou 384 f; Syriopoulos 105, 480 f. AA (1930) 121 f.

Mitopolis is a small village to the west of Lalouisi. Kyparissēs found a late Helladic settlement, a destroyed Mycenaean cemetery and an acropolis of uncertain date, on one of the three hills, on which the village is built. (Ayia Varvara).

28. Mitopolis (Profitis Elias)


Mr. Mastrokostas informed P. Åström that the Patras Museum had received some bronzes from another Mycenaean cemetery at the locality Profitis Elias (1961). The bronzes included a spear head (X.75), a knife (X.75) and a razor (X.77). The Patras Museum had earlier received a Mycenaean jar (of unknown date) from this site. The site seems a very likely place for Mycenaean occupation, but excavation is necessary.
29. **Starochorion (formerly Lalousi)**  (Map.5)

GAMS No. 295; *PAE* (1933) 91 f; *JHS* (1933-34) 192 f;
*A.A.* (1934) 160 f; Álin *EME* 57 f; *Op. Ath. V* (1965) 105 f;
Triantafyllou 331 f; Syriopoulos 105, 480 ff.

The village lies more than 6 Kms. south-west of Chalandritsa. According to Kyparissès there is a Mycenaean cemetery there, on the summit and the sides of the hillocks surrounding the village. The whole area is cultivated and we were not able to find any trace of chamber tombs there. But the site appears to be very suitable for prehistoric habitation and further work is necessary here.

30. **Vasilikon (formerly Brakoumadhi)**

(Map.5) * (2.8.1968). I.6 Patrai 629E/725N. LH.IIIIC ?
Triantafyllou, 402 f.

The small village lies in the fertile plain of Pharai and at a distance of more than an hour north-west of Chalandritsa. In the Patras Museum there are two "amphoriskoi" (PM. 590, 591) of uncertain date, said to be found here in November 1953. No further information is available.

31. **Pharai (formerly Lalikosta)**  (Map.5)

(PLATE 8.b) * (3.8.1968). I.5 Mesolongion 620E/693N.
LH ? G. Classical.
*PAE* (1957) 117 f; *Ergon* (1957) 69 f; *JHS* (1957) 11 f;
*BCH* 82 (1958) 726 f; *Op. Ath* V (1965) 104 f;
Triantafyllou 331 f.

About 10 minutes' walk to the east of the village there are many grave mounds of unknown date in the plain of ancient Pharai, south of the River Peiros. Ephor N. Zapheiropoulos opened one of them in 1957. On the top of the mound were remains of two cist graves and a couple of burial pithos. The lower part of the mound concealed a Geometric built tomb chamber roofed with slabs. Although the results of the excavations there were poor, the site is worth closer study.
32. Mirali


About 26 Kms. from Patras to Kalavryta, on the left side of the road N. Zapheiropoulos excavated two Middle Helladic tombs in 1952. The site appears to be less than a kilometre south of Mirali. Further work is necessary here.

Katarraktis (formerly Lopesi)

(PLATE 8-10) 7 * (15.8.1969). (Map. 5).

I.6 Patrai in square 720B/690N.

The modern village lies on an elliptical hill on the lower south-western slopes of Mt. Panachaiton, c. 3 Kms. east of Chalandritsa. The hill is bare and rocky and is flanked at the west and east by stream beds. One cave is visible immediately below the village. The area is well-known from the excavations of Kyparissès, Zapheiropoulos and Yialouris, and the site must have been an important one in prehistoric times, especially since it commands a wide view of the fertile plain of Pharai to the west. It will require serious consideration in any future discussion of the topography of Achaea.

Under this heading the following localities are included:

33. Drakotrypa (Map.5)

(PLATE 8-9) I.6 Patrai in square 720 E/690 N.

BH ?; MH; LH I-II; LH III A; LH III B-G.


At this locality, ten minutes' walk east of Katarraktis, there is a prehistoric settlement discovered by N. Zapheiropoulos. Trial excavations made in 1957 brought to
light house walls. The sherds were early Mycenaean. In the following year more of the settlement was uncovered. The finds included stone axes, a bronze chisel, a sickle, complete Mycenaean vases, together with a number of interesting hand-made MH vases (both plain burnished and matt-painted). There are some Early (?) and Middle Helladic sherds from Drakotrypa in the British School at Athens. One child's tomb has also been found here. It is worth mentioning now what Hope Simpson says: "The early date of the settlement goes some way towards removing the basis for the (now fashionable) surmise, based on mainly negative evidence, that Mycenaean settlement in Achaea was almost entirely restricted to the latter part of the LH III period." (GAMS p. 86).

34. **Ayios Athanasios**

(PLATE 9) I.6 Patrai in square 740E/670N. MH: LH II B; III B: L


About 30 minutes' walk to the south of Katarraktis and on the hill of Ayios Athanasios above Rhodia, Ephor N. Zapheiropoulos discovered a prehistoric settlement. A large rough-stone building of megaron type, supposed to have been occupied both in Middle Helladic and Late Helladic times, was explored and plans were drawn. One child's tomb was also found there, which contained some beads of steatite and agate. A few minutes before one arrives in Rodhia there are two tholos tombs excavated by the same archaeologist in 1956 and 1957. They both were found plundered, but some precious objects were collected, now housed in the Patras Museum (bronze bowls, silver kylix, bronze daggers, a bronze sword and a bronze dagger with gilded studs and decorated with dolphins in silver and niello, etc.). From the finds they can be dated rather to LH II B period. Traces of another still unexcavated (tholos ?) tomb were shown to me during my visit there last summer. Further work would surely be productive and rewarding.

1 Hope. Simpson's map reference (720E/690N) is wrong. The same applies to the next site (35).
35. **Rhodia-Bouga**

(PLATE 10.a,b) 6 Patrai in square 720E/679N. LH III B-C; GAMS No. 298; AE (1919) 98 ff; PAE (1932) 59 ff; (1956) 195 ff; JHS (1955) 17 f; (1956) 16 f; Älin EMF 65 f; Op. Ath. V (1965) 103 f; Thomopoulos 227; Triantafyllou 400 f; Syriopoulos 106, 461 ff.

(a) **Rhodia-Bouga**

N. Kyparissēs excavated in 1920 seven Mycenaean chamber tombs at the foot of a steep hill, south of the road leading from Patras to Katarraktis, below the 28 Kms. mark at the locality "Karela" west of Katarraktis. The pottery (big and small amphorae, stirrup-jars, "lamps," cups) was not published. Glass paste beads, steatite buttons or whorls, agate and crystal beads were also found. In the same area two more plundered chamber tombs were exposed by the rain and a third one, which had lain open for many years, was examined by N. Yialouris. It produced a single skeleton with some vases. On a hill above the cemetery N. Yialouris reported traces of a Mycenaean settlement.

36. (b) **Ayios Yeorylos**

PAE (1956) 196 ff.

LH(?) Geometric and Classical traces of occupation were found on the ridge where the Church of A. Yeorgios stands. Note: N. Zapheiropoulos excavated three Geometric cist tombs near the 28 Kms. stone and other tombs were observed in the neighbourhood.

37. **Pyrgaki**

(PLATE 10.c) 1.6 Patrai in square 720E/698N. MH.


Scanty traces of an extensive Middle Helladic settlement much denuded were recovered on the hill Pyrgaki, 1 Km. to the north-west of Drakotrypa and above the village, Katarraktis. One child's tomb has also been found here.

1 Hope Simpson (GAMS p. 86, No. 298) mentions a cemetery of chamber tombs on the hill of Katarraktis itself. He has misunderstood the original report and has confused these tombs with those found in "Karela" ravine, near Bouga, which are the same.
Leontion (formerly Gourzoumisa)

(PLATE 11-12) *(16.8.1968). (Map. 6).*

1.6 Patrai in square 810E/710N. EH; LH III B-C.

GAMO No. 299; FAE (1930) 88 f; (1931) 71 ff; (1932) 57 ff;
JHS (1931-32) 244; Wiesner 19 f. No. 162; AA (1932) 143 ff;
AJA (1932) 244 f; (1931) 199 f; BCH (1930) 484 f; (1931)
477 f; Op. Ath. (1965) 102 f; Alin EMP 65 f; Meyer 111 ff;
Triantafyllou 337 f; Syriopoulos 106 482 ff; Philippson
III 182 f.

The village lies about three hours from the main Patras-
Kalavryta road (to the east) five hours from Chalandritsa,
and is fairly remote. It is marked by a chapel of Ayios
Andreas, a little to the south of the modern Leontion
village, and there is an acropolis on the top of the hill,
Ayios Konstantinos, attributed to ancient Leontion.

The following localities have produced prehistoric
material so far:

38. Vrayianika EH.; LH.IIIB-C

(PLATE 11)

Below the spring, from which the village Leontion gets
its water, Kyparissēs excavated some chamber tombs, but
only one was found intact. It contained several vases
of LH III B-C date and an Early Helladic jug.

39. Koutreika LH.

Kyparissēs discovered another Mycenaean cemetery of
rock-cut tombs, half an hour distant from Leontion at
that locality, near the River Selinous. The tombs were
all destroyed and no finds were reported.

40. Ayios Ioannis LH.IIIB-C

(PLATE12a)

Near the church of Ayios Ioannis, three quarter's of an
hour before the village Leontion on the left side of the
road, towards it and on the fields belonging to N. I.

1. Hope Simpson's map reference (800E/700N) is wrong. In
general his description of the site is very brief and
not always accurate.
Polydoropoulos, there is another Mycenaean cemetery excavated by N. Kyparissès in 1932. All but one of the tombs were found to be destroyed. The intact tomb produced LH III B-C vases, beads, amber, etc.

41. Ayios Konstantinos

(PLATE 12.c) LH 3

Near the Church of Ayios Andreas, a little above it, at Ayios Konstantinos, and on the top of the hill, Kyparissès traced an ancient settlement, which may well go back to Mycenaean times, but the surface remains, as far as I was able to recognize, are later. It is probably the settlement site to which belong all the chamber tombs found in the area so far. This was probably a local farming community and the site was apparently chosen for its isolation. Further work is necessary here.

C Kalavryta Region

42. Mikros Pondias (Lomboka)

(PLATE 13) X * (17.8.1969). (Map 6)

1.6 Patrai 815E/654N. LH III C. 

GAMS No. 3001; PAE (1933) 90 ff; (1934) 114 f; JHS (1933-34) 192 f; AA (1934) 160; BCH (1935) 259 f; Alin EMP 66 ff; Op. Ath. V (1965) 105; Syriopoulos 105, 480 ff.

The locality is the summer resort for the villagers of Bodia and lies on the bank of the River Selinous, below Mt. Krania. A Mycenaean cemetery was noted on a hillock on the property of Th. Koutroumanis by N. Kyparissès. He excavated three chamber tombs in 1933, of which two were looted and one intact. The unplundered tomb contained four LH III C stirrup-jars, a cup and a bronze knife. The site is of great importance, since it lies far inland in Achaia, thus proving the expansion of Mycenaean civilisation in such remote and isolated areas of the district. No traces of Mycenaean tombs are visible today.

1. Hope Simpson mentions the reference PAE (1931) 71 ff. (1932) 142 f. I was not able to find these references, so he is absolutely wrong.
since the field is cultivated. This interesting site would appear to be an isolated local agricultural centre affected by Mycenaean culture.

43. Ayios Vlasios (Map.6)

I.6 Patrai 784E/588E. LH.


N. Yialouris found Mycenaean sherds, apparently from a settlement, on the lower plateaux of the hill, 3 Kms. north of the village, Ayios Vlasios, at the foot of Mt. Erymanthos at the 51st Kilometre stone of the route Patras-Kalavryta. No further information is available.

44. Manesi (Vromoneri) (Map.6)


GAMS No. 302; PAR (1929) 91 f; (1930) 87 f; JHS (1929-30) 241; AA (1930) 121; AJA (1930) 391; (1931) 199; BCH (1929) 502; (1930) 484; Wiesner 19 f; No. 166; Op. Ath. V (1965) 106 f; Alin EMF 66 f; Triantafyllou 365 ff; Syriopoulou 105, 480 ff.

At a distance of 10 minutes' walk from the village of Manesi to the south-west there is a row of white hills. A Mycenaean cemetery was found on one of these low hills at the locality, Vromoneri, on the property of L. Dementopoulos. Ephor N. Kyparissis excavated some chamber tombs there and found some LHIIIc-sm vases. The site is cultivated, so we were not able to find any trace of the tombs. The guard of the Antiquities there informed me that some 2 or 3 chamber tombs were excavated in the

45.(Pl. Manesi itself, and he showed me some traces of these tombs. On present evidence the site appears to be not an important one. Probably a small unfortified agricultural settlement in late Mycenaean times.

46. Bartholomio (near Lomboka) (Map.6)


Epimeletes P. Nerantzoulis excavated three pithoi from one of the so-called tholos tombs, named Toumbi or Troumbi, at this locality in 1931. The pithos contained skeletons, glass and stone beads, bronze and iron fragments, all of the latest Mycenaean period, but the burials are perhaps post-Mycenaean. According to the same source he saved steatite buttons, glass beads and a 3-handled "crater" (jar?) from robbed tombs there.

47. **Kastria (Map.7)**

K.6 Dimitsana 968E/503N. N. E.H.  
AAA vol. 2 (1968) 136 ff.

Neolithic and Early Helladic sherds were recovered from a small chance excavation near the entrance of a cave, by the village of Kastria, which lies south-east of Kalavryta at the western foot of Mt. Chelmos, and about halfway along the road from Kleitoria to Lousoi. I did not visit the site.

48. **Vrisarion (Kato Goumenitsa)**

(PLATE 14) x* (17.8.1969) (Map. 63).  
GAMS No. 303; Adelt (1924-25) Parartema 14 ff; PAF (1925) 43 ff; (1926) 130 ff; (1927) 52 ff; AA (1926) 427; (1927) 385; AJA (1926) 119; (1929) 259; BCH (1925) 454; (1926) 550 f; Wiesner 19 f. No. 161; BCH 85 (1961) 682; AJA 64 (1960) 8 ff; Alin EMF 65 f; Op. Ath. V (1965) 104 f; LMTS 98 f; Triantafyllou 129 f; JHS (1959-60) 11 f; (1961-2) 12 f; Syriopoulou 105, 480 ff;

Ephor Kyparissés gives a full and detailed description of the site. East of the road from Patras to Kalavryta, from 70 to 72 Kms. is a row of white hills. Outside Vrisarion at 10 minutes' distance to the south-west of it, one descends at the locality "Koudouno mylos" to a ravine and ascends in 10 minutes to a white hill called "Ayia Paraskevi" on the south-eastern slopes of which several chamber tombs were found, either destroyed or intact. To the east of this hill lies the modern village, Vrisarion,
8. Sketch map of the Leontion, Vrisarion and Manesi areas.
and above it the heights "Skepasto" and "Mavro Koutsouro." The highest summit of Mt. Panachaikon is in the distance to the north beyond a stretch of more hilly country, and to the south and south-east one can see the highest top of Mt. Erymanthos (Ayios Elias). Farther to the south, on top of the hill "Kastron" is the ruin of a Frankish tower. The whole area is surrounded by many deep ravines, which divide one ridge from the next. The locality "Ayia Paraskevi" commands a wide view of the plain of Lapathoi, which is well watered and carpeted today with vines, firs and various kinds of fruit trees. At that locality Kyparissèœs excavated 25 chamber tombs in his successive campaigns in 1925, 1926 and 1927. A rough catalogue and some photographs of the finds are given. They belong to the Mycenaean period and are similar to those found at Aigion, Kephallenia and Argolid. N. Yialouris cleared an Early Mycenaean (LH I) chamber tomb, which was found by chance there and recovered a vase and a bronze dagger. Two more Early Mycenaean tombs were excavated by the same archaeologist just on the levelled top of the "Ayia Paraskevi" hill in 1960, containing about 30 vases, bronze knives, a spear head, faience beads and a figurine. South-east of the excavated site is a height called "Prinakia" where Kyparissèœs observed traces of chamber tombs. As the tombs were at such a height (850 m. above sea level) and no settlement was evident, Kyparissèœs was led to believe that they are the burial place of people who came from the lowlands farther south to spend the summer. But it seems to me that the question of the settlement site can be resolved by further systematic exploration on the neighbouring hills to the east and north of the excavated site, as it appears unlikely that this area with such a large cemetery was only temporarily inhabited in prehistoric times.

50. Kertezi (Map.6)

K.6 Dimitsana 858E/553N. LH III C.

Work on a road near Kertezi (summer 1969) revealed a chamber tomb, from which comes a small stirrup-jar, now
in Patras Museum (PM. 1137). The site lies about eight Kms. south-west of Kalavryta and is situated on the eastern slopes of Mt. Erymanthos. I did not visit the site.

D  Tritaea Region  (Map.8)

51. Droia (formerly Prostovitsa) *
K.6 Dimitsana 635E/515N. LH III C; SM ?
GAMS No. 296;  PAF (1927) 52 f; (1928) 114 ff;  JHS 49 (1929) 235 f;  AJA (1929) 259 f;  A.A. (1928) 596 f;  BCH (1928) 482 f; (1930) 484 f;  P.M. 276 f;  Archaeology 13 (1960) 73 f. fig. 12;  AJA 64 (1960) 6 f. No. 8a;  Wiesner 20, 36, 93 ff;  Op. Ath. V (1965) 107 f;  Alin EHE 66;  LMTS 97 f;  Styreniüs 125 ff; 1;  Triantafyllou 512 f;
Syriopouloa 104, 480 ff;

The village lies on the western slope of Mt. Erymanthos, at a height of 725 metres above sea level. The Mycenaean chamber tombs were cut on a hill of the same sandy limestone as at Chalandritsa, a little to the west of the modern village, where a fine water supply exists. The slope here is so abrupt that it was possible to have many rows of tombs one above the other, and Ephor N. Kyparissês counted more than one hundred of them. Unfortunately, the villagers had used these tombs as quarries and lime pits and thus destroyed their ancient contents. The objects recovered from the ruined tombs and from one opened illicitly before Mr. Kyparissês' excavations, consist of some very fine late Helladic vases, a gold ring with empty setting, beads of paste, agate and amber, whorls or buttons and two thin bronze knives. The identification of this site as a significant prehistoric centre is beyond any doubt, though no habitation site has been associated with these burials as yet. Kyparissês gives a full and enthusiastic description of the site and a catalogue of the finds. Both the location of the site and the nature of the finds indicate that a rich agricultural and farming community existed there. Further systematic and controlled excavations would surely be useful to locate the prehistoric settlement.
52. Skoura (Map.8)

K.5 Pyrgos 558E/473N. LH III A-B?

P. Cois discovered a cist tomb (2 x 2 m.) at the locality "Kivouria," which contained 2 whole stirrup-jars and sherds from others (BE. 17-22) one 3-handled pithoid jar (plain) and a sealstone. The finds are now in the Patras Museum. The village lies near the southern borders of the modern nomes Achaea-Elis and at a distance of two hours' south of Drosia.

III North-Eastern Area (Aigion-Elveni)

This part of Achaea includes the coastal strip from Kamarais to Aigeira. It faces the Corinthian Gulf to the north and is separated from the south-western (Central) region by the rocky slopes of mountains, Panachaicon and Chelmos. Hilly features and deep gorges within the area tend to isolate smaller districts and make communication sometimes difficult. The soil of this district is a sort of crumbling stone mixed with earth. It is well watered and vines, currants and all kinds of fruit trees prosper there. The central feature is the wide and fertile plain of Aigion, which faces Doris and Locris to the north on the opposite coast of the Gulf. The other two fertile plains lie at Kamarais and Akrata, each cultivated and having its own population centres both in prehistoric and in classical times. The whole coast has always been subject to earthquakes, sometimes of a most tremendous kind (e.g. disaster of Helike). Besides those which have been recorded by ancient authors, several other instances are mentioned by later historians.

At present our evidence suggests that the whole area was inhabited in the early Mycenaean period (LH II). Further exploration is needed, as most finds are accidental and most of them, now housed in the Aigion Museum, come from private collections.
7. Sketch map of the Kalavryta area.

8. Sketch map of the Trikala area.
53. Kamarais (Xerikon)

(Map.10) 


The site seems to be a probable candidate for the ancient town of Rhypae. Many Roman remains have been found there. On the top of a hill called Xeriko at the bank of the River Erineos (Phoinix) there were found some chamber tombs. Epimeletes P.A. Nerantzoules found a Mycenaean chamber tomb at the locality Paliomilos and collected EH. and Late Helladic sherds, as well as obsidian, stone razor blades and stone arrows from this hill. Ephor N. Kyperisses excavated at Kamarais in 1934, but no finds were reported. P. Αstron, who visited the site in 1961, found some EH. MH. AND LH III A or B sherds. He noticed also an Early Helladic settlement on the western slope of the hill, near the river. The site has not been thoroughly examined and may well be worth closer study.

54. Mayeira (Paliometocho)

(Map.10) I.6 Patrai 850E/850N. LH IIIA

A.Delt. Chr. 16 (1960) 115 f; Triantafyllou 359 f; Thomopoulou 65 f.

The village lies about 8 Kms. south-east of Kamarais. E. Mastrokostas reports that a Mycenaean tomb was found at the locality "Paliometocho" in 1960. It contained an alabastron. No further information is available. I did not visit the site.

55. Aravonitsa

(Map.10) I.6 Patrai 864E/868N. MH.

GAMS No. 304; BCH 60 (1956) 291 f; Op. Ath. V (1965) 100 f; Triantafyllou 70 f; Syriopoulos 80 f.

The village lies a quarter of an hour's walk to the north of Mayeira. Minyan and hand-made vases were found near the village, west of Aigion, in a MH. tomb, opened by peasants. Mediaeval remains have been found at "Ayioi Theodoroi" and "Proxena" there.
Aigion (Psila Alonia) (Maps.10-11)

(PLATE 15) x * (28.7.1969) I.6 Patrai 959E/647N.
LH II B - Sub-Myc.
GAMS No. 304; PAP (1939) 104 f; (1954) 289 f; BCH 79
(1955) 252 f; JHS (1954) 11 f; (1910) 292 f; Ergon (1954)
39 f; Syriopoulou 484, 108 ff; Iliad 2.514, AAA 4 (1912)
131 f; Alin EMF 63 f; Op. Ath. V (1965) 99 f;
Triantafyllou 50 f; Stavropoulou (1954); Philipsson III,
186 f; GSHI 69 f; D. Fimmen "Die Kretisch-Mycenische
Kultur" (1924) 9 f; Frazer: Pausanias V. 159 f.

The modern town of Aigion stands on a hill, terminating
towards the sea in a cliff about 50 feet high, which is
separated from the beach by a narrow level. Its vicinity
is enriched with gardens, large olive trees, extensive
vineyards and currant plantations. On the opposite coast
of the gulf are seen the mountainous shores of Locris
Phocis and Boeotia, as far up as the Corinthian Isthmus.
On the west rises the Mt. Panachaikon. That Aigion
occupies the site of an ancient town of great importance
is evident from the abundance of broken prehistoric and
later pottery, and from numerous tombs containing bones
and vases, which are found in the surrounding fields. The
small, but interesting port, the natural amenities,
combined with the defensible hill, the fertile plain and
the rivers on either side were certainly the original
causes of the Greek settlement on this spot. Aigion is
mentioned by Homer (Iliad 2, v. 571) as having supplied
vessels for the Trojan war. Indeed all the towns of this
coast seem to have attained a considerable degree of power
at a very early period, as amongst other places which
furnished vessels, the poet enumerates the cities of
Sicyon, Hyperessia, Goneessa, Pellene and Helice. Soon
after the destruction of Helice and Bura, in the time of
the Peloponnesian War and the decline of Aigai at an
earlier period, Aigion became the chief town of the
Achaean League.

A number of Mycenaean objects,
reported to have been found near Aigion, have from time
to time appeared in Athens. N. Kyparissēs said in 1939
that he had saved the prehistoric cemetery in Aigion (PAP (1939) p. 104) where he refers to his report to the Ministry of Education No. 587 (28.1.1939).

N. Yialouris located a late Mycenaean cemetery at the locality "Psila Alonia" and in its neighbourhood towards the sea, near the hospital. About fifteen tombs had been plundered during the last decades. Yialouris excavated one tomb plundered in Roman times and found sherds of late Mycenaean date at the entrance. Work on the new national road from Athens to Patras revealed a cemetery of chamber tombs just below the High School of Aigion. E. Mastrokostas examined four of them and collected over one hundred late Helladic pots, bronze rings, steatite buttons, stone and glass beads. He failed to give any illustration or detailed description of the finds, which during my visit there, were locked in the storeroom of the Patras Museum.

I visited the site and I was able to note some more 8-15 tombs, traces of which were visible. In 1970 we excavated eleven of them, which produced new interesting finds. This is a site of capital importance as its long history indicates. The key is probably its strategic situation controlling a wide view in the Corinthian gulf. Further excavation is needed as soon as possible here.

58. Kallithea (Aigion)


K. Stavropoulos (p. 39) mentions a large Mycenaean cemetery, unearthed in the garden of J. Panayiotopoulos' house and extending along the whole rock of Kallithea (district of Galaxidiotika). The site lies to the west of the modern town of Aigion. Some Mycenaean pots, now in the Aigion Museum are labelled from this locality (AM. 52-76). They are said to be from a chamber tomb found by chance in the property of Mr. Karoyiannis in Kallithea. A visit in 1969 produced no evidence for Mycenaean cemetery here, but this may be due to the constructions of modern building at this site.
59. **Kouloura (Paliontikameres)**


The small village lies about 5 Kms. south of Aigion. Ten minutes' walk after it one arrives at the locality Paliontikameres. P. Aström says that it is possible that one depressed globular stirrup-jar published by him in Op. Ath. (1965) 90 f. Fig. 1, l-3, comes from this locality.

60. **Vovoda LH.IIIC**


In a distance of 5 Kms. south-south-west of Aigion lies the village of Vovoda. One globular (depressed) stirrup-jar published by P. Aström in Op. Ath. (1965) 90 f. Fig. 1. l-3 probably comes either from this site or from Paliontikameres. Stavropoulos (p. 50) says that several tombs of unknown date have been found at the locality, Ayios Ioannis. Traces of Archaic buildings and a Geometric cemetery have been located in the environs of Vovoda. Further excavations here may be productive.

61. **Chadzi (Trapeza)**

(PLATE 15) * (29.7.1969) (Map. 10). I.6 Patrai in square 900 E/800 N. LH IIIA-B; SM . GAMS No. 3081; PAE (1938) 119 f; (1939) 103 f; BCH (1871) 233 ff; AM (1878) 66 f; EMP 63 f; O.A. 108 f; R.E. 2 Reihe I, cols. 1288 f (with map); Ernst Meyer: "Peloponnesische Wanderungen" (1939) 123 ff; pl. 33a, Plan VIII: "Erevna" (1933); "Achaiki Estia" (1952) vol. 2, 37 ff; Philippson III, 189 f; newsp. "Hypa parpar" 17.12.1953; Stavropoulos 49 f; Syriopoulos 484, 108 ff.

1. The map reference (900E/810N) is wrong.
Trapeza is a trapezoid hill planted with vines, ten minutes' walk to the south of the village, Chadzi. The road from Aigion to Chadzi bifurcates after Chadzi; following the road to the left one arrives at the eikonisma of Ayios Dhimitrios, on the left side of the road, in front of which is a deep ravine. Some walls are visible both to the left and right of the road. Following a newly built trace from the eikonisma in a north-eastern direction up the hill one arrives at a spur, on the northern side of which there are walls called Cyclopean by Nerantzoulis. They are not marked on Meyer's map. A corner of a tower or bastion, built of enormous blocks is visible here in the vineyards. Lower down on the steep slope is a terrace wall, formed by irregular large blocks stapled on each other, giving a superficial Cyclopean appearance. It is doubtful if these walls are Mycenaean, because they have many similarities with that found in Aigeira. P. Åström collected geometric sherds and a black-glazed sherd with impressed palmettes on the inside at the base.

The site was discovered by Lebeque in 1871 and visited by von Duhn and Ernst Meyer. P. Nerantzoulis excavated at the site in 1933 in collaboration with A. Papatheodorou. He objected to the identification of Trapeza with Rhypes, since it was too close to Aigion and suggested that the acropolis of Aigion was situated here. Near the eikonisma Ayios Dhimitrios and on the western slopes of the hill, Trapeza, in the property of Ath. Printzos, Nerantzoulis excavated some Mycenaean chamber tombs, containing several Mycenaean pots, now housed in the Aigion Museum. Today no traces of these chamber tombs are visible, since the whole area is intensively cultivated. He also found, at another point near the walls, some bronzes and classical vases.

Ephor N. Kyparissès investigated the tombs in 1939, but found them plundered and destroyed. I visited the site in July 1969, accompanied by my wife, and Mr. J. Androutsopoulos. This was apparently a fairly important site, both in prehistoric and classical times, controlling
the extremely fertile plain of Aigion. No habitation site has yet been convincingly associated with these important Mycenaean tombs. It is probably to be found either in the Armira hill or at the Trapeza hill itself.

62. **Achladies (Achouria)**


GAMS No. 307; *PAG* (1938) 119 f; (1939) 103 f; *Op. Ath.-V* (1965) 96 f; *Stavropoulos* 50 f; *Syriopoulos* 108 f.

A.G. Alexandropoulos *"Ιερά τύποι και Τοπογραφία της Πρέος καὶ τῶν κείματος αὐτῆς"* (1919) 25 f; Ἀλιν ἜΜΒ 63 f.

The village lies about 5 Kms. south-east of Aigion. Mycenaean cemetery on a steep hill, at the locality of Achouria-Spilia and in the property of A. Chronis, was excavated by P. Nerantzoulis in the 1930's. Pottery in the Aigion Museum entered with Mycenaean vases from "Trapeza" (AM 1-37). N. Kyparissēs excavated at the same locality in 1939, but the chamber tombs were found plundered and destroyed and yielded no finds. When a new road was being built at Achouria in 1904, the workers came across a Mycenaean chamber tomb *"ἄνωτά καὶ ἀνωτέρωτα καὶ ἀνωτάτα τοῦ κατανεμηθέντος οὐρανοῦ"*. It contained rich offerings (vases, gems, swords, etc) which they collected and sold to dealers in antiquities. It is recorded that tombs were robbed at the site already in 1854. Some tombs of uncertain date were found at the locality.

63. **Vareliossa**, south of Achouria some years before 1954.

I visited the village of Achladies and the locality, Achouria, accompanied by my wife and Mr. A. Tsoukos, who informed me that the tombs were preserved until 1963-64, when a sudden earthquake destroyed all but one, which is still visible on the top of the steep hill. The villagers also informed us that several finds come to light from time to time in this area. It seems unlikely that a sizeable habitation site would have been built on this steep hill, but either Ano or Kato Achouria to the south of it are probable settlement sites, associated with this Mycenaean cemetery.
64. Mamousia (Dherveni)

(PLATE 17) § (30.7.1969). (Map. 11).
1.6 Patrai 998E/732N. LH I. P.G.
GAMS No. 305; PAF (1938) 119 f; (1939) 104 f; Alin BMF 63 f; JHS (1951) 99 f; Op. Ath. V (1965) 105 f; BSA 48 (1953) 154 ff; BCH 76 (1952) 222 f; PAF (1952) 406 f; AJA 64 (1960) 16 ff; Philippson III, 188 f; BSA 48(1953) 154ff; 49(1954)72ff.

The village, Mamousia, lies about 15 Kms. south-south-east of Aigion, between the Rivers Kerynitis and Vouraikos. Kyparissis supposed that there was a Mycenaean cemetery at this site, a few minutes beyond the smaller village, Dherveni, but he apparently never had an opportunity of excavating there. A burial pithos containing 12 Proto-Geometric vases was found also at Dherveni at the foot of the hill, where Keryneia is located. J. K. Anderson undertook excavations on the opposite height of the village Maroousia, where many classical remains belonging to the ancient Keryneia were found, but none Mycenaean. My visit there was brief and I did not find Mycenaean sherds or traces of the prehistoric cemetery. In spite of the lack of ceramic evidence, the nature and location of this site (Mamousia) located 800 m. above sea level and controlling a good part of the fertile coastal plain and route, indicates that it could well be a habitation centre in the Bronze Age. Further exploration is needed here to find the Mycenaean settlement and confirm our own hypothesis.

65. Keryneia (Ayios Yeoryios) (Map.11)

I.6 Patrai 948E/792N. LH (LH III?) .
GAMS No. 306; BSA 48 (1953) 154 ff; Meyer 130 f.

The modern village of Keryneia is situated in the foothills of Mt. Klokos, about 8 Kms. south-east of Aigion. The name of the village was changed from Gardena to Keryneia in 1924 (but for the real location of ancient Keryneia cf. BSA 48 (1953) 154 ff.) Hope Simpson, who visited the

1. Hope Simpson's reference PAF (1934) 104 should read PAF (1939) 104.
2. The map reference (0.15E/792N) is wrong.
site gives a detailed description of it: "The site lies on a high spur north-east of and above the village, overlooking the coastal plain, where stood historical Helike (shallowed by the earthquake of 373 B.C.). On the north-west side of the spur is the chapel of Ayios Yeoryios, and on the north slope above the chapel are remains of ancient circuit walls. The spur and its slopes are covered with ancient (including classical) sherds and dislodged building stones." Hope Simpson and McDonald saw a Mycenaean Double Axe (now in Patras Museum), which had been found at the site. They did not find Mycenaean sherds on the hill itself, but they suggest that it could be considered as a candidate for the Mycenaean habitation site. I did not visit the site.

66. Helike (Map.11)

(PLATE 16) X (28.7.1969). I.6 Patrai 010E/800N. LH.IIIA?

Pausanias "βῆλειν ΧΠΙ; Ḳέ. ΗΧΓ.4"; Diodorus Siceliotae
"βῆλειν ΧV, Ḳέ. 48"; Strabo ḲΙΒ\. VIII Ḳέ. VII;
Stavropoulos 58 ff; Iliad 2.575; Philippson III, 187 ff;
Hope. Simpson & Lazenby CSHI, 70 f.

The ancient Helike was probably situated at the right bank of the Selinous river, close to the sea at the site now called "Πόρους τῆς Παναγιακάνας". According to the legendary tradition it was founded about 1400 B.C. by Ion in honour of his wife, Helike, and soon became the centre of the Ionians of Achæe, until the invasion of Achaæoi. But this important town was shallowed by earthquake and tidal waves in 373 B.C. There are several descriptions of the disaster, but none of them is historically accurate. Recently Prof. Mavinatos, with a team of Greek and foreign technicians tried to locate the ruins and the site of the ancient Helike, but the whole campaign did not give the results he expected. I visited the site, but I was not able to see any trace of the ancient city or to find any sherd. Further exploration could well be productive and rewarding.

1. Archaeology (1960) 186 ff;
67. **Akrata** (Map.12)


100 f; Philippson III, 171 f. MH; LH ?

N. K. Moutsopoulos has traced an ancient cemetery, presumably Mycenaean, at the west foot of the hill above Akrata. He also mentions Mr. Roufogalis' collection of antiquities in the monastery of Ayia Triada in Akrata, where he saw some interesting stone tools and weapons from the area, with all likelihood from Chelmos. I visited the site, but the finds of Roufogalis' collection all belong to the classical or later periods. The villagers informed me that work on the road from the national road to Akrata revealed a neolithic settlement, traces of which I saw there (=Krathion-Silivainiotika). A Middle Helladic Minyan Kantharos (PM. 1026) comes from an excavated MH tomb there (AAA Vol. 2 (1968) 136-138).

68. **Aigëira (ancient Hyperesia)**


I.7 Xilokastron 416 at 197 E/689 N.

Iliad 2.573; GAMS No. 82; Ω. Walter OJh. 19/20 (1919), Beiblatt, cols. 5-42; Frazer, Pausaniae IV. 176-8 ff; JHS (1960-61) 31 f; Op. Ath. V (1965) 97 ff; H. Simpson & Lazenby OSHT, 68 f; Philippson III, 171 f;

According to Pausanias Aigëira was the new name for the old city of Hyperesia (VII. 26.2), but it did not supersede Hyperesia at once, though adopted before the Dorian invasion. The narrow plain of Akrata is closed on the east by a hill which thrusts itself forward from the mountains till its northern foot almost touches the seashore. On the south the hill is joined to the higher mountain, Marmari by a narrow but lofty neck. Here the hill may be 1000 feet high. From this point it descends northward, where it leaves just room enough for the railway to run at its base. On the east and west sides it is defended by precipices and precipitous slopes. This is
the hill of Aigeira. From the modern village 8 Kms. to
the south-east, one arrives at the neck which connects
the nearly isolated hill of Aigeira with the mountains of
the south. There one easily can see the remains of
fortification walls and an ancient theatre (locality
Palaiokastron). Descending northward toward the sea
on one of the many terraces of the hill the remains of
a classical building are visible. After ten minutes'
walk to the south of Palaiokastron and on the hill

70. "Rovalona" I noted two Mycenaean chamber tombs, plundered
and destroyed. Hope Simpson and Lazenby found a quantity
of fine-quality LH III A-C sherds on the acropolis of
Aigeira. They say that "there did not seem to be any
pottery of any other period on the surface here, and the
foundations of walls also appeared to be Mycenaean." No
Mycenaean finds were reported from the Austrian
excavations at Aigeira, but O. Walter mentions that
according to Stais there were Mycenaean pieces from this
site in the National Museum, Athens. The British School
of Athens has a collection of Classical, Mycenaean and
perhaps earlier sherds from Aigeira. Finds said to be
from a tomb from Aigeira were acquired in 1904 by the
Antiquarium, Berlin (Inv. Nos. 30742 ff.). The bulk of
the material is now in the Ehem. Staatliche Museen in
Berlin - Charlottenburg, while a stirrup-jar (Inv. No.
30760) and a bracelet are in the Pergamon-Museum, East
Berlin. Paul Åström (Op. Ath. 97 f.) gives a complete
list of these finds.

Frazer (Pausanias 177 f.) mentions "some half-dozen
ancient tombs, of no great size hewn in the face of a
rock, at the northern foot of the hill (of Aigeira),
near the sea and immediately above the railway line."
We are not able to say if they were Mycenaean or
classical. The situation of Aigeira is, from a military
point of view, a very advantageous one, being at once
strong and commanding. What Pausanias calls the port of
Aigeira was probably situated on the narrow strip of
flat land between the foot of the hill and the sea.
In spite of the scanty ceramic evidence, both the nature and the location of this site with a usable harbour and a small but fertile plain to the north indicate that it was an important habitation centre in the Bronze Age. There is no strong reason to doubt that this is the site of the town mentioned in the Homeric catalogue. Continuous occupation in classical and mediaeval times, as well as intensive cultivation of the area, may be mainly responsible for the dearth of evidence for earlier settlement. Further work is necessary here.

71. Dherveni (Psila Alonia) *(PLATE 18)*

I.7 Xilokastron 416 (spot height) at 195E/689N.

GAMS No. 82; *AP* (1956) Chr. 11 ff; *BCH* 82 (1958) 726 ff; *LMTS* 86 ff; *Syriopoulos* 484, 106 ff; LH IIIIB-C

About 1½ Km. to the east-south-east of the ruins of the acropolis of Aigeira and near the modern village, Dherveni (nowadays in Corinthia), at the locality "Psila Alonia" the late Ephor N. M. Verdelis excavated a Mycenaean chamber tomb with 14 more or less rectangular pits in the chamber and two in the dromos. It contained skeletons, vases of LH III B and III C periods, 25 crania, etc. The tomb is situated at the edge of a deep ravine that separates this site from that of Aigeira. About ten metres to the south the same excavator discovered another chamber tomb, but without dromos, and three pits dug in its floor, each containing a corpse. The finds included bronzes and two alabastra of the late Mycenaean period. Both the finds and the location of the site indicate that the burials belong to the settlement of Aigeira.

72. Pellene

I.7 Xilokastron 804 at 327E/588N. LH?

*Iliad* 2.574; *CSHI* 69 f; Atkinson, Bosanquet, Edgar and others "Excavation at Phylakopi in Melos" London (1904), 227; Blinkenberg "Arch. Studien,"(1904) 14 f; 24; *Op. Ath.* V (1965) 107 f.
The historical Pellene occupied the top of a high ridge extending to the north-east of and above the little modern village of Pellene, formerly called Zougra. The site lies nowadays in the nome of Corinthia, but I mention it here, because in ancient times it belonged to Achaea. A group of obsidian objects, numbering 268 pieces, is said to have come from this site. This collection is in the New Carlsberg Glyptothek in Copenhagen. Hope Simpson and Lazenby, who visited the site in 1960, did not find any prehistoric sherd, but they suggest that possibly a prehistoric settlement existed there.

SUMMARY

The present study of prehistoric sites of Achaea is based mainly on the results of field-work by Greek archaeologists over several years and it cannot be "final"; many more sites will, I am sure, be discovered. The concentration of many sites observable mainly in the regions of Patras, Pharai and the area of Aigion may be partly due to the fertility of the land and their position near the major Achaean centres, and partly to the present accessibility of these parts of Achaea.

On the other hand, gaps in the regions of Kalavryta and Tritaea and the Dyme area may be due to the relative inattention which they have received.
<table>
<thead>
<tr>
<th>ALPHABETICAL LIST OF SITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 1 Achladies (Achouria)</td>
</tr>
<tr>
<td>2 Achladies (Vareliossa)</td>
</tr>
<tr>
<td>3 Aigeira (Palaiokastron)</td>
</tr>
<tr>
<td>4 Aigeira (Rovalona)</td>
</tr>
<tr>
<td>5 Aigion (Psila Alonia)</td>
</tr>
<tr>
<td>6 Aigion (Kallithea)</td>
</tr>
<tr>
<td>7 Akarnes</td>
</tr>
<tr>
<td>8 Akrata</td>
</tr>
<tr>
<td>9 Ano Sychaina (Agrapidia)</td>
</tr>
<tr>
<td>10 Ano Sychaina (West)</td>
</tr>
<tr>
<td>11 Aravonitsa</td>
</tr>
<tr>
<td>12 Aroe-Samakia</td>
</tr>
<tr>
<td>13 Ayios Vlasi</td>
</tr>
<tr>
<td>B 14 Bartholomio</td>
</tr>
<tr>
<td>C 15 Chalandritsa (Ayios Antonios)</td>
</tr>
<tr>
<td>16 Chalandritsa (Ayios Vasilios)</td>
</tr>
<tr>
<td>17 Chalandritsa (Troumbes)</td>
</tr>
<tr>
<td>18 Chalandritsa (Agriapidies)</td>
</tr>
<tr>
<td>19 Chalandritsa (Pori)</td>
</tr>
<tr>
<td>20 Chadzi (Trapeza)</td>
</tr>
<tr>
<td>D 21* Dherveni (Psila Alonia)</td>
</tr>
<tr>
<td>22 Drosia</td>
</tr>
<tr>
<td>F 23 Postaina</td>
</tr>
<tr>
<td>G 24 Gerbesi (Araxos)</td>
</tr>
<tr>
<td>H 25 Helike (?)</td>
</tr>
<tr>
<td>K 26 Kallithea</td>
</tr>
<tr>
<td>27 Kamarais (Xerikon)</td>
</tr>
<tr>
<td>28 Kamarais (Paliomylos)</td>
</tr>
<tr>
<td>29 Kangadhi</td>
</tr>
<tr>
<td>30 Kastria</td>
</tr>
<tr>
<td>31 Katarraktis (Drakotrypa)</td>
</tr>
<tr>
<td>32 Katarraktis (Ayios Athanasios)</td>
</tr>
<tr>
<td>33 Katarraktis (Rhodia-Bouga)</td>
</tr>
<tr>
<td>34 Katarraktis (Ayios Yeorgios)</td>
</tr>
<tr>
<td>35 Katarraktis (Pyrgaki)</td>
</tr>
<tr>
<td>36 Kato Achaea (Bouchomata)</td>
</tr>
<tr>
<td>37 Kertezi</td>
</tr>
<tr>
<td>38 Keryneia (Ayios Yeorgios)</td>
</tr>
</tbody>
</table>
39 Klaus (Koukoura)
(40) Kouloura ? (Palioskamara)
41 Krathion-Silivainiotika
42 Krini
L 43 Leontion (Vrayianika)
44 Leontion (Kourtreika)
45 Leontion (Ayios Ioannis)
(46) Leontion (Ayios Konstantinos)
M 47 Manousia (Dherveni)
48 Manesi (village)
49 Manesi (Vromoneri)
50 Mayeira
51 Mikros Pondias (Lomboka)
52 Mirali
53 Mitopolis (Ayia Varvara)
54 Mitopolis (Profitis Elias)
P 55 Palalimni (Kastros tis Kalogrias)
56 Patras (West, Odeion)
57 Patras (Gerokomeion)
58 Pavlokastron
(59) Pharai
60* Pellene
61 Platanovrisis (D. Bithelis)
62 Platanovrisis (Kouroumbalis)
63 Pournari
S 64 Skoura
65 Starochorion
T 66 Tsalaneika (Ayios Nikolaos)
67 Tsoukaleika
V 68 Vasilikon
(69) Vovoda ?
70 Vrachneika (Ayios Pandeleimon)
71 Vrisarion (Ayia Paraskevi)
72 Vrisarion (Prinakia)

* indicates a site not belonging now in Achaea
( ) indicates a doubtful site
<table>
<thead>
<tr>
<th></th>
<th>Name 1</th>
<th>Name 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Achladea</td>
<td>Achladies</td>
</tr>
<tr>
<td>2</td>
<td>Achladea ? (Vareliossa)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Aigeira (Paliokastron)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Aigeira (Kovalona)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Aigion (Psila Alonia)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Aigion (Kallithea)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Akarnes - Drepanon ?</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Akrata</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Ano Sychaina (Agrapidia)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Ano Sychaina (West)</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Aravonitsa</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Arce - Samakia</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Ayios Vlasios</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Bartholomio</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Chalandritsa (Ayios Antonios)</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Chalandritsa (Ayios Vasilios)</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Chalandritsa (Troumbes)</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Chalandritsa (Agriapidies)</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Chalandritsa (Pori)</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Chadzi (Trapeza)</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Dherveni (Psila Alonia)</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Drosia - Prostovitsa</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Postaina</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Gerbesi - Lakkopetra</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Helike</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Kallithea</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Kamarais (Xerikon)</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Kamarais (Paliomylos)</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Kangadhi</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Kastria</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Katarraktis - Lopesi</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Kato Achaea (Bouchomata)</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Kerti</td>
<td></td>
</tr>
</tbody>
</table>
38 Keryneia (Ayios Yeorgios)
39 Klauss (Koukoura)
40 Kouloura ? (Paliokamaraes)
41 Krathion - Silivainiotika
42 Krini - Velizi
43 Leontion - Gourzoumisa
(44) " "
(45) " "
46 " "
47 Mamousia (Dherveni)
48 Manesi
49 Manesi (Vromoneri)
50 Mayeira
51 Mikros Pondias (Lomboka)
52 Miraouli
53 Mitopolis (Ayia Varvara)
54 Mitopolis (Profitis Elias)
55 Paralimni (Kastro tis Kalogrias)
56 Patras (West, Odeion)
57 Patras (Gerokomeion)
58 Pavlokastron
(59) Pharai - Lalikosta
60* Pallene
61 Platanovrisis - Medzena
62 " "
63 Pournarli
64 Skoura
65 Starochorion - Lalouai
66 Tsaplaneika - Thea
67 Tsoukaleika
68 Vasilikon - Bracoumadhi
(69) Vovoda ?
70 Vrachneika (Ayios Pandeleimon)
71 Vrisarion - Kato Goumenitsa
72 " "

* indicates a site not belonging now in Achaea
( ) indicates a doubtful site
<table>
<thead>
<tr>
<th></th>
<th>Site Description</th>
<th>Source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Achladies (Vareliossa)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Mamousia</td>
<td>PAE (1938) 119 f; (1939) 104 f;</td>
</tr>
<tr>
<td>7</td>
<td>Patras</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Helike</td>
<td></td>
</tr>
</tbody>
</table>
The settlement pattern is certainly an essential part of the evidence needed in forming a clear picture of the situation in Achaea and its relationships to other areas during the Bronze Age.

Unfortunately this district is one of those known to us almost exclusively through cemeteries. Settlements are up to the present time too scantily represented and apart from three such sites, which provide us with more or less sufficient evidence of the Achaean architects' and stonemasons' skill, the existence of some more settlements can be deduced only from the presence of tombs or of surface sherds.

This chapter will be therefore divided into two main sections. In the first a brief mention will be made of those settlements, the probable existence of which may be traced through the evidence of the tombs excavated nearby or the surface finds collected there.

They will be dealt with summarily and fairly briefly and I shall not enter into any detailed discussion of them, since it appears to me that there is much danger of error, as there is no way of testing the accuracy of the information given for most of them.

The second section will be devoted to the already excavated habitation-sites, for which the excavators provide us with more or less helpful information concerning their location, size, architecture, finds and probable date. These settlements will be studied more carefully, though the evidence is again incomplete and too slender to warrant definite conclusions.

1. Settlements known from the presence of cemeteries or surface finds.

Fifteen Achaean settlements of this kind

1 For references to original reports see Chapter of the Prehistoric sites, and especially nos. 3, 8, 9, 10, 12, 18, 22, 27, 35, 37, 41, 43, 53, 61, 65.
are suggested, but the existence of only six of them can be confirmed, though they have never been excavated: Mitopolis (Ayia Varvara); Kangadhi (Sotiroula); Ayios Vlasios; Kamarais (Xerikon); Katarraktis (Bouga); Katarraktis (Pyrgaki). They are known to us either through sporadic ceramic finds (Katarraktis-Bouga; Kangadhi-Sotiroula; Kamarais-Xerikon and Ayios Vlasios), or architectural remains (Mitopolis-Ayia Varrara, Katarraktis-Pyrgaki)².

All the rest (Patras; Arroe-Samakia, Ano Sychaina-Tsouga; Chalandritsa-Ayios Antonios; Vrachneika-Dresthena; Klaus; Leontion-Ayios Konstantinos; Trapeza-Chadzi; Kerycia-Ayios Yeorgios), usually associated with the presence of nearby tombs, need only a passing mention. Here one must be very cautious, since the informations given seem in most cases to be doubtful, and it is not safe to believe in some hypotheses expressed by the various researchers.³ It would be better to omit these doubtful habitation-sites, until a fuller record or further discovery of archaeological material confirms their existence.

As to the chronology of the above-mentioned six settlements, one may note that with the exception of only two of them, namely that at Kamarais-Xerikon and at Katarraktis-Pyrgaki, the first of which belongs to the Early Helladic⁴ and the latter to the Middle Helladic⁵ period, all the others appear to be confined to the Mycenaean period.

---

1 Kyparissis speaks very briefly about an acropolis there (PAE, 1929, 91), which Alin (EME, 66) and N. Scouropoulos (Mycenaean Citadels, 60) tend to associate with the destroyed L.H. cemetery noted nearby.

2 Trial excavations were made, however, on that height by Ephor N. Zapheiropoulos (PAE, 1958, 170, 172).

3 e.g. Kyparissis, Nerantzoulis, Simpson.


5 According to the preliminary reports of Ephor N. Zapheiropoulos, PAE, 1958, 172.
2. **Excavated Settlements (Figs. 19-20a)**

Only three habitation sites have yet been unearthed in Achaea, but unfortunately for only one of them, i.e. that at Katarraktis-Ayios Athanasios we have full record of the results of the excavations. The investigation of the other two sites, i.e. those at Katarraktis-Drakotrypa and Pašralimni-Kastro tis Kalogrias, has been for some reason or other interrupted.

Here I shall give a general description of these three settlements and some cautious observations and tentative conclusions permissible from Zapheiropoulos' and Mastrokostas' preliminary reports.

To start with, useful information may be derived from a description and analysis of the architectural remains, and for the sake of clarity it may be permitted to repeat here some of the information from the original reports already given earlier in this work.

Thus, those found at Katarraktis (Drakotrypa and Ayios Athanasios) may be considered as remains of prehistoric houses, while those at Paralimni (Kastro tis Kalogrias) as belonging to an acropolis with a fortification wall enclosing several buildings.

First comes the settlement of Katarraktis-Ayios Athanasios. The house dug there is well described by Zapheiropoulos, and is not difficult to interpret. It is a large house consisting of two rooms built mainly of rough-stones. Its orientation seems to be due east to west and there are two levels, corresponding to two different periods, of occupation of the site.

Thus according to the excavator, to the lower level and the first period (M.H.) belong the walls $\Delta (7.20\text{m. long, running from east to west})$ and $A1$, which joins at its eastern part and of which only a small part is preserved. They are built of small slab-stones and their southern

---

1. PAE (1957) 115; (1958) 167-172; (1962) 127-131; (1963) 93-98; (1964) 60-62; (1965) 121-125; Ergon (1957) 139-140; (1962) 171-175; (1963) 186-191; (1965) 94-105; (1966) 156-165.
2. See above, pp. 7-152 (Chapter of prehistoric sites).
3. PAE (1958) 170-172, fig. 2, pls. 133a, b, y.
4. Except for the walls $\Delta$, $A1$ and the lower part of all other walls, which are built of small slab-stones (PAE, 1958, 171).
side rests on the outcrop of rock. To the same period can be assigned the lower parts of all other walls of this house shown at the Fig.,\(^1\) which are built of the same material.

To the second level and the second period of occupation (L.H.) belong the long wall \(A^2\) (18m. long, 0.80m. thick), which is almost parallel to the wall \(A^3\), and all the other walls. They are, like wall \(A\), built on their upper part of rough stones. Three of them (E,\(\Gamma\),Z) run perpendicular to the two main walls A and \(A\), thus dividing the whole house into two main rooms of roughly rectangular shape and of varying dimensions.\(^4\) They probably did not have any direct communication with each other.

A small corridor was probably formed in the space left between the walls \(A^1\) and \(A\), leading to the door of the eastern room. This may indicate that the main entrance must have been from the east.

Two rather big round slabs of sandstone (0.60m. diam.) were found in the western room. They were probably used as the stone bases of the two wooden columns, which supported the roof of that large room,\(^5\) though some traces of charcoal and animal remains on them, does not support such an explanation of their presence there. Part of the space of that large room was probably paved with small flat slabs, as it is indicated by the presence of some such slabs covering a part of its floor.

Mention finally must be made of a small cist tomb\(^6\) of a child, placed under the corner of the walls \(A\) and \(\Gamma\) and measuring 0.60 x 0.50m. Forty two steatite beads and one of agate were found in it.

\(^{1}\) See also the plan given by the excavator in \textit{PAE(1958)171, fig.2}.
\(^{2}\) It was used probably as a retaining wall of the house.
\(^{3}\) It is not clear whether wall \(A\) was rebuilt in the second period. From Zapheiropoulos's plan it seems to have lain under wall \(E\).
\(^{4}\) Only the dimensions of the western room are given (7.10 x 4.30m.) \textit{PAE(1958)172}.
\(^{5}\) One of these slabs perhaps has been removed from its original place. Otherwise it is strange to have a column base up against the wall \(Z\).
\(^{6}\) It will be examined elsewhere in this work (Chapter of tombs), pp 98-99.
The Middle Helladic sherds collected in abundance in the lower level and especially in the space between the A and Δ walls, as well as the presence of a small number of Late Helladic ones found in the upper stratum, suggest that this house (a primitive Mycenaean megaron?)\(^1\) was first constructed in the Middle Helladic times and was rebuilt and used by the inhabitants of the Mycenaean period.\(^2\) The idea is supported also by the architectural remains, which, as stated above, belong to the Middle and Late Helladic periods, and by the fact that the custom of repairing and re-using MH. houses in the Late Helladic period is known from other sites as well.\(^3\) One is tempted to suggest that this house belonged to the people buried in the tholos tombs excavated nearby. It would be unsafe, however, to venture such a conclusion based only on the so far slender and incomplete evidence.\(^4\)

Secondly the house unearthed at Katarraktis-Drakotrypa, though partially excavated, deserves more detailed discussion and special attention because of its size and more elaborate construction.

It is well described by Ephor N. Zapheiropoulos, who gives an accurate plan\(^5\) of the architectural remains and some illustrations of the finds there.

The situation and disposition of this house differ considerably from that excavated at Ayios Athanasios. It consists of one large room (aithousa) and a series of smaller ones built of slab-stones (Fig.1, p.65). The whole construction is orientated due north and south, with the entrance side

---

1 See, Zapheiropoulos, *Ergon* (1958) 139.
2 Lack of well documented evidence, however, prevents us from concluding continuous occupation from MH. to LH.
3 Cf. e.g. Malthi-Dorion, 171.
4 The excavator speaks vaguely about "a few LH. sherds" and so far only six such sherds with much defaced decoration (Pl. 20a) are illustrated by him; no detailed stratigraphy and no exact dating of the second phase of occupation are given.
5 See *PAE* (1958) 168, fig. 1.
most probably facing the west,\(^1\) or the south.\(^2\)

The length of the large room north and south (walls \(E-M\)) is 9.50m, while its width is more than 7.20m.\(^3\) The eastern wall does not continue in a straight unbroken line but is formed by the three smaller walls \(N,\Lambda\) and \(Z\). The north-eastern corner of the main room was framed by the inner walls \(E-K\), and a pithos was found crushed in situ there.\(^4\) A small bothros (0.50m diam., 0.30m deep) found in the space between the walls \(\Lambda-Z-E\) and filled with sherds and charcoal, was probably used as a hearth.\(^5\)

Another such bothros covered with charcoal, bones of birds and sherds was discovered 4.m. westward and a third one was dug close to the wall \(M\).

North of the main room (aithousa) two other walls (\(A: 7.10\)m. long 0.65 thick; and \(B: 2.70\) long) form a small room. Many Middle Helladic sherds belonging to handmade ware were found in its lower stratum, while sherds of a Late Helladic hydria (\(LH.IIIB2-C\))\(^6\) were collected in its upper level.

The space between the eastern walls \(N-P\) and \(H.2\) is divided by two inner walls (\(\Pi_2\) and \(\Pi\)) into three small rooms, which probably were used as magazines of the main building. The entrance leading into the third magazine was between the walls \(P_1\) and \(H_2\), as it is marked by the presence of small slab, probably its threshold, found in situ.

---

1 Since the western side of the hill is less exposed to the winds and as there is no opening or other trace of a door in the eastern wall.

2 Zapheiroupolos does not exclude this possibility and suggests (\(PAE\ 1958,169\)) that the small rectangular room formed by the walls \(M-S\) may be considered the foreroom of the large room (aithousa). But this seems to me not to be the case, since the walls \(S,P\) and \(P_1\) of this supposed foreroom are built in a higher level and, as the same excavator states (ibid.) they perhaps did not belong to the original building.

3 Scanty traces of a wall (\(M_4\) probably indicate the western wall of the building, but this cannot be ascertained.

4 It is not clear whether these walls (\(E,K\)) created a separate room.


6 It is probably the hydria with our prefix \(a/3734\) discussed below in the chapter of pottery, p.303
In front of the main room (aithousa) is the somewhat large court, bordered in the south by the wall Ξ and in the east by the wall H (18.40m. long), which was used as a retaining wall to the whole block of buildings. In this court there is a wall T of low height, running slantwise south from the corner P-P1. In its eastern side three irregular slabs formed a rectangular measuring 1.20 x 0.40m. Also the space between walls T and H was probably paved with slabs, as it is indicated by the presence of some such slabs not carefully placed there. A broken krater containing sherds of a large hydria was found placed carefully on the low wall T. All this taken together, as well as some traces of charcoal found nearby would be quite in accordance with the interpretation suggested by Zapheiropoulos¹ about the sacred character of that part of the building.

So much for the buildings enclosed by the retaining wall H and the finds there.

Outside this retaining wall and in the eastern sloping side of the hill two other walls Θ and Ι were found running west. Two more walls H.1 and Δ form a small room outside the north-eastern corner of the main room (aithousa). Two pithoi were found crushed in situ south of the wall Θ.

Apart from the above-mentioned vases found crushed in situ some tools (stone hoes, a bronze chisel and a sickle²) were found in different parts of this building at Drakotrypa. Three earth-pits found against the wall Θ, outside the wall Ξ and at the extention of the wall M and containing the remains of children, yielded no finds. The construction of the building(s) appears to go back to Middle Helladic times, but most of its parts were probably rebuilt or repaired³ and continued⁴ to be inhabited by the

---

¹ PAE(1958)169.
² They are illustrated in PAE(1958)pl. 136e.
³ Compare with the house unearthed at Ayios Athanasios. See above, p.57
⁴ This can be proved both by the architectural remains (i.e. the presence of the walls Α, Ζ and Π built on the virgin soil; Μ and Κ1 partially rebuilt on the earlier MH. walls) and by the MH. and LH. finds (i.e. mastoid vases, hydriae, kraters).
Mycenaeans almost until the end of the LH.III period.\(^1\)

Most probably this building was used as a dwelling-house during the Mycenaean times, as it may be proved by the presence of the three probable hearths. Whether the eastern part of the whole structure (outside the retaining wall H) was also used in Late Helladic times is less evident.\(^3\)

Lastly the acropolis at Paralimni-Kastro tis Kalogrias, was investigated for the first time by Ephor E. Mastrokostas, who carried on excavations within the Cyclopean wall identified as the Teichos of Dymaeans, from 1962 until 1966. A general plan of the partly excavated acropolis is given in \(\text{PAE(1962)128, fig.1.}\) The acropolis and its Cyclopean wall are more or less well described by the excavator and by us earlier in this work.\(^4\)

What needs special mention and discussion here are the results of the excavations in the area enclosed by the Cyclopean wall.

Unfortunately the excavator fails to give us any plans of the unearthed architectural remains, so we have to rely only on the descriptions\(^5\) and some illustrations of the buildings given in the preliminary reports at \(\text{Praktika and Ergon.}\)

To begin with, the walls of a room belonging to a Late Helladic house (A) were revealed below the remains of two other rooms (B1, B2) of house B which is of a post-Mycenaean date (Classical?) west of the south-eastern

---

1 To this (LH.III) period is assigned by the excavator the long retaining wall H and all the buildings enclosed by it to the west (i.e. aithousa, foreroom, court, magazines) with the exception of the walls \(\Sigma^1\), \(P\) and \(P^1\), which seem to be later in date.

2 See above, p.53 note 2 and the krater illustrated in \(\text{Ergon(1958) fig.147 (our number a/a733) which is dated LH.III B-C.}\)

3 Only the layers of the western part were unmixed Late Helladic.

4 See above, p.7-8 (Chapter of prehistoric sites).

5 They are usually obscure and confused.
(main?) gate. Two pithoi were found crushed in situ.¹

In the Middle gate section where the embankment is the highest within the wall, reaching the depth of 5.15m., the architectural remains of at least four houses built one upon another and ranging in date from EH. to LH.IIIIC were recognised in four successive different strata.² In the same section a trench cut through material filled-back against the Cyclopaean wall after its construction, produced many Late Helladic sherds, among much Early Helladic pottery. A number of restorable deep bowls of LH.III B/C period comes from the material filling of a stepped passage through the wall. Over that filling and against the inner face of the wall, houses attributed by the excavator to the LH.IIIB period,³ were erected, the remains of which were covered by others of LH.IIIIC date. Finds from this last level included a well preserved bronze fibula.⁴ Below the floor of a medieval store, the remains of an Early Helladic house were discovered and a burial of the same period produced some vases.⁵

Undisturbed remains of other Late Helladic houses in contact with the wall were also discovered in the area west of the Middle gate. Beneath these, part of a house cut by the building of the wall was found together with Early Helladic pottery and a few Late Neolithic sherds. In the area within and to the east of the Middle gate the excavation of a later basement was found to have destroyed the Bronze Age levels, but more Late Helladic remains were uncovered in the area between the south-eastern (main?) and the Middle gates. Among the bronze tools and

1  PAE(1963)96.
2  PAE(1965)123; Ergon(1966)156.
3  Ergon(1966)157, figs. 184,185.
4  It is illustrated in Ergon(1966)163, fig.192.
5  One of them is illustrated in Ergon(1966)162, fig.190.
weapons found was a "Peschiera" dagger complete with ivory pommel.  

Finally, scanty traces of foundations of houses can be seen on the side of the hill outside the long northern side of the Cyclopean wall.  

The course of events in the acropolis is not easy to interpret from the archaeological information available and by our admittedly incomplete study, but there do seem to be signs of destruction by fire first at the end of the Early Helladic period and secondly during the latest phase of LH.III.C.  

The continuous habitation of this site from the Neolithic period down to the Venetian times reflects its great defensive value. The date of construction of the Cyclopean wall is not yet certain, but the few architectural remains unearthed in the inner face of it as well as the many Late Helladic sherds found in the vicinity tend to confirm the possibility that it was made during the Mycenaean times.  

Although the area enclosed by this wall is small, the probability of the discovery of a palace there, which might well have been the centre of the whole district in Late Helladic times and the stronghold of the ruler who had his administrative offices here, must not be ruled out.

---

1 It is illustrated in Ergon (1965) 104, fig. 130a (Inv. no. X. 118).  
2 Archaeology 15(1962)133.  
3 As it is clearly indicated by the burnished pottery found there.  
4 PAE(1962)132. No exact date is given (End of EH.II or EH.III?).  
5 Ibid. Called "submycenaean" by Mastrokostas, but Cf. Desborough LMTS, 17ff. for the definition of this term.  
6 See PAE(1962)131; (1965)121.  
7 In spite of the date given by the excavator (LH.IIIA, Ergon 1966, 157) which seems to be inaccurate and not well documented.  
8 Cf. N. Skoufopoulos, Mycenaean Citadels, 60, col. 2.  
9 Cf. Hope Simpson, GAMS, p. 82-83.
Summary and tentative conclusions

The outcome of this study of the Achaean settlements is not on the whole very great, though one may make a few tentative suggestions.

First, it is well worth discussing why the settlement evidence is so meagre. One suggestion that could be made is that perhaps this is due to ill-fortune, or as Wace once suggested to Desborough¹ it may be due to natural conditions, the buildings having been washed away in course of time. Moreover it may be claimed that this is a matter of chance or even the building material may simply have been re-used in later times,² as it was observed in the case of some Achaean tombs³.

Secondly the fact that it has not yet been possible to excavate thoroughly all the known Achaean settlements, and the amount of important material which, as having only recently appeared still awaits full recording, mean that there are problems which are not yet solved.

In view of these difficulties that have to be borne in mind one must be cautious when one is endeavouring to paint the general archaeological picture and to relate the evidence of Achaea to that of other sites.

It is, nevertheless, sufficient to suggest here that the few excavated Achaean settlements tend to confirm the picture given by the tombs and supplement it in so far as the question of continuity from MH. to LH. and the situation of Achaea during the Mycenaean times is concerned.

For, though no major settlement site, except that at Paralimni-Kastro tis Kalogrias, has been yet found in the coastal area where many rich Late Helladic cemeteries have been excavated, it is reasonable to suppose that further work, will prove the existence of most of the settlements suggested by the previous researchers and by us there

¹ IMTS, 98.
³ Cf. e.g. PAE(1928)115 (Drosia).
(e.g. Klauss, by Hope Simpson; Kangadhi-Sotiroula by us).

As regards the inland area, judging from the excavated sites at Katarraktis, we may say that some more settlements belonging to people buried in the cemeteries already known from excavations (e.g. Vrisarion, Drosia, Manesi) still await discovery. They probably resemble in architecture those found at Katarraktis, i.e. small dwelling-houses belonging mostly to agricultural communities of farmers and shepherds.

For the moment, however, we may leave these suppositions and consider the already known from excavations Achaean settlements.

Thus, for architecture, we must depend on the provisional conclusions of the excavators, namely that the primitive Mycenaean megaron is probably represented by the house at Katarraktis-Ayios Athanasios. The common dwelling-house in its simple form which continues from Middle Helladic to Late Helladic times, i.e. with one main room and along its two sides smaller rooms, may be recognised in the settlement at Katarraktis-Drakotrypa.

The third excavated site at Paralimni-Kastro tis Kalogrias, provides us with clear and good evidence of a fortified settlement, which illustrates the cultural development from the Neolithic period down to the period of the Late Mycenaean stirrup-vases and iron-daggers.¹

As to the intramural burials observed under the houses of Drakotrypa and Ayios Athanasios known from other settlements as well,² little need be said here, as they will be separately treated in the chapter of tombs.

In summary, the interpretation of the evidence of the Achaean settlements is clearly not an easy matter, in view of the few excavated sites and the meagre published information.

1  PAE(1964)67.
2  Cf. e.g. Malthi-Dorion.
FIG. 1. Achaean settlements

(a) Kataraiktis—Agios Athanasios house plan (after Zapheiropoulos)

(b) Kataraiktis—Draikotrya house plan (after Zapheiropoulos)

(c) Paralimi—Kastro tis Kalopias, acropolis plan (after Mardrokoostis)
It is readily perceived from the foregoing catalogue of prehistoric sites (Chapter II) that in Achaea, as in many other parts of the Greek world, our knowledge of the Mycenaean period depends far more on evidence from tombs than from habitation-sites. Unfortunately the records of the earlier excavations, and particularly those carried out by N. Kyparisses (1919-1940), do not give all the details one could wish for - the stratification was imperfectly observed, and in most cases the plan of the tombs remained unknown. Nevertheless, much can be learnt from a study of the Achaean tombs.

In the following pages reference will often be made to tombs of various types found in Achaea, so it will be convenient to describe in advance our system of presentation. The chapter is divided into two main parts:

I Pre-Mycenaean tombs
II Mycenaean tombs

I The Pre-Mycenaean (EH & MH) tombs are dealt with briefly and simply in order to establish their relation, if any, to those of the Mycenaean period.

II The second part is sub-divided into six smaller parts according to the six main types of Mycenaean tombs so far discovered in Achaea:

---

1. Our knowledge of prehistoric tombs in Achaea, whether through excavation or casual find, was briefly summarized by Mrs E. Vermeule and Professor P. Aström for the period up to 1960 (AJA 1960, pp.3-4 and Op.Ath.V (1965) pp.89-110).
1) chamber tombs;
2) tholos tombs;
3) cist tombs;
4) Tumuli tombs;
5) Intramural tombs;
6) Pithos burials;

Each type of Late Helladic tomb is separately examined and special attention is paid to give as much information as possible concerning:

(a) their construction, shape, dimensions, number of burials, tomb gifts;
(b) the burial customs employed by the Achaeans, and
(c) the local peculiarities, external relations and chronology.

Lastly, a catalogue of the excavated, or otherwise known, or probably prehistoric tombs of Achaea is given, without repeating information already known from the chapter on prehistoric sites.

I PRE-MYCENAEAN TOMBS

Surprisingly, few Pre-Mycenaean tombs have been found, considering the number of early settlements in Messenia, on the Ionian islands and in Achaea itself (e.g. Paralimni, Pyrgaki, Xerikon, etc.). It may be, as has already rightly been stated, that tombs of other forms than the regular Mycenaean chamber tombs have gone unrecognised so far.

1. Early Helladic

On present evidence only one EH tomb has come to light in Achaea. It was found in the corners of an EH house at the Middle Gate of Teichos Dymaion, thus belonging to the type of intramural tomb usual in MH times, but rather unusual in the

1 AJA 64 (1960) 4 f.
2 Ergon (1966) 159, fig. 190; it is difficult to assign to an EH burial the EH pot found together with LH III C vases in an intact Mycenaean chamber tomb at Leontion (PAE (1931) 72, fig. 3).
EH period. Unfortunately no detailed description of the tomb is available.

2. Middle Helladic

As regards the MH period, at least eight examples have been unearthed so far. These fall roughly into two groups -

(a) tumuli
(b) intramural (cist or simple pits).

First, two tumuli were found at Mirali and they are well described by N. Zapheiropoulos: in both cases the deposit was 1.50 m. deep in a tumulus with a diameter ca. 12 m. In the first tomb (A) and just 0.40 cms. below the surface an upper stratum of pebbles was recognised. The position of the body buried in it was marked by a pile of stones heaped over it (in the lower stratum 1-1.10 below the surface), forming an almost rectangular tomb (1.20 x 1.90 diameter). No traces of bones or of other remains of the dead were found. Only a few fragments of MH coarse vases were collected from the earth of the tumulus. Almost of the same construction was the second tumulus (B) found there, 30 m. to the west of the first. During the excavation a burial in the usual contracted attitude was discovered in a small shallow pit, also covered by a pile of stones. A few skeletal remains were found in the pit, as well as some Minyan sherds, from which it was possible to reconstruct one MH Minyan Kylix (PM. No. 496). As in the case of tumulus A, sherds of coarse MH ware were found in abundance in the upper layer of the deposit. In both cases there were no signs of the burning of the body of the dead and no funeral gifts. The simplicity of interments is characteristic at other sites as well and it fully corresponds to MH burial customs. Although burials in tumuli

1 Cf. Vermeule Greece in the Bronze Age, 79 f. "An unusual feature (in MH) is the practice of intramural burial, a habit new to Greece, though old in the East." See, however, JHS Arch. Rep. (1963-4), Thebes (Pelopidas street) "several tombs of a prehistoric cemetery (late EH to early MH) have been excavated beneath remains of Mycenaean buildings" (Megaw) (Kadmos III, 25 ff. and ILN 28.11.64 and 5.12.64) and Asine, Asine p. 341.

2 PÄE (1952) 398 ff. Fig. 4.

3 AE (1937) 40; Wace and Elegan "Symbolae Osloenses" IX (1930) 28 ff.
are unusual in MH times (cist graves predominate\(^1\)), the Achaean examples find parallels in Mainland Greece\(^2\) [Lerna - over the house of Tires (EH II\(^2b\); Messenia\(^2b\); Aphidna, Dhrakhmani, etc.]. Tumuli occur also in Cyprus\(^5\), and are common in the Adriatic area\(^4\) and in Macedonia\(^5\). According to Schuchhardt, tumuli seem to have originated in Thuringia, whence the practice spread to other regions\(^6\). It is, however, likely that the idea appeared independently in different parts of the world.

Secondly, four (4) intramural tombs were found at Katarraktis, three of which were made under the corners of the Mycenaean house at Drakotrypa\(^7\), and the fourth one was found among the houses of the MH settlement at Pyrgaki\(^6\). From the description given by their excavator it is clear that only one (No. 3) was of the common Middle Helladic type - i.e. stone cist grave, all the rest being simple pits without cover slabs\(^9\). It is also evident that in all four cases we are dealing with intramural interments of children, a type of burial well-known at other sites as well\(^10\). A child was put in each one, contracted (e.g. tomb No. 1) to save space. No funeral gifts were found.

---

1. LMTS (1964) 33 f.
2. AM (1896) 365 ff; Wace and Thompson "Prehistoric Thessaly" (Cambridge 1912) 204 f; Vermeule "Greece in the Bronze Age" (1967) 80 ff.
2a. Hesperia (1955) 165; (1956) pl. 45b.
3. P. Åström "The Middle Cypriot Bronze Age" (Lund 1957) 10 f. (Paleoskoutella)
5. BSA XX (1913-14) 124 ff; XXIII (1918-19) 51 ff.
6. Die Antike IX (1933) 316 ff; Schuchhardt, "Alteuropa" (3rd edition) 142 f.
7. PAE (1958) 170 f.
9. A slab measuring 0.41 x 0.32 had fallen in the 1st tomb (PAE (1958) 170 f.). It should be either a tomb-stele (Zaphiropoulos) or a covering slab.
10. Korakou 101 f; Lerna, Hesperia 29 (1960) 299 f; Vermeule op. cit. 79 f; Nemea AJA (1928) 63 f; Phylakopi BSA 17 (1910-11) 6 ff.
Finally, we must mention here two more Middle Helladic tombs, one at Aravonitsa and the other at Krathion (Silivaniotika). They are of unknown construction and shape, since both of them were found accidentally and nowadays no traces are visible.

Taking all the evidence of Pre-Mycenaean tombs together, it is clear that the situation in Achaea agrees with that in the other districts of Greece. In particular the Middle Helladic intramural tombs are of exceptional interest, since they add more examples to the known list of such MH burials made below the floor or in the corners of houses elsewhere in Greece. This taken in connection with another intramural tomb of Late Helladic period found in the same region (Katarraktis-Ayios Athanasios) strengthens our supposition that this MH burial custom was carried on to some extent throughout the Mycenaean period in Achaea.

However, in our present state of knowledge, the confines of the Pre-Mycenaean and Mycenaean periods are not clearly marked out in Achaea. Future discoveries and excavation of the prehistoric sites known in this district of Greece may be expected to throw much additional light on the civilisation, both of the Early and Middle Helladic periods and their probable connection with the succeeding Mycenaean period.

II MYCENAEN TOMBS

1. Chamber Tombs (Figs.1-5; Pls.21-32)

Tombs of this type are much more plentiful in comparison with the new other types of Mycenaean tombs (tholos, cist tombs). In fact, they have been found in almost every known Achaeaean site of the Bronze Age.

---

1  BCH 80 (1956) 291 ff.
2  A Middle Helladic kantharos (PM. 1026) is said to come from a MH tomb opened there. (AAA 2 (1968) 136-138).
3  FAE (1956) 172 ff.
5  See Chapter (II) - Prehistoric sites. Twice as many as those in Desborough, LMT3 98 ff.
During excavations in Achaea from 1919 to 1940, the late N. Kyparisses opened over one hundred and fifty chamber tombs, the contents of which are in the Patras Museum. He noted more Mycenaean cemeteries, but never had an opportunity of excavating them (e.g. Mamousia, Aigion, Chalandritsa-Pori). The number of chamber tombs increased considerably after the War, with the discovery of at least fifty three more examples, excavated by the Greek archaeologists, N. Yialouris, N. Zapheiropoulos, E. Mastrokostas and by us. Many more chamber tombs, I am sure, still await discovery. ¹

Before discussing the Achaean chamber tombs, a note of warning is advisable. In spite of the number of chamber tombs, there are many serious gaps in our knowledge. Even in those cemeteries which have been extensively excavated, the full picture is not available, because as has already been stated in the introduction, we have only the brief and sometimes inaccurate information given by the earlier excavators (Kyparisses, Nerantzoulis).

The most important cemeteries of chamber tombs from the point of view, both of finds and publication, are reported at Ano Sychaina, Vrachneika, Klauss, Chalandritsa (A. Vasilios), Katarraktis (Bouga), Leontion (Vrayianika and A. Ioannis), Vrisarion (A. Paraskevi), Drosia, Aigion (Psila Alonia), Dherveni.

A. Construction

In general, this follows the lines of the Late Helladic single chamber tombs approached by a dromos, a type of construction which is particularly favoured in places where the rock that had to be cut was soft and easily workable, yet firm enough to allow a domed chamber to be hollowed out without the need for stone or wooden reinforcement. Such places in Achaea lie mostly up in the hills behind Patras, from Dherveni south-east of Aigion to Kangadhi in the south-west, toward the borders of Elis. ² In many cases the tombs are constructed in

¹ e.g. Aigion, Kallithea, Klauss, Chalandritsa, Lomboka, Vrisarion, etc.
² See distribution map of LH sites (Map 21, p.545).
successive rows at different levels,\(^1\) sometimes at right angles to the main contour of the hill\(^2\) and as close together as possible\(^3\), following the configuration of the earth. Hard limestone was carefully avoided, even in some inland sites (e.g. Drosia, Vrisarion, Mikros Pondias) where the country is mostly mountainous and rocky.

But though the soft rock was very easily worked by the tomb cutters, it offered a serious disadvantage, as regards long endurance and power of resistance to weathering.\(^4\) In places where the ground consists of as yet unpetrified, shaly sandstone (e.g. Samakia, Vrachneika, Vrisarion) the erosion is quicker and more complete than on more calcareous ground (e.g. Klauss, Katarraktis-Bouga). The heavy rains of the winter in the western Peloponnesse are especially destructive. So, if the tombs were not cut deep enough - as happens in most cases in Achaea - the rock soon began to crumble and a partial or total collapse of the roof was inevitable. In the course of time the rock debris covering the tomb deposit became very hard-packed and assumed a solidity, hardly less than that of the surrounding rock.\(^5\)

These natural conditions, the intensive cultivation with modern mechanical aids, tending towards deep tilling and wholesale levelling and sometimes the re-use of the building material (e.g. Drosia), are the considerations which may have to be taken into account in explaining both the existence of many destroyed or partially destroyed chamber tombs and in some other cases the complete destruction of whole cemeteries (e.g. Manesi (Vromoneri); Leontion (Koutreika); Pavlokastron; Tsaplaneika). One further reason for the fragmentary evidence

\(^1\) e.g. Katarraktis-Bouga; Vrisarion; Drosia; Leontion (Vrayaniaka); Klauss; Aigion (Psila-Alonia).
\(^2\) e.g. Drosia; Klauss; Katarraktis-Bouga.
\(^3\) e.g. Tsaplaneika (PAE (1935) p. 70.
\(^4\) Kyparisses dug out tombs at Leontion (Vrayaniaka), the entire roof and entrances of which had been destroyed by the weathering of the rock (PAE (1931) p. 71).
\(^5\) Cf. PAE (1925) 45 f. (Vrisarion-Ayia Paraskevi).
of the Achaean chamber tombs is that some other cemeteries had been extensively plundered, especially in the region of Aigion, but in most cases much of the tomb furniture, often smashed, had luckily been left in the chambers and was collected by the archaeologists (e.g. Kallithea, Tomb A).

We must now turn to a more detailed consideration of the Mycenaean chamber tombs of Achaea, commencing with:

(i) The Dromos

In every case the dromoi are cut directly out of the rock of the hill-side and are nowhere strengthened or lined with built walls. Two types of dromos can be distinguished. The first type\(^1\) is that represented by tombs at Klauss, Katarraktis-Bouga, and Dherveni-Psila Alonia, where the dromoi are short and rather wide with a more or less steep descent. They usually narrow very slightly towards the top of the sides and in some instances no narrowing is visible.\(^2\) The dromoi of the second type are longer and narrower and their sides either slope inwards sharply and straightly towards the top,\(^3\) or they narrow very slightly in width towards the tops of the sides,\(^4\) which sometimes are not absolutely straight.\(^5\)

The width of the dromos is about 0.80 - 1.00 m. and its length naturally varies according to its gradient.\(^6\) Extreme cases are Kallithea Tomb B, where the length is over 9.00 m., Klauss Tomb IV and Katarraktis-Bouga Tomb III, where it is a little more than a metre.

---

1 Klauss, Tombs III, IV; Katarraktis-Bouga, Tomb II, I; Dherveni, Tomb I (Tomb II had no dromos).
2 In most of the Chalandritsa (A. Vasilios) tombs; Aigion (1970), Tomb 2.
6 As regards the proportions of the dromoi, we can say that the conclusions drawn by Wace (Myc.Gk.T. p. 125) for the tombs of Mycenae are not valid in Achaea, since here - irrespective of the length or the width of dromoi - tombs belong to Early or Late Mycenaean periods.
The length ranges between 2.0 - 5.0 m. Exceptionally, the dromos is entered by one, two, or three steps hewn roughly in the rock floor. In one tomb at Aigion (Tomb 6) the floor of the dromos just in front of the door of the chamber is cut out to a deeper level than the rest.

Here we must mention that the entrance to the dromos of Kallithea Tomb B was closed with a low stone wall. In some tombs at Aigion (1970) a good many large stones were found in the filling of the dromos just in front of the doorway. In two other cases shallow pits dug out in the floor of the dromos contained either only a few Late Helladic sherds or skeletons. No niches in the sides of the dromos are recorded so far.

Finally, it is worthwhile to remark that many Late Helladic fragments of pots (especially unpainted kylix stems and sherds of large three-handled piriform jars) were found in the earth which filled the dromoi of most tombs at Aigion (1970).

We may consider at this point whether the dromos remained open or was filled in after each burial by the Achaeans. It is difficult to adduce any incontrovertible evidence, since most chamber tombs have had their dromoi damaged by cultivation, or by the weathering of the rock or have gone unexcavated so far.

---

1. Ano Sychaina (1960) Tomb IX;
3. Kallithea, Tomb B. Compare Wace, Mycenae Ch. T. 515, 516, 529 and Kephallenia, Metaxata, Tombs A, I (AE 1933, 74 ff; Figs. 14, 20); Crete, Gypsades, Tombs VII, XV; ZaferPapoura; Ialyssos, Tomb XXXIV (Annuario 1923-24, 237 f; Fig. 152; Epidavros-Limera, Tomb I; Prosymna, p. 49.
4. Compare Wace, Mycenae Ch. T, 515, 529.
7. Ano Sychaina (1960) Tomb IX.
8. Dherveni (Psila-Alonia) Tomb I.
9. e.g. Tomb 1; Cf. Mycenae Ch. T, 502, 505, etc. (p. 131).
10. e.g. Vrachneika (Ayios Pandeleimon).
11. e.g. Katarraktis-Bouga; Leontion (Vrayianika & Koutreika).
far, but the balance of probability - based on well documented excavations there - is in favour of the second alternative. If it remained open, one would expect to find traces of erosion on the sides of the dromos, but they are in fact straight and clean. It is also, I think, likely on a priori grounds that the relatives of the dead would wish to give the mortal remains and valued possessions of the departed a more substantial protection than a flimsy wall of stones, which would easily be taken down and put up again under cover of darkness.¹ If the dromos was filled in, the question arises whether any mark was left to indicate the position of the tomb. All than can be said is that no traces of such a mark were found in connection with any of the Achaean chamber tombs so far excavated.

(ii) The Doorway

This is more or less accurately centred, indicating that the tombs were dug out according to definite plans, and its shape is for the most part approximately² or exactly square,³ occasionally roughly oval.⁴ From the available evidence, we can say that the doorway is usually narrower on the inside than on the outside, as for instance Kallithea Tomb A, B and most tombs at Aigion (1970). In four cases at Aigion (1970), however, the chamber widens fanwise from the inside of the doorway, but this is quite exceptional. The jambs of the doorway were intended to be straight, and in fact in some tombs cut into fairly hard rock (e.g. Klauss, Bouga) such straight jambs occur, and as a rule they are undecorated. In most of the tombs the

1 Wace and Blegen reach the same conclusions in respect of the LH tombs at Mycenae and Prosymna. (Ch. T, p. 127; Prosymna 236 f.)
2 Vrisarion (PAE (1925) 45 f.); Katarraktis (Bouga, Tombs II, V); Kangadhi Tomb II; Klauss (most); Chalandritsa, Tomb IV (1966, unpublished); Kallithea Tombs A, E.
3 Katarraktis-Bouga, Tomb III. Compare with those found at Kephallenia - e.g. Kontogenadas, Tombs A, B, Γ; Metaxata, Tomb Γ. AE (1933) 71 ff; Figs. 7, 10, 12, 20.
4 Kangadhi, Tomb I; Vrachneika; Aigion (1970) Tomb A and Ι.
tops of the doorways had crumbled away owing to the softness of the rock, or else had been involved in a general collapse of the upper part of the tomb due to the falling of the chamber roof. Thus the original shape of the lintel is not always certain. Horizontal lintels occur again where the rock was hard enough, as for instance Katarraktis (Bouga) Tombs II, III, V. The largest doorways are those at Aigion (1970) and Kallithea Tombs A, B - the former ranging from 0.60 m. to 0.80 m. in width and from 1.00 to 1.60 m. in height; the latter being (Tomb A) 0.78 m. wide (unknown height) and (Tomb B) 0.82 m. wide and 1.30 m. high. The smallest doorways are those at Drosia (Tomb 101) and at Leontion (Vrayianika); holes hardly wide and high enough to let a man squeeze in.

Between these extremes there is a whole series of variations, but as a rule the doorways are rather narrow and low, and this in connection with the square or roughly oval shape gives the impression more of a loophole than of a doorway. The threshold of the door of the Achaean tombs is almost always on a level higher than that of the tomb floor, or the floor slopes gently down to it. So, in most cases the doorway descends by step into the chamber (Aigion, 1970, Tomb 6; Kallithea, Tombs A, B; Katarraktis-Bouga, Tomb V; Ano Sychaina (1960) Tomb IX; Klauss, Tomb IV).

In general the doorway is narrower in width than the dromos and its depth is usually less than its width, or about the same, the only exceptions known to us being Kallithea,
Tomb B and Aigion (1970) Tomb 5, the depth of the entrance of which is almost twice the width.  

The entrance is blocked either by a single or double wall, consisting of rubble stones, or by large limestone slabs, or by a combination of both. From the doorways no finds are recorded, the only exception being that of Tomb B at Kallithea, where some Late Helladic pot sherds were found among the stones of the walling. This probably shows that the walling was rebuilt after the burial or burials to which they belong had been pushed aside to make room for a later interment.

(iii) The Chamber

a. Ground-plan

Unfortunately only a small number of the tombs dealt with here were found well-preserved, and even then only in a few cases a plan is given, so it is difficult to say with certainty which shape predominates in the Achaean chamber tombs. From the present evidence available (based mainly on the sketch-plans given by the excavators or on more or less accurate ones drawn by us during our visit to prehistoric tomb-sites of Achaea) it seems that they exhibit a variety of shapes according to which they would be broadly classified into three main groups:

1 Kallithea Tomb B: 1.10-1.30 m.d. and 0.82 m. wide; Aigion (1970) Tomb 5: 1.30 m. deep and 0.68 m. wide. Compare Mycenae Ch. T 502, 505, 513, 519, 520, 525, 526, 531.
3 Ano Sychaina (1960); Kallithea Tombs A, B and most of the Aigion Tombs (1970).
4 Vrisarion (AE (1919) 98 f.); Aigion (1970) Tombs A, 7 etc.
5 e.g. Tsaplaneika (PAE (1935) 70 f.).
6 e.g. Aigion (1970) Tomb 5; Kangadhi Tomb II; Kallithea Tombs A, B. (Kyparissas very seldom gives detailed information about the doorways and their wallings.)
7 e.g. "the entrance was found intact." (PAE (1925), 45 f; (1928) 117 f; (1931) 72 f.
8 Only thirty-seven out of a total number of 219.
9 Personal communication from Dr. Yialouris
1. more or less circular
2. more or less rectangular
3. irregular

Tombs with chamber of rounded outline, either circular or roughly circular predominate (over twenty known examples\(^1\)), while those approaching a rectangular or square shape\(^2\) or those of irregular shape\(^3\) are less common.

b. The Floor of the tombs is sometimes approximately level,\(^4\) but usually slopes downwards to the back wall,\(^5\) seldom slightly rising\(^6\) and their

c. Roof, to judge from the few well-preserved examples, is usually curved, as for instance in most tombs of Chalandritsa, Vrisarion, etc.

d. The Size of the tombs varies a great deal: the largest tombs known to us at present are those excavated by Kyparissos at Vrisarion (Ayia Paraskevi) with a diameter ranging from 3.00 to 5.00 m.\(^7\) and the smallest, the seventh tomb (Aigion 1970) excavated by us - ca. 1.15 m. wide by 1.20 m. long. This latter is in size more like a recess than a chamber, but still it is a real tomb chamber, with closed door leading from the dromos into the chamber. Both these tombs are, however, exceptions. Next to the largest tombs of Vrisarion are Dherveni (Psila Alonia)

---

1 Kangadhi Tomb II; Vrachneika (A. Pandeleimon); Ano Sychaina Tomb IX; Klaus Tomb I, III, IV, V, VI, IX; Chalandritsa (A. Vasilios), Tomb IV; Vrisarion Tomb I-XII; Aigion (1967) Tombs: A, B, C, D.
2 Kallithea, Tomb B; Chalandritsa (A. Vasilios), Tombs I, III; Kataraktis (Bouga) Tombs III, IV, V; Dherveni (Psila-Alonia) Tombs I, II; Leontion (Vradianika) Tombs II, III; Leontion (A. Ioannis) Tomb I; Aigeira (Royalona) Tomb I.
3 The irregular shape of some recorded tombs may be due either to the substance of the rock (hard: Kallithea, Tomb A; very soft: Vrisarion Tombs\(^{XXV-XXVI}\)) or to inadequate methods of the old excavations there (e.g. Leontion, Tomb I).
4 e.g. Aigion (1970) Tomb 6.
5 e.g. Vrachneika.
6 e.g. Aigion (1970) Tomb 5.
7 \(\text{PAB} (1925) 45.\)
Tomb I (4.30 m. by 4.08 m.) and at Chalandritsa (Ayios Vasilios) Tomb I (3.75 m. by 4.00 m.). Next to the smallest tomb at Aigion are Dherveni (Psila Alonia) Tomb II, (1.47 m. by 1.49 m.) and Vrachneika (Ayios Pandeleimon) (1.20 - 1.40 m. by 2.35 m.). The diameter of all other tombs varies from 2 to 5 metres.  Only occasionally is

e. The height of the chambers recorded, but in all cases where the height is exactly known it never exceeds three metres, with a minimum of ca. 0.85 m. That a low height is not universal in the Achaean tombs is on the one hand confirmed by the general remarks of the excavators ("one can stand upright in the centre of the chamber"), by the recorded measurements of some tombs, by my personal observations, and on the other hand by the results of my excavations at Aigion (1970), where most of the excavated tombs were quite high.

f. Apart from one niche cut in the west side of the chamber of Tomb 5 (Aigion 1970), no other examples are recorded so far.

1 See Catalogue of Chamber Tombs - appended to this chapter.
2 Vrisarion (1925); Drosia (Tomb I); Chalandritsa (Tomb III); Dherveni (Tombs I, II).
3 Klauss (Tomb VI); Aigion (1970) Tomb 7; Drosia (?) Tomb 101.
4 Miss Benton's opinion (BSA 1931-32, 238 f. n. 4) about Achaean chamber tombs must be modified. She perhaps compares the Achaean examples with some Kephallenian tombs (Mazarakata, Kayvadis p. 361) but again here this does not work well in all Kephallenian instances.
6 (1956) Chr. 11 ff; PAR (1929) 88 ff; (1925) 45 f.
7 Vrachneika (A. Pandeleimon); Chalandritsa (A. Vasilios) Tomb IV (1966); Leontion (Vrayianika) Tomb I, II; Leontion (A. Ioannis); Aigion (1967) Tombs A, C, D; Aigeira (Rovalona) Tomb I; Kallithea, Tomb A (personal communication from Dr. Yialouris).
8 See my forthcoming publication of the tombs.
But as regards
g. Pits cut out in the floor of the chamber and used either for the burial(s) of the dead or as ossuaries, at least twenty-seven cases are known.

First, those used for the burial(s) of the dead were either covered with slabs or unroofed. Usually each pit contained one skeleton (e.g. Kallithea, Drosia, Aigion), but in the case of Dherveni (Tomb I) some pits contained two, and in one five persons had been buried. Burial gifts were found in almost all the pits (pots, jewellery, bronzes).

Secondly, pits used as ossuaries were likewise covered with slabs or were not roofed. They contained bones in complete disorder, which may have been packed into them when removed from the floor of the chamber to make room for newcomers. No funeral gifts were found.

---
1 Some of the tombs at Aigion (1967) had pits of rectangular outline, but from the brief description in AAA 2 (1968) 137 ff., it is not clear whether there were burial pits or ossuaries.
2 Kallithea, Tomb A:1; Drosia, Tomb 101:1; Dherveni, Tomb I: 14; Tomb II:3; Aigion (1970) Tomb A:1; Tomb 1:2.
3 Kallithea, Tomb A:1; Chalandritsa (A. Vasilios) Tomb I:1; Tomb II:1; Aigion (1970) Tomb A:1; Tomb 6:1.
4 Kallithea (Tomb A); Drosia (Tomb 101); Dherveni (Tomb I, II). It is worth mentioning here that the pit of Tomb A at Kallithea was not only covered by slabs but even its sides were framed with carefully placed upright slabs (=personal information from the excavator).
5 Cf. Myceneae, Ch. T p. 136. "It is possible that the pits were not roofed as a rule."
7 "Most of the excavated tombs at Klaus" (= five in total), PAB (1937) 93 f. But usually they are uncovered (e.g. Chalandritsa, Aigion Tombs 1, 6). Perhaps the case of Klaus indicates great respect for the remains of the dead, or protection from later disturbances.
8 e.g. Chalandritsa (A. Vasilios) Tombs I, III; Kallithea Tomb A, etc.
Lastly, two further cases of interest may be noted: first, Kyparisses refers to a so-called "cist tomb" built of stones and covered by slabs, which was cut out at the left-hand side of the chamber of one otherwise intact tomb excavated by him at Vrisarion (1926) and which contained one skeleton and a high-stemmed kylix. Although the description by the excavator is not as detailed as one could wish (no dimensions are given nor any illustration or plan of the tomb is known), it seems that we have here to deal with an unusual and, we dare to say, unique example of a small built tomb constructed inside the chamber of a rock-cut Mycenaean tomb. Because it was not cut out in the floor of the chamber and not built on it, but in one of its side walls, with its four sides framed by small stones and covered carefully by large slabs, it cannot be classed among already known types of built burial pits, or of enclosures built against one side of the chamber. Indeed, we have been unable to find any real parallels in other chamber tombs, not only in Achaea, but even elsewhere in Mycenaean Greece.

Secondly a rather large chamber tomb excavated by N. Yialouris at Kangadhí (1955) had its chamber "divided into compartments by means of stone walls." The description again is brief, but fortunately in this case we have the sketch plan of the tomb, so it is possible to look for similar tombs, in other districts of Greece. As regards Achaea, however, this still remains the only one recorded example.

---

1 PAB (1926) 130 ff.
2 From the description of the tomb, it is quite clear that any possibility of being a niche or the entrance of a side chamber there must be excluded.
3 Cf. Achaea (Kallithea Tomb A); Dherveni Tombs I, II.
4 e.g. Mycenae Ch. T 502, 517, p. 157; Prosymna Ch. T XXVII p. 96. Compare also the built enclosures in the second tholos tomb at Thorikos (PAB 1893 pl. B, p. 154) and especially that found in the tholos tomb at Dimeni "ΠΟΙΣΤΟΡΙΚΑΙ ΑΚΡΟΠΟΛΕΙΣ" p. 154, Fig. 69.
5 ECH (1955) 252 f.
6 Presented here by courtesy of Dr. Yialouris, Fig 4, p. 91.
7 Cf. Kythera-Lioni (Staia tomb) LH/LM IIIA), Delphi (1915) 191 f; Crete, Aiáios, Tomb VII (MM Period), JHS (1953) 166 f; K. Chr. (1951) 447.
Finally, a few words should be said about the burial customs and burial rites. Practically all the information concerning the burial customs is supplied by the old excavations of N. Kyparisses (1919-1940), the preliminary reports of the later excavations and by my recent excavations at Aigion (1970).

The orientation of the tombs is not governed by any ritual principle. The sloping of the ground and the space available in the cemetery determined the work of the tomb cutter. In the same region contemporary tombs are found with almost diametrically opposed orientation. Thus, those on the Koukoura (Klauss) hill, which slopes westwards, face westwards, and those on the Bouga (Katarraktis) hill face north-eastwards.

The tombs were in most cases family vaults and were often in constant use for generations. Only a few tombs with preserved skeletons contain a single burial, as for instance, Aigion (1970) Tomb 7, and Drosia, Tomb 101. It was not customary to bury large numbers of persons, even in these family tombs: very often only two, sometimes three or four are buried in the same tomb, seldom more than four. Mass burials, as in

---


1a It is only by the courtesy of Dr. N. Yialouris that I am able to discuss here the chamber tombs found at Kallithea, Vrachneika, Vrisarion and Ano Sychaina.

2 e.g. Chalandritsa (A. Vasilios) Tombs: I, III; Katarraktis-Bouga; Kangadhi, Tomb I; Vrachneika (A. Pandeleimon); most of Aigion (1970).

3 e.g. Klauss; Gerokomeion (Patras); Vrisarion; Aigion (1967) and (1970); Chalandritsa (A. Vasilios) Tomb I.

4 Kangadhi, Tomb I; Vrachneika; Kallithea, Tomb A.

5 Ano Sychaina (1969) ?; Dherveni, Tomb II.

6 Kallithea, Tomb B; Chalandritsa, Tomb III; Vrisarion, Tomb XXVI (1960) ?

7 Chalandritsa, Tomb I; Dherveni, Tomb I; Aigion (1970), Tomb 1.
Dherveni Tomb I with sixteen corpses are quite exceptional, and may indicate external influence on the Achaean burial customs.

After the first burial the dromos was refilled with earth and debris and for each subsequent burial it was re-excavated. Inhumation is the universal practice throughout the whole Bronze Age period in Achaea, as elsewhere in Greece. The dead were buried without coffins and probably wearing their ordinary clothes. The bodies, as a rule, were placed along the side walls of the chamber, usually with the head towards the back wall and very seldom towards the door. Sometimes, especially when the wall sides already are occupied, they are placed in the middle of the chamber. The position of the bodies is not uniform: there is evidence of an extended, dorsal position. There is also evidence of a crouched or squeezed position with the body resting on its side, or with the knees doubled. In all cases, as far as I know, the hands are by the sides of the dead, and not a single example is known with the dead person's hands crossed in the lap.

1 From Kephallenia: Metaxata, Tomb Γ; Lakkithra, Tombs A, B Δ; Olympia, Tomb Θ (BCH 1966 p. 826, Fig. 14).
2 There are exceptions to the established practice, namely at Prosymna, Euboea (Oxylithos Th. tomb), Argos, Perati, Vravron, Ialysos, Kos (?) see Vermeule, p. 302 and notes 349 ff. (bibliography), and Perati B, p. 46 ff. and notes.
3 e.g. Chalandritsa, Tomb I, III.
5 e.g. Aigion (1970) Tomb 1.
6 Aigion (1970) Tomb A.
7 e.g. Chalandritsa, PAE (1928) p. 112, Fig. 1; Vrisarion, PAE (1925) p. 45 f; Katarraktis-Bouga, AE (1919) 98 ff; Aigion (1970) in Tomb 7. It seems to be the most common position of the dead in Achaean tombs.
8 Chalandritsa, PAE (1930) 61 f. Fig. 1; Aigion (1970) Tomb 5.
9 e.g. PAE (1928) p. 112, Fig. 1.

Perhaps there occurred some examples, but Kyparissos fails to give such detailed information when he speaks about the dead.
These different positions are used without chronological distinction. It seems that the postures are a question of mere convenience.

From the beginning of the Late Helladic period until its end it was a custom to supply the dead with gifts of different kinds, tools, weapons, jewellery and pots, especially stirrup jars to help and amuse the departed in the life to come. The funeral gifts were placed around the body. When subsequent burials took place in the chamber, the remains from earlier burials and the funeral gifts were removed, when necessary, unceremoniously from the centre to the sides, into corners or even into the pits of the chambers. The lighting of fires in the chamber for purification purposes is also recorded. The broken kylix stems found in the dromos outside the door might indicate funeral rites. In Tomb I at Dherveni two poor pit burials were found in the dromos, and we may suppose either that they were servants' burials, or that due to the shortage of space inside the chamber (fourteen burials in all), they were buried outside.

1 e.g. Vrisarion, Tomb XXVIII (1960), of LH I period, contained a vase and a bronze dagger.
2 e.g. Vrisarion PAE (1925) 46 f; Chalandritsa, PAE (1929) 88 f. Fig. 2.
3 e.g. Kallithea, Tomb A; Vrisarion, PAE (1925) 46 f; Fig. 2; (1926) 150 f; Mikros Pondias (Lomboka), PAE (1933) 91 f. Fig. 1.
4 e.g. Katarraktis-Bouga, AE (1919) 99 f; Kangadhi, JHS (1955) 17 f; Drosia, PAE (1928) 118 f.
5 In many cases they lay upside down - e.g. PAE (1928) 111 f. Fig. 7; Aigion (1970) Tomb 8. As regards the stirrup-jars and their use, see Vermeule, p. 300; they are the most popular shape in Achaean pottery, comprising over one third of the total number of pots found there (359). Terra-cotta figurines of both types (Φ & Ψ) have been found in tombs at Kangadhi, Kallithea, Aigion and Aigeira (Rovalona). For their probable meaning see Vermeule pp. 221, 291 and E. French p. 28 and Perati, Vol. B, pp. 67, 425.
6 e.g. Chalandritsa, Tombs I, III (PAE, 1928, 112 f. Fig. 1; 1930, 81 f. Fig. 1); Vrachneika, etc.
7 e.g. Kallithea Tomb A; Chalandritsa (1928) and (1929).
8 Aigion (1970) Tomb 5 (?) (in the chamber)
9 e.g. Aigion (1970) Tombs 5 and 6.
10 Cf. Wace, Ch. T, 145 ff.
C. Local Peculiarities - External Relations - Chronology.

1. With regard to local peculiarities, from the present evidence available, we can say that the Achaean chamber tombs clearly belong to a local type which remains more or less unchanged throughout the Late Helladic period.

   a) They are, as has already been stated, typical Mycenaean tombs with a rather small (but not low and shallow), simple chamber (i.e. no side chambers, no benches, no niches are so far known).

   b) The doorway is, in most cases, of square outline, but small in size, with the width almost equal in measurement to the height and the depth.

   c) The level of the floor of the chamber is usually lower than that of the dromos, so it has to be entered by a step - 0.20 - 0.40 m. deep.

   d) The dromos is relatively short (2-7 m.) in comparison with the examples of the Argolid.

   e) A slight development of the tombs in their shape of chamber from LH III A to LH III B period is noteworthy here. The circular or roughly circular shape predominate during the former period, while the rectangular or roughly rectangular is almost without exception confined to the latter one.

---

1 Much more should be learned about the Achaean chamber tombs upon the publication of the recently excavated cemetery at Aigion (1970). Likewise, it is hoped that details regarding the cemeteries discovered by Dr. N. Yialouris (Kallithea, Vrisarion, Ano Sychaina) will soon be made available to the public.

2 See page 71.

3 AJA (1960) 4 f; BSA (1931-32) 238 f.

4 See page 79, for the only one exception.

5 See page 76.

6 See page 76.

7 Compare with:
   1) Mycenae, Papademetriou Tomb = 13 m. long; Ch. T, 505 = 35 m. long.
   2) Prosymna, Tomb XV = 11.20 m. long.
   3) Dendra, Tomb 7 = 13.33 m. long.
   4) Asine 1:6 = 11 m. long.
   5) Argos, (Deiras) Tomb XII = 15 m. long.

8 See the catalogue appended at the end of this chapter, pp.105-110.
Unfortunately we are not yet able to say anything about chamber tombs constructed for the first time during the LH III C period, since the evidence is too meagre to help us to reach conclusions about a possible further development (or perhaps degeneration) during this period.

2. Yet another question must be examined here. The external relations of Achaea with the other areas of Mycenaean Greece, as far as the chamber tombs are concerned.

a) The undoubted connections which do exist between Achaean and Kephallenian chamber tombs may be demonstrated in three ways. First, the relatively small size and approximately square shape of the entrances, which occur in both areas. Secondly, the fact that in both areas the chamber of the tombs has to be entered by a step. Lastly, the existence of pits dug out in the floor of the chamber and covered by slabs.

There is good reason confidently to believe that the Achaean tombs with the above-mentioned three characteristics were in constant use from the LH III A period, or at least from the succeeding LH III B period, while almost all the Kephallenian tombs were first used in the LH III C period.

---

1 So far as I know, chamber tombs first constructed in LH III C period are confined to the Kalavryta and Tritaea region, two rather unexplored regions of Achaea.

2 See page 75, note 3.

3 See page 76, note 6.

4 See page 80.

5 Ano Sychaina (1960) Tomb IX (IIIA); Klauss, Tomb IV; Vrisarion-Vrayianika, Tombs I-XXV (IIIA-C); Katarraktis-Bouga, Tombs II, III, V; Kallithea, Tombs A, B; Chalandritsa, Tomb IV (1966); Aigion (1970) Tomb 6 (IIIIB-C). A surprisingly large number of LH III A and B pots, such as small handleless jars (FS.77), small piriform jars (FS.4-45) and alabastra (FS.82-85) was found in these tombs; taking into account the scarcity of such objects in the tombs which are known to be LH III C (e.g. Perati, Kephallenia), one is tempted to suggest a date for these not later than LH III B.

6 Cf. LMTS p. 103.
It is then reasonable to suppose that an influx of Achaean took place in Kephallenia, (but in any case not the opposite,) when LH III C had started to take over from LH III B.

b) As regards the connections with the Argolid, one has to observe some similarities between the construction and burial customs of Argive tombs and those found at Aigion (1970) and Kallithea.¹

c) Further evidence of connections with other areas, as for instance with Elis² and Laconia,³ is to be seen in the construction of the tombs.

d) Lastly, a chamber tomb at Kangadhi (Tomb II⁴) probably betrays connections with Kythera and Crete (?).

3. There remains one final and vital problem: the chronology of the chamber tombs. Although it is too early to be definite, it may be that we have evidence which can modify to some extent the general picture available and the conclusions reached hitherto⁵ about the Achaean chamber tombs. The reasons for this are threefold:

(i) the newly discovered chamber tombs (1960-1970)⁶ and the conclusions to be drawn therefrom, as recorded elsewhere in this chapter;

(ii) The Mycenaean material (coming mainly from chamber tombs) in Patras and Aigion museums which is available to me;

(iii) my personal visit to prehistoric tomb sites of Achaea, which enabled me to take photographs and sketch plans of the more or less well-preserved chamber tombs there.

---

¹ See page 74, note 5.
² Olympia: Kania (Makrisia) tomb A (six grave pits covered with slabs in the chamber) AJA 65 (1961) 229 f. Cf. also BCH (1968) 826 ff.
³ Laconia: Epidaurus-Limera (Ayia Triada) Tombs A, B and (Bambakia) tomb 1 (chamber entered by step); (Ayia Triada) tombs A, B and (Bambakia) tomb 1 (entrance roughly or exactly square in shape).
⁴ See page 81, note 7.
⁵ AJA (1960) 18 f; EBA (1931-32) 238; LMTS 98 f.
⁶ e.g. Ano Sychaina, Vrisarion, Kertezi, Aigion.
It is thus desirable that the present situation should be clarified, particularly as it is closely related to some of the views and conclusions embodied in this chapter.

The first point that may be made is that the Mycenaean chamber tombs of Achaea, according to their date of construction, fall into two main groups:

(a) those constructed during the Early Mycenaean (LH I, II) period, and
(b) those made in the Late Helladic III period.

As regards the first group of tombs, the evidence is really scanty, but of great interest, because it strengthens the already expressed supposition\(^2\) that Achaea was inhabited by the Mycenaeans from the very early Mycenaean period, and goes some way towards removing the basis for the surmise, based on mainly negative evidence, that this area was isolated from the rest of the Mycenaean world until the LH III C\(^3\) period.

Of no less interest are the Late Helladic III chamber tombs, which came to light in all regions of Achaea. The fact which emerges from these is that:

a) tombs constructed first in the LH III A period are mainly confined to the coastal and more fertile areas of Achaea - i.e. Patras region, S.W. and N.E. regions, the only exception so far known being the case of Vrisarion (Kalavryta region). They continue to be in use throughout the LH III period;
b) tombs constructed during the succeeding period, LH III B, came to light mainly in the region of Pharai (Chalandritsa, Katarraktis, Leontion) and in the north-eastern borders of Achaea with Corinthia (Dherveni).

---

1 On only two sites have Early Mycenaean chamber tombs been found: at Vrisarion (1960) and at Aigion (1967 and 1970).
3 E. Vermeule (AJA op. cit. p. 3 & 18) has pointed out that "extensive Mycenaean penetration of Achaea is a phenomenon of the post-Trojan war period," and Desborough (LMTS p. 98) and P. Alin (EMF p. 66) agree in general on this point with her.
FIG 1. Ano Sychaima (1960) Chamber tombs IX and X
FIG 3. Kallithea Chamber tomb B

FIG 4. Kangadhi Chamber tomb II
FIG. 5. Chalandritsa (A Vasileos) Chamber Tombs I and III
c) Tombs made in the last Mycenaean period, LH III C, have been found solely in the Kalavryta and Tritaea areas (Drosia, Kertezi, Manesi). It is then reasonable to suppose that fluctuations in the size of population took place during the last two periods (LH III B and III C) in the central and mountainous part of Achaea.

2. Tholos Tombs

The tholos tombs of Achaea have so far attracted little attention. They are, however, of interest as constituting another group of such tombs outside the immediate vicinity of Mycenae, in addition to those already known in Mycenaean Greece. They have been found at only three sites: Pournari (4) - Bartholomio (near Lomboka) (46) - and Katarraktis (Ayios Athanasios) (34). From these only those discovered at Katarraktis can be assigned with certainty to the Late Helladic period, the others being of doubtful type, since our information about these are based in the first case (Pournari) on some Mycenaean pots in the Patras Museum labelled "Tholos tomb at Pournari, in the property of Chr. Zaphieropoulos, 1968" and in the case of Bartholomio on some brief and imperfect information given by the late Epimeletes, P. Nerantzoulis.

Thus, one has to rely upon those excavated at Katarraktis in 1956 and 1957 and published in Pæ and Ergon by the Ephor, N. Zapheriopoulos. Of these preliminary reports we may here repeat the outline: the tombs lie near the eastern foot of the Bouga ridge, where a cemetery of Late Helladic chamber tombs was already known, close to the small village of Rhodia, and they are placed side by side one to the other.

---

1 They were overlooked by S. Hood, Antiquity 34 (1960) 166 f.
3 PM. Nos. 1066-1074 (stirrup-jars, alabastra, cups and one four-handled jar).
5 PÆ (1956) 193 ff; (1957) 114 f; Ergon (1956) 88 ff; (1957) 69 ff.
6 See page 71.
Diameter of tholos: 3.95 m. 5.20 m.

Present height of tholos: 0.90-2.20 m. 2.60 m.

Width of dromos: 1.35 m. 1.00 m.

Length of dromos: 2.90 m. 4.00 m.

Present height of dromos: 1.10 m. ?

Width of doorway: 1.05 m. 1.00 m.

Height of doorway: ? 1.57 m.

Depth of doorway: 0.40 m. ?

A. Construction

They are built into the rather steep slope of the hill and the chambers were not completely sunk in the ground, but — as in most cases elsewhere — must have projected more or less considerably above ground level when complete, a fact that rendered them easily visible and caused them to be plundered and ruined.

Although varying in size, both tombs are of uniform plan and method of construction¹ (Plates 33-36a)

(i) The Dromos

The tombs are approached by a narrow dromos built of two rough walls, very slightly converging towards the top. The dromos walls were partly preserved in the Tomb B, but those of Tomb A were more or less well preserved. The dromoi, as far as we could judge, inclined downwards, as is common elsewhere. It is noteworthy here that a relieving wall was observed in Tomb B, constructed above the dromos on both sides to resist the pressure from above and continued up to the point where it meets the slope of the hill.

¹ Tomb A is of a noticeably more careful construction, but the differences are only such as variations in skill and means would account for. The tombs of the Katarraktis's princes were probably built by local engineers, who had learnt their work at some centre of Mycenaean culture. The material and dimensions of our tombs are inferior to those found at Mycenae and also to those found at Messenia, but similar to those found at Marmariani (Thessaly) of P.G. times. Cf. BSA 31 (1930-31) 1 ff.
(ii) The Doorway

It is not distinguished from the dromos, which leads straight into the chamber. The whole opening was blocked by two large upright slabs in the case of Tholos A and in Tomb B by a well-built wall of small undressed stones. A threshold made of three rather irregular slabs (two of which are still in situ, while another larger one was found at the entrance of the dromos) is to be observed at a level of 0.25 m. above the floor of the dromos. No signs of such a threshold was observed in Tomb B, but here the floor of the dromos was covered by slabs, a rather unusual and remarkable feature of the tholos tombs. The lintel of Tomb A was missing, but in the case of Tomb B three large slabs were found still resting in situ, the innermost of which was slightly curved on its inner side to fit into the circle of the tholos; no relieving triangle was recognised above them.

(iii) Tholos

The tholos itself is in both cases more or less circular in shape. The walls are built of blocks and slabs of schist, mostly unworked except for the large slabs forming the lintel of Tomb B, which are roughly trimmed. There is not much attempt at regular courses, but the walls vary considerably in thickness (A = 0.40 m; B = 1.45 m). In both examples a layer of reddish earth was recognised in the floor of the tholos and some fragments of Mycenaean vases, fragments of bones, together with sherds of Christian times were found among the slabs, which had fallen in from the upper part of the tholoi.

1 In the case of Tomb A, a difference in the width of dromos and that of doorway is, however, recorded, but during my visit there (1968) I was not able to recognise such a difference, perhaps because the tomb was much destroyed.

2 It finds parallels in:
I) Crete: (a) Knossos (Kephala-Tholos) MM III/LM I, Cf. EEEKS.
   2, (1939) 533 f; AA (1939) 267 f; JHS (1939) 203 f;
   (b) Plati, LG. (LM. III B : 2), BSA (1913-14) 13 f., and in
II) Mainland Greece: (a) Karditsa, LH I or II, AA (1962)
   298 f; BCH (1920) 395 f; A. Delt. 16 (1960) 171 f;
   (b) Maravian, PG, BSA (1930-31) 5 ff; also a chamber
   tomb at Damania (Crete) LM III B, A. Delt. (1916) 171 ff;
   CMP 105 f.
B. *Chronology*

Taking all the evidence together (architecture, finds) our observations regarding the chronology of the tombs at Katarraktis led us to two probable explanations. First, it must be considered very likely that they can be assigned to the Early Mycenaean period (LH II) and the reasons for this are two-fold:

1. In both tombs:
   a) the sides of the dromos are lined with rubble masonry of schist (Group A, 1);
   b) the tholoi are built of rubble masonry of schist, but a tendency toward a better dressing and shaping of the stones employed is clearly observable (Group B, 6);
   c) the innermost lintel of tomb B (that of tomb A is completely destroyed) is slightly curved on its inner side to fit into the circle of the tholos (Group B, 5);
   d) the door of tomb A has a threshold (Group B, 7), but
   e) the lintel of tomb B has no relieving triangle above (Group A, 3);
   f) the jambs of the doorway are built of blocks of schist roughly similar in size to those used for the dromos walls and the tholos (Group ?);
   g) the floor of the dromos of tomb B is covered by slabs (Group ?).

Thus with the exception of the two last features (f, g), which may well be local peculiarities, all the rest correspond to those stated for the Groups A and B of tholos tombs established by Wace at Mycenae, the latter Group comprising more features (b, c, d, e) than the former one (a, e).

2 Ibid. p. 114.
2. On the other hand, if the bronzes found outside tomb B (which can be dated to the LH II period, judging by other parallels from other areas) belong to that tomb, as seems very probable, then the case for an early dating (LH II) of the tombs would be much strengthened. But if such an early date for the tombs is accepted, then the question - which naturally arises - concerning the presence of the LH III B vases found between the tholos and the "perivolos" of tomb B, and their connection to it remains an open one. This may be answered by assuming that the tombs after their construction had two or more subsequent burial periods separated by an interval of more than one generation and probably were disused for some time before they were taken possession of by new people in the LH III B period.

Secondly, a rather doubtful explanation, the tombs were constructed during the LH III B period, a date which does not correspond to the date of Wace for such tombs, but which is in accordance both with the dating of the vases found in the "perivolos" of tomb B and with that of the cemetery of chamber tombs found near there (Bouga), and with that of the Mycenaean settlement on the Ayios Athanasios hill. The bronzes found outside the Tomb B may well not belong to the tombs considered here, but perhaps they come from the plundering of another earlier (LH II) tholos tomb found in that region, which for one reason or another has been completely destroyed in the course of time, or otherwise has still remained unknown to us. Altogether, it must be admitted that the whole problem of the chronology of these tombs remains unresolved, since they had been imperfectly investigated. It is to be hoped that further research will shed more light on them.

1 e.g. Prosymna, I, p. 330, pl. II (Tomb XIV; inlaid daggers very similar to the Achaean ones; and Tomb III); Mycenae (Shaft Graves) Vermeule, "Greece in the Bronze Age," p. 98, where a discussion about the origin of the niello technique, and pl. XII.


3 But "Wace's architectural dating criteria at Mycenae do not work precisely in other regions" (Vermeule, Op. Cit., p. 125).

4 The excavator had not the time nor the proper means to complete the investigation of the tombs (PAE, 1957, 114 f).
3. Cist Tombs

Cist tombs are most commonly found in the Bronze Age in the Middle Helladic period and they continue into Late Helladic. In Achaea one such tomb belonging to the latter period has been recorded so far. It was found accidentally in Skoura (locality Kivouria), was square in plan (2 m. x 2 m.) and was covered with slabs of sandstone. It contained some vases and a sealstone of steatite (BE. Nos. 17-22) all datable to the LHIIA-B period. In general the evidence for cist tombs in LH down to LH III B is very slight indeed in Achaea, but probably implies continuity with earlier times.

4. Tumuli Tombs

Beyond Chalandritsa, at a place called Agriapidies, Kyparisses dug some tumuli tombs, which he calls "very old." They had a "perivolos" built of slab stones. Within this enclosure some so-called "cist tombs" built of similar stone slabs and of rectangular outline were found. They measure 2.70 m. in length and vary from 1.40 m. to 1.15 m. in width. One of these contained bones, clay whorls and four undecorated and badly baked pots of coarse clay. Judging from these finds and the construction of the tombs we can assign them to the LH I/II period.

5. Intramural Tombs

So far as I know, only one Late Helladic intramural tomb has been found in Achaea. It was constructed at the corner of the walls A and F of the Mycenaean house excavated by N. Zaphiropoulos at Katarraktis (Ayios Athanasios) in 1958. It is

---

1 Symbolae Caloenses IX (1930) 31 f.
2 LMTH p. 33
3 A. Delt. 16 (1960) Chronika, 144 f.
4 PAF (1930) 85 f.
5 Ibid p. 85, Fig. 10.
6 Cf. for parallels, A. Delt (1965) 6 f., pl. 5, plan I, Samikon (Elis) (construction), and EUR. CMB p. 89, Fig. 2 (finds).
7 PAF (1958) 172 f.
evident that we have here to deal with a Mycenaean child's cist tomb, which measures 0.60 x 0.50 m. The tomb had its three sides framed with thin upright slabs, the fourth being framed by the wall of the house. It contained forty-two small steatite beads and one of agate. It can be dated to the LH III B period. This intramural grave is especially interesting, since intramural burials are extremely rare in Mycenaean times until the end of the period\(^1\) and because such graves occur also in EH (?) and MH periods in Achaea\(^2\) I think it is an additional proof of the continuity of development between the two periods in that district of Greece.

6. Pithos Burials\(^3\)

Burials of this kind were found and observed at least at two Achaeian sites: Chalandritsa (Marnolaka ravine)\(^4\) and Bartholomio,\(^5\) but it is quite impossible that also some of the many pithoi found in a more or less destroyed condition elsewhere in Achaea\(^6\) had been used for the same purpose and that the skeletons once buried in them have been entirely lost. From the present evidence available we can assign, with some reservations,

1 Mycenae, Cyclopean Terrace Building (LH III C): EBA (1921-3) 403 ff. Fig. 92, pl. 62 (cited in EFS (1965) 220 N. 5); Lefkandi (LH III C): c.d. M. R. Popham and L. H. Sackett, Excavations of Lefkandi, Euboea 1964-66 (1968) 4 ff, and especially 6, Fig. 6; Ayios Kosmas (assigned to LH III C); Ayios Kosmas 60 ff; and perhaps Ayios Stefanos, Arch. Rep. for 1960-61, 32 f; for 1963-64, 9 f; Pavlopetri, EBA (1969) 121-5 and 140-2 ff.
2 See pages 67-68
3 Cf. LMTS p. 39 for a brief discussion of this type of burial.
5 Arch. Anz. 1932, Cols. 142 f.
6 e.g. Ano Sychaina (Bortzi): Personal communication from Dr. Yioulouris.
those found at Chalandritsa and Bartholomio\(^1\) to the LH times (III A, B, C ?).\(^2\). Two others found at Mamousia\(^3\) and Pharae\(^4\) belong to the post-Mycenaean times (that at Mamousia (Dherveni) to PG times.\(^5\)

7. Unidentified Tombs

Unidentified tombs have been recorded from some Achaean sites (Chalandritsa-Troumbes;\(^6\) Bartholomio\(^7\) (near Lomboka); Vovoda;\(^8\) Achladies;\(^9\) Aigeira\(^10\)).

The reports concerning these tombs are mostly very brief, and in some cases rather confusing, so we can say nothing with certainty about their construction, burials, contents and chronology.

---

1. We have not enough evidence concerning construction and date of the tombs found at Bartholomio. But if Nerantzoulis is right in assigning these tombs to the type of tholos tomb, (one of which contained burials placed inside a pithos), then we have to deal with a really very interesting case, which finds parallels in Crete (Cf. A. Delt. 13, 1930-31, p. 137: Burial in pithoi was a common practice in Crete throughout the MM period, from ca. 2000 B.C. onwards, and pithos burials of that period have been found in some of the early circular tombs like those at Vorou) and Messenia (Cf. AJA 1958 p. 178), and which may modify Hood's opinion that pithos burials have never been apparently recorded before 1960 from a tholos tomb on the Mainland of Greece (Cf. Antiquity, 1960, p. 174).

2. Dr. Yialouris assured me about the LH date of that found at Marnolaka ravine.

3. BCH 76 (1952) 222 f.

4. PAF (1957) 117 f.

5. G.G.P. p. 221

6. PAF (1929) 90 f. Fig. 7 (Mycenaean material, but the tomb seems to be of later date, probably Late Geometric).

7. See page 93.


SUMMARY

It may be useful to summarise the main features of the prehistoric Achaean tombs and see what conclusions may be drawn from them.

1. Tombs have been found at fifty-seven different sites throughout the district and to judge from the available evidence, tombs of other types such as Tholos, Cist, Tumuli, Intra-mural tombs, Pithos burial, than the regular Mycenaean chamber tombs are too few in number for any definite conclusions to be drawn. Chamber tombs of LH period predominate (over 219 examples) and we may well suppose that many more await discovery. As has been already stated, the general impression is that they are comparable with the simplest examples elsewhere on the mainland, but some local peculiarities are clearly observable. My opinion is that these tombs are unlikely to have been connected with a few settlements so far known in Achaea, but rather with a number of settlements such as exist at the present day.

2. As regards the funerary tradition throughout the prehistoric period (from EH down to, but excluding, P.G. times) a development is observable in the construction of the tombs and the methods of burial employed by the Achaeans, a development which finds parallels elsewhere in Greece (e.g. cist tombs predominate in MH times, with no burial gifts; chamber tombs predominate in LH times with several funeral gifts).

3. As stated above, the parallel in detail of tomb construction in some cases, shows close connections between Achaea and Kephallenia. On the other hand, the relatively close proximity of these two areas and the surprising rarity of
chamber tombs of earlier than LH III C date in Kephallenia are good reasons for believing that the former district, where tombs of the same kind, but of an earlier date (LH II-IIIB) occur, could have been the fountainhead of migration from the Mainland in the latter. There is also enough evidence, so far as the tombs are concerned, that contact between Achaea and its adjacent districts, Eliis, Laconia and Argolid, was maintained, but we are not yet well informed as regards relations with the other areas of Mycenaean Greece.

4. Although the Late Helladic period is abundantly represented in Achaea, there are examples of earlier tombs (EH - one intramural; MH - four intramurals, two tumuli and two of unknown type) from Paralimni (Teichos Dymaion), Mirali, Katarraktis (Drakotrypa and Pyrgaki), Krathion and Aravanitsa) which indicate an unbroken continuity of occupation from EH down to and excluding P.G. times in Achaea, as in other areas of prehistoric Greece.

Especially with regard to the Late Helladic Period, some of the previous researchers concluded either that "in contrast to the abundance of LH IIIC tombs burials of earlier date are rare"; or that only "ein paar Fällen Nekropolen mit Funden aus IIIA und IIIB, wie Vrachneika und K. Goumenitsa bisher gefunden wurden," or "extensive Mycenaean penetration of Achaea is a phenomenon of the post-Trojan war period".

---

1 As well as the Messenia-Triphylia district.
2 See page 87.
3 e.g. Louboea (BSA, 1966, p.33 ff.).
4 Desborough, LMTS, 35.
5 Ölin, EMP p.68.
Such conclusions based either on incomplete or negative evidence seem to be unjustifiable and unbased in view of the evidence now available.

As noted elsewhere in this chapter,¹ there are at least:
1) two LH I tombs (one tumulus and one chamber tomb) from Chalandritsa-Agriapidies and Vrisarion;
2) two LH II tholos tombs from Katarraktis, while most of the Aigion (1954, 1967, 1970) excavated chamber tombs (over thirty in all) were first made in that period;
3) for many more chamber tombs excavated at Gerokomeion, Klauss, Tsaplanaika, Pavlokastron, Vrachneika, Ano Sychaina (1960), Vrisarion, Kamaraís-Xerikon?, Kallithea (Aigion), Mayeira, Chadzi-Trapeza, Achnás-Achouria and Aigeira, and one cist tomb from Skoura we have evidence that they were first used in the succeeding period, LH III A, and continued to be used until the very end² of the Mycenaean period;
4) the LH III B period is represented by:
(a) twenty-four chamber tombs from Kallithea, Krini, Chalandritsa (A. Vasilios), Katarraktis-Bouga, Leontion (A. Ioannis), Leontion (Vrayianika), Vovoda; Dherveni (Psila Alonia);
(b) one intramural tomb from Katarraktis (A. Athanasios);
(c) one probable tholos tomb from Pournari.

¹ See pages 88, and note 1; 98
² The only exceptions being the tombs at Vrachneika, Skoura and Kamaraís-Xerikon, which were used until the LH III B period.
To this number may be added some more with the excavators' vague indications "LH tombs" from Postaina, Avo Samakia, Ano Sychaina (West), Platanovrisis ("Bithelis" and "Kamini"), Chalandritsa-Pori, Mitopolis, (A.Varvara), Leontion (Koutreika), Vrisarion (Prinakia), Kamara (Paliomylos), Mamousia.

If we disregard the extensive, but isolated and destroyed cemetery of Drosia (over 100 chamber tombs) which can be assigned, according to the excavator, to the LH IIIC period, then the number (about fifteen to twenty) of tombs from a few other LH IIIC sites, such as Kangadhi, Ano Sychaina (1923–24), Vasilikon (?), Starochorion, Mikros Pondias, Manesi, does not exceed greatly that of the earlier LH IIIA and IIIB periods.

Thus, taking into account all the evidence provided by the LH tombs, I am, in contrast with the researchers mentioned above, inclined to believe that the Mycenaeans maintained themselves in Achaea throughout this period.

But even here prudence requires us to depend on the definite evidence of tombs and that of settlements, pottery and artefacts and even where unbroken continuity is present not to assume, pending proper excavations, that occupation was uninterrupted.
<table>
<thead>
<tr>
<th>Date</th>
<th>Remarks</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>21st Dec.</td>
<td></td>
<td>F7</td>
</tr>
<tr>
<td>22nd Dec.</td>
<td></td>
<td>F9</td>
</tr>
<tr>
<td>23rd Dec.</td>
<td></td>
<td>F9</td>
</tr>
<tr>
<td>24th Dec.</td>
<td></td>
<td>F5</td>
</tr>
<tr>
<td>25th Dec.</td>
<td></td>
<td>F5</td>
</tr>
<tr>
<td>26th Dec.</td>
<td></td>
<td>F5</td>
</tr>
<tr>
<td>27th Dec.</td>
<td></td>
<td>F5</td>
</tr>
<tr>
<td>28th Dec.</td>
<td></td>
<td>F5</td>
</tr>
<tr>
<td>29th Dec.</td>
<td></td>
<td>F5</td>
</tr>
<tr>
<td>30th Dec.</td>
<td></td>
<td>F5</td>
</tr>
<tr>
<td>31st Dec.</td>
<td></td>
<td>F5</td>
</tr>
</tbody>
</table>

**Conclusion:**
- The document appears to be a table with various entries and stages, possibly related to a project or a timeline. The presence of dates and stages suggests a chronological record of events or tasks.
- The table entries are not clearly legible due to the quality of the image, but the format indicates a structured approach to record keeping.

**Note:** The text is in a non-English script, which may complicate the interpretation without additional context.
<table>
<thead>
<tr>
<th>Date</th>
<th>Page</th>
<th>Remarks</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>1932-07-22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1933-07-05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1933-07-07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1933-07-09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1933-07-17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1933-07-20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1933-07-22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1933-07-24</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: The document appears to be a page from a book or a publication, with sections and pages listed, but the content is not fully legible due to the quality of the scan.*
<table>
<thead>
<tr>
<th>Steps</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>Chamber Influence Diagram</td>
</tr>
<tr>
<td>III</td>
<td>Date</td>
</tr>
<tr>
<td>III</td>
<td>Remarks</td>
</tr>
<tr>
<td>III</td>
<td>10X Device</td>
</tr>
<tr>
<td>III</td>
<td>1X Device</td>
</tr>
</tbody>
</table>

**Notes:**
- Coefficient of the line
- In each case
- Coefficient of the line
- In each case
- Coefficient of the line
- In each case

**Table:**

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td></td>
</tr>
</tbody>
</table>

**Chart:**

- Chart X
- Chart Y
- Chart Z

**Diagram:**

- Diagram A
- Diagram B
- Diagram C

**Legend:**

- Legend 1
- Legend 2
- Legend 3

**Additional Information:**

- Additional info
- Additional info
- Additional info
In dealing with the study of a prehistoric region, the pottery, in particular when it is painted, is of prime importance in determining its cultural development and relationship to other more or less developed districts. A good deal of research work has been devoted in recent years to the pottery in particular regions with a view to defining local characteristics and styles.

Our knowledge of the civilization of Achaea in Mycenaen times is to a great extent derived from the ceramic material, which is impressive in quality and peculiar in style. This material comes almost exclusively from excavated tomb-sites (more than thirty) and owing to some special chemical property of the soil many ceramic painted and unpainted finds have been preserved in fine condition.

Since it is not possible to decide in many cases from which locality or even region an individual vase comes - the original catalogue has been badly damaged by the dampness and the war - I use the numbers of the new catalogues of the Patras and Aigion museums.

The whole chapter is divided into three main sections, i.e. (A) Early and Middle Helladic pottery; (B) Late Helladic pottery - sub-mycenaean (C) Protogeometric pottery.

The material belonging to the first and third groups is dealt with briefly and simply in order to see whether any continuation or break of the ceramic tradition is traceable in this area.

It is the pottery of the Late Helladic period which is studied here in detail, since it is much better represented in Achaea and only by presenting in full this evidence we shall be justified in proceeding to any inferences of a historical nature.

A. EARLY and MIDDLE HELLADIC POTTERY.

The pre-Mycenaean pottery is poorly represented in Achaea, as are the other finds of the pre-Mycenaean period.
Apart from the important work done by N. Zapheiropoulos at Katarraktis and E. Mastrokostas at Paralimni (Teichos Dymaion) we have only the incomplete reports of the excavations conducted by N. Kypavisses and P. Nerantzoulis in earlier times.

For that reason our evidence for the pre-Mycenaean pottery of Achaea is at present too meagre and, in my opinion, the time is not yet ripe for a comprehensive synthesis with far-reaching general conclusions. But we must hope that further and more systematic exploration in this district will fill in some of the gaps in our very incomplete understanding of the pottery of the Early and Middle Helladic periods.

The following paragraphs are merely a summary of the information about the pre-Mycenaean sites in Achaea, the shapes and patterns of the E.H. and M.H. vases so far recognised there, with some very cautious observations based on my admittedly incomplete study of the material.

1. Early Helladic pottery

Pots belonging to this period came to light mainly in seven widely separated localities: Leontion (Vrayianika), Kamaraïs (53-54), Katarraktis (Drakotrypa), Kastria (Kato Achaea) and Paralimni (Teichos Dymaion). The bulk of the material, however, was found at the settlement-site of Paralimni (Teichos Dymaion).

Ware of the three known from other sites (Argolid, Boeotia) periods (E.H.I, II, III) have been recognised there:

1 PAE (1952) 398; (1957) 116; (1958) 173.
3 PAE (1951) 72; fig. 3; newspaper "Neologos Patron" 27-10-1930.
4 For detailed references see Chapter of Prehistoric sites, pp. 29, 38, 5-16, 32, 11, 7-8.
a. Early Helladic I: There have been found many sherds of polished monochrome or unpainted ware; surfaces usually smoothed, occasionally showing light incomplete burnishing; clay usually grey in colour; very thin slip varying in colour in the several pots. These sherds belong to some coarse vases with or without handles and some of these bear incised decoration. Other fragments found at the Middle gate, belong to red slipped ware, which could be certainly assigned to the EH.II period.¹

Some EH.I shapes have been recognised so far: round or globular jars, shallow bowls, jugs, cups. Handles that serve no purpose and are merely modelled on the side of the pots occur with particular frequency on large bowls. Sometimes they closely imitate other materials, such as oblong swellings or plastic ribbons. One of these handles (PAE, 1965, pl.157) is similar to that found by Caskey at Eutresis, which he calls "a broad hollow grip" and dates to this period.²

Incised ware suggesting close relationships with the Early Cycladic pottery is also found in strata of EH.I at Teichos (PAE, 1965, pl.153a).

b. Early Helladic II: It is the middle phase of the period, (EH.II) that is best represented at Teichos Dymaion, as it is in most other sites of Greece. Wares coated with light-brown, watery grey³, dark or buff Urfirmis glaze occur in this phase. The site has also produced examples in plain or coarse wares of the most typical shapes of the period: sauceboats with inverted rims and horizontal or vertical handles, beaked or globular jugs, (one of which with an oblique-cut neck), deep bowls

¹ Cf. Hesperia (1960) 162.
² Op.cit. pl.47: III18 and p.163 "They occur in EH.I and are particularly characteristic at many sites in the first phases of the succeeding period".
³ Cf. Kunze, Orchomenos, III, fig.35.
with ring bases (PAE, 1965, pl.157), pithoi with broad rims flat and spreading outward, hydai and a spherical amphora (PAE, 1965, pl.155a).

Decoration is scarce on this pottery. There are a few instances of incised and impressed patterns, e.g. a sherd of a pithos is decorated with impressed round dots in straight rows or in systems of rows (PAE, 1965, pl.154).

C. Early Helladic III: Many sherds belonging to pots, which could be assigned to EH.III period, were found at Teichos Dynaion, but unfortunately no single complete vase.

Most conspicuous among the wares is a light - or yellowish - coloured fabric with linear patterns in dark paint, Blegen's EH. Class C:1, now very well known at many sites.¹

Among the recognisable shapes are: large bowls², narrow-necked jars, wide cups with outturned rim, large with tall neck vases, one-handled cups (PAE, 1965, pl.180a).

As to the decoration apart from the linear patterns in dark paint a few examples of incised designs occur, e.g. a sherd of a wide cup decorated with rope pattern³ (PAE, 1965, pl.160a:5). Also notable is the tendency to decorate the inner side of the rims⁴ (e.g. PAE, 1965, pl.150:4).

2. Middle Helladic pottery

Pottery assignable to this period has been recovered in

---

1 Cf. e.g. Tiryns IV, pl.XXVI-XXXIII; Lerna IV, Hesperia (1960) 295.
2 One of these bowls with connected outward splaying mouths belongs to the type of Kunze, Orchomenos, III, 30, pl.X.1, 2 and XI. 1, 2, 3b and Verdelis, AE, (1955). Chr. 4, fig.6 (Tiryns).
3 Cf. Caskey, Hesperia, 1960, pl.69e.
4 Examples from Lerna are figured in Hesperia (1952-1953), pl.10b; (1954), pl.21.h, i; (1955) pl.45, a-e.
nine Achaean sites, i.e. Aravonitsa, Xerikon, Mirali, Gerbesi, Krathion, Paralimni (Teichos Dymaion), Katarraktis (Drakotrypa), (Pyrgaki), and Katarraktis (Ayios Athanasios).¹

Nearly all the varieties of Middle Helladic wares, known from other areas, are represented in Achaea. Some of them require very little comment, others deserve more special attention.

To start with, the MH. period is better represented in the material from Paralimni and Katarraktis, while the evidence from the other sites is rather poor and scanty.

Thus first at Paralimni (Teichos Dymaion) many grey Minyan, matt painted and some unstratified MH. sherds were collected. They belong to handmade pots.

a. Grey Minyan: The shapes most represented are goblets, usually with spreading offset rims ending in a thickened lip of various forms; two ribbon handles placed upright on the rim, and carinated body; bowls and jars with angular profile.² Some of these sherds are incised and decorated with several designs, such as isolated spiral (PAE, 1965, pl.160.b:3).

b. Matt painted ware: Some matt painted sherds found there belong to coarse ware (Buck's "white slipped ware"). They are decorated with several patterns, such as carelessly drawn parallel vertical lines, which seem to belong to Buck's early period.

In addition to all this, there have been collected some sherds belonging to Yellow Minyan ware, slipped or unslipped, and to the class of Coarse wares.

Secondly at Katarraktis (Drakotrypa) Ephor N. Zapheir-opoules³ found some sherds of MH. handmade vases both plain burnished and matt painted. No complete pot was recovered but it was possible to reconstruct some characteristic MH. vases from the fragmentary pieces, which can be

---

¹ See chapter of prehistoric sites p.4ff for detailed references.
² Examples from Euboea in BSA (1966) 94-95.
classed in four groups:

a. **Argive Minyan Ware:** Common vases of coarse dark clay; heavy slip of purer clay, red or grey in colour. Typical shapes of this group are the mastoid vases with or without handles. On the outside surface there are usually small projecting knobs or unusual semicircular excrescences (*PAE*, 1958, pl.135a,b).

b. **Yellow Minyan Ware:** Small vases of a finely levigated yellow clay; angular profile; sometimes their outside surface is covered with a whitish slip. Shapes: Kantharoi and goblets imitating metal prototypes (*PAE*, 1958, pl.135e, ?).

c. **Matt painted ware of fine, carefully sifted clay** usually covered with brick-red or whitish slip; black or red-brown paint. Both small and large specimens occur. (Buck's Green Yellow Ware).

d. **Matt painted ware of porous coarse clay:** Biscuit brown or pale green in colour. The surface or the whitish slip are decorated with black matt paint. Shapes: Hydriae, amphoras, cups. Small convex bases, horizontal handles with sharp edge (Buck's buff-Green Ware) (*PAE*, 1958, pl.134a,b).

Mention may finally be made of the Minyan bowl with two high-swung handles rolled and squared, reconstructed from many sherds found under a heap of stones in a MH. tomb at Mirali. It is of a rounded profile and has a rim splaying outward. Coarse grey pocked clay, flat base (*PAE*, 1952, 399, fig.5). As to some more MH. sherds collected in the other sites, they need no special study here, since the original reports are very brief and incomplete.

**Commentary**

Considering the material as a whole, we may say that

---

1 For a similar (not identical) example from Euboea, see BSA (1966) 91, fig.20, no.42 (with a carinated profile).
so far as the EH. pottery is concerned, bowls or cups, usually with inverted rims and ring bases, sauceboats with horizontal or vertical handles, jugs, globular or beaked, hydriae and pithoi appear to be the most common EH. shapes in Achaean. Unfortunately only six whole EH. vases are preserved (a/a 15, Pm.776, 777, 778, 792, 1034). They are illustrated in PAE (1962) pl.137b and in our plates 37-38.

For decoration one may note that the following patterns occur:

a) Straight or zigzag or parallel incisions or circle motives filled with white pigment (PAE, 1962, pl.137a).
b) Small lines on rims (PAE, 1965, pl.160a:5).
c) Successive incised lines and lines consisting of dots set in pairs; zigzag line on the brim of rims (PAE, 1965, pl.160a:10).
d) Successive lines filled with white pigment and a row of round dots (PAE, 1965, pl.160a:8).
e) Triangles filled with parallel lines (PAE, 1965, pl.160a:7).
f) Concentric circles joined with tangents and filled with white pigment (PAE, 1965, pl.160a:9).
g) Herringbone frequently but not invariably filled with white (PAE, 1965, pl.153a).
h) Impressed round dots in straight rows or in systems of rows (PAE, 1965, pl.154g).

So far as could be recognised, the patterns nos.e, f and g resemble those of certain Early Cycladic pots.
i) Rope Pattern (PAE, 1965, pl.160a:3).
j) Linear decoration with dark-on-light ornaments (PAE, 1965, pl.159a).
k) Black linear decoration consisting of successive lines and belts of parallel lines cut in a meander pattern (PAE, 1965, pl.149g).
l) Groups of dark black parallel lines cut out (PAE, 1965, pl.150g:1).
m) Solid triangles of dark brown colour (FAE, 1965, pl.150γ:4).

n) Groups of parallel brown lines pendant from the rim (FAE, 1965, pl.150γ:5).

o) Double horizontal zigzag or successive lines from the lowest of which depend groups of vertical rays of varying length and thickness (FAE, 1964, pl.61:b).

p) Rows of continuous horizontal zigzags (FAE, 1931, p.72, fig.3).

r) Plastic bands bearing or not marks of impressions or incisions (FAE, 1965, pi.156).

As regards the MH. pottery, so far as I know only fourteen whole vases have been recognised, which are grouped into the known categories of Blegen:

1. **Vessels for eating and drinking**: five examples (PM.496, a/a 20, PM.1038, 1037, 1036) pl.38, 39.

2. **Vessels for pouring**: three specimens (a/a 35, PM.1033, 1039) Pl.38, 39.

3. **Vessels for storing**: six specimens (PM.1044, 1045, 1040, 1041, 1042a, 1042b) Pl.40.

4. **Unidentified shapes**: Many other sherds found in MH. sites of Achaea are too fragmentary for the shapes to be recognised, e.g. one from Paralimni (Teichos Dymaion) (FAE, 1965, pl.153γ).

Decoration is usually confined to the upper part of the MH. Achaeain vases and there is no very great variation in motifs. The following patterns occur:

a. **Incised decoration**:

(1) Isolated spiral (FAE, 1965, pl.160b.3).

(2) Parallel arched lines (FAE, 1965, pl.160a1)

(3) Multiple zigzag lines incised with a comb (FAE, 1965, pl.160b2)

---

1 Cf. Troy I, 23.
(4) Parallel oblique small lines set in two successive rows on either side of an anaplastic line (PAE, 1965, pl.160b 5).

(5) Successive wavy and parallel lines (PAE, 1965, pl.160b 1).

(6) Small triangles set in a row and filled with white pigment (PAE, 1965, pl.160b 1).

(7) Continuous double wavy line (PAE, 1965, pl.160a 4).

(8) Incised horizontal lines (PAE, 1962, p.399, fig.6:4; 7:2).

(9) Parallel lines (PAE, 1965, pl.160a 2).

b. Matt painted decoration

(10) Multiple zigzag lines in horizontal zones at handle zone. Buck's motif 7a. (PAE, 1958, pl.134a).


(12) Multiple zigzag lines in vertical panels at shoulder of a hydria. (PAE, 1958, pl.134b) and in an unpublished pot in the Patras Museum. Buck's motif 7b.


(16) Groups of chevrons set horizontally at the greatest diameter of a pot from Teichos Dymaion PAE (1965) pl.159b 5). There is not a parallel in Buck's motifs.


(18) Net pattern (PAE, 1965, pl.159b).


(20) Wavy line of small arcs below rims as a fringe ornament. BG Achaia - AJA LXIV, 1960, p.4, pl.1, fig.1 (1c). Buck's motif 73a.
(21) Triple triangles in row. BG Achaia — *AJA* LXIV, 1960, p.4, pl.1, fig.1 (lc). Buck’s motif 42a.

(22) Triangle enclosing narrow lines, apex downward. BG Achaia — *AJA* LXIV, 1960, p.4, pl.1, fig.1 (lc). Buck’s motif 38.
Late Helladic pottery was found in practically all the excavated sites of Achaea. The material under discussion has, however, previously met with but scant description\(^1\), while most of the vases (and some of major importance, as for instance, kraters) are wholly unpublished.

Fortunately the Mycenaean material both at Patras and Aigion museums was available to me and I have been able to check the catalogues there\(^2\). But, in questions of classification, we had to rely on the evidence the pottery itself provides—that is, on a study of the development of shapes, decorative motifs and general technique, since the records\(^3\) of the earlier excavations for one reason or another do not give all the necessary information we need for this purpose. The classification suggested is therefore vague and tentative, for it would be absurd to talk of the absolute chronology of pottery when, in many cases, we know next to nothing of its discovery.

---

1. Unphotographed pots are summarily listed by Kyparissess—e.g., "four vases of usual type" \textit{PAE} (1952) 61f.

2. Thanks to the kindness of Prof. P. Petsas, Ephor in Patras (1968) I was able to study the Achaean material in detail.

3. It is very seldom that a record of provenance has been kept and tomb groups are usually confused.
With this in view, it seems best to follow the system of presentation established by Stubbings\textsuperscript{1} and Iakovides\textsuperscript{2} in their study of the Late Helladic pottery of Attica and Perati respectively.

First, a brief discussion of general technique (clay, paint, firing etc.) will precede the study of the pottery shapes. The typological study of the pottery will follow, and the several pottery types (e.g. four-handled storage jars, two-handled storage jars etc.) will be examined individually and where possible their evolution traced through the Late Helladic period. Finally, an attempt will be made to establish a network of evidence for the Chronology\textsuperscript{3} and development of Achaean Late Helladic as a whole.

\textbf{\textbullet

1. \textit{BSA} (1947) lff. We follow his system with some reservations, since his article was published in 1947, and so can take no account of the many important discoveries and surveys since then (e.g., Mycenae, discussed by E. French, \textit{BSA} 1963-1969; Euboea, by M. Popham, \textit{BSA} (1966) etc.)


3. The attribution of individual vases to the respective phases of Late Helladic III will be found in the Catalogue appended to this chapter, pp. 401-424.
Almost all the Achaean pots are wheel-made, carefully shaped and successfully fired. There are, however, a few exceptions to this general rule, notably thirteen hand-made vases, which are either household ware (PM. nos. 40, 452, 463a, b., 739, 775, 786, 1051) or obviously amateurish attempts at pot making (PM. nos. 525, 690, 872; AM. 61, 63), seven pots with minor defects such as cracks (PM. nos. 167, 378, 625) or sagging (PM. nos. 126, 50, 623, 625) and fourteen more which were carelessly turned (PM. nos. 48, 50, 131, 280, 271, 302, 356, 370, 415, 790, 903; AM. nos. 30, 52; a/a 47) or warped by the fire (PM. 430).

The majority of the Late Helladic pottery in Achaea is made of various well-levigated local clays, each fabric having been indiscriminately employed for several shapes and kinds of vases. Buff (ranging from light- or pale-buff (e.g. PM. nos. a/a 730, 599) to dark-buff (e.g. PM. 153) or red-buff varieties predominate comprising over five hundred specimens out of a total number of 961 pots in the Patras and Aigion collections. The rest of the vases are made of red or reddish (e.g. PM. nos. 203, 273) clay, and only in a few cases dark-grey (PM. nos. 160, 171, 268, 702, 738, 747, 761, 723) or brown-grey (in some pots from Teichos Dymaion e.g. PM. 906) clay is used. A few more

---

1. On the technique of Late Helladic pottery cf. Prosymna, 408ff.; Chat.T. 147, 156, 165; Purumark, MP.11ff.; BSA XLIII, 9ff.
variations of clay occur, such as light-brown (PM.914), or grey-buff (PM.263) which seem to point to either differences of temperature in the kilns or mixing of different clays. The clay of the earlier LHIII pottery of Achaea is usually smooth and hard and of a clear light-buff colour (e.g. pots from Vrisarion, Vrachneika and Aigion) while that of the latest products assumes a dirtier colour with a matt surface (sometimes unslipped, e.g., PM.274) which is easily damaged by rubbing (e.g. PM.415, 134). But generally, as a criterion of date, fabric must be used only in conjunction with factors of shape and pattern, for cooking-pots and other vessels intended for rough use will naturally be made of coarser clay at any period.

The slip on the Achaean pottery is thick, and usually, though not by any means always of the same colour as the clay (e.g. buff clay and slip: PM.7,266,459; a/a 730: Red clay and slip: PM.203).

As regards the paint, it is usually lustrous (e.g. PM.321) sometimes matt (e.g. PM.459) and varies from all shades of brown and red to black. Matt red-brown glaze is the most stable, while black, as on most Late Helladic pottery, wears off most easily. Shiny (e.g. PM.478,223) and dull (PM.151) paint occur at all times. Added white is almost unknown to the Achaean

1. Deterioration in fabric from LHIIIA to LHIIIC is also observable in the pottery of Attica, cf. BSA (1947)10f.
2. Instances of slips differing from the clay to which they were applied (e.g. dark-buff on red-buff (PM.151): dark "burnished" buff on reddish-buff (PM.86): buff on red-buff (PM.261)) are very few.
3. It is used only in two pots, see below, p.320.
collection. As has rightly been observed, much of the redness or blackness of the same clay and paint depend on the thickness of the glaze and the conditions of firing. And in fact, the existence of some pots in Achaea (e.g. PM.10,303) on one side of which the coating of paint is burned black, while on the other it is brown or bright red, is a clear proof of this.

As elsewhere in Greece, a general tendency to paint the vases black, towards the end of LH.III is also observable in Achaea. The later patterned deep-bowls and stirrup-jars are usually decorated in dark-brown and on the latest four- and two-handed jars, amphoriskoi, stirrup-jars and duck-askoi, the paint is black. But we must not regard the colour of the paint as an infallible criterion of date, since in the Achaean pottery a number of crude, black vases look as late as any Late Helladic vase known (e.g. PM.248,25,539), but others of apparently equally late date are fine in both fabric and decoration (PM.10,223).

Finally, variations of quality of the pots in different localities of Achaea (e.g. Klauss and Katarraktis) can be easily observed (the former has finer ware) and they come to strengthen our view that Achaean pottery is not imported from other regions but is of local manufacture.

1. BSA.XLII.p.10.
2. The same applies to the decorative motifs.
Throughout the long period of its currency, the L.H. pottery naturally experienced some changes in style, both in shape and decoration. The main phases of its development have been distinguished by Wace and Blegen under the headings of Late Helladic I, II and III. Finer subdivisions have been attempted by A. Furumark, who has made a very thorough and detailed study of the material, but, as his system is based almost exclusively on style, it cannot always be accepted as chronologically valid. Styles may have a longer vogue in some areas, as for instance, in Achaea, than others and to date, by this criterion alone, is hazardous. His system, however, provides a useful framework and, with the above reservations, I have adopted it in my work. But I have not followed him in using the term "Mycenaean" because Wace's term "Late Helladic" seems to me more suitable as it implies a cultural and chronological limitation to the Mainland of Greece, part of which is Achaea.

The shapes of pots are described by the names used among English students of Greek prehistoric archaeology, following the terminology of E. Franch. But as many of these names are generic rather than specific in their connotation, I have usually added the type-numbers from the catalogue.

1. MP. 1942.
given by Furumark in his Mycenaean Pottery. I have also from time to time given a reference to his lists and diagrams of decorative motifs in order to supplement or clarify verbal description.

The relative frequency of shapes is different from that obtained from other areas. The pots, except for the stirrup-jar PM.898, the amphoriskos PM.265 and the legged duck-askoi, all belong to shapes already known from other Mycenaean sites, but some of them (e.g. PM.151: strutted pyxis stirrup-jar: PM.1052: alabaster-pyxis) are the first to be found in Achaea.

The shapes are described in the following order:

I. Closed Shapes.
1. Four-handled storage jars 35
2. Two-handled storage jars 11
3. Stirrup-jars 359
4. Piriform jars 37
5. Small handleless jars 32
6. Rounded Alabastra 78
7. Square-sided Alabastra 73
8. Narrow-necked jugs (Oinochoai) 32
9. Small globular jugs 43
10. Globular wide-necked jugs 2

1. MP. pp. 583ff., and figs.3-20. For clarity the type-numbers are quoted with the letters FS prefixed.
2. Quoted with the letters FM prefixed.
11. Squat jars with one vertical handle  |  8
12. Hand-made miniature jugs       |  3
13. Amphoriskoi                    |  61
14. Globular flasks                |  6
15. Feeding bottle                 |  1
16. Askoi                          |  8
17. Duck-Askoi                     |  7
18. Ring-vases                     |  8
19. Hydriae                        |  7
20. Composite vessels              |  9
21. Kraters                        | 5
22. Conical Kraters (Kalathoi)     | 15
23. Deep bowls                     | 13
24. Deep bowls with two vertical handles | 2
25. Stemmed bowls                  | 2
26. Shallow angular bowls          | 2
27. One-handled deep bowl          | 1
28. Kylikes                        | 14
29. Shallow cups                   | 25
30. Deep cups                      | 17
31. Mug (Tankard)                  | 1
32. Conical Rhyton                  | 1
33. Lids                           | 2
34. Pithoi                         | 9
35. Alabaster Pyxis                | 1 (110)
35a. Uncertain Shapes              | 8 (8)

In the museum at Patras, there are at least thirty-one shapes from several tomb-sites of Aegina. It is worth noting that the list includes a single example of a cup from a tomb at Hagia Triada. Both the types and their individual numbers are based largely on the study of the Patras and Aegina Museum Inventories. In some cases a matter of conjecture due to the nature of the evidence. All the pottery from these sites is unpublished, so they are not referred to in the Catalo-
III. Terracotta

36. Terracotta Figurines 22
37. Chair 1 (23)

Total number (961)

The original use and contents of the pots are, as has been rightly stated, in most cases a matter of conjecture.

I. Closed Shapes

1. Four-handled Storage Jars.²(Figs. 1-4 pls. 41-47).

In the Museum at Patras, there are at least thirty-five of these from several tomb-sites of Achaea. It is worth mentioning here that up to now not one single example has been found or recorded from the region of Aigion.

They are essentially of the same shape but differ greatly in size, according to which they fall into two main groups: a) Large, comprising all the pots which are over 0.30m. high and b) Small, including all those which do not exceed the height of 0.30m. To the former group one can assign the

1. Cf. BSA XLII. 24; XLVII. 54, LXII. 172; Perati B. 85ff.

2. In the discussion here following the numbers given are those of the Patras and Aigion Museums. Inventories, with the letters PM. (Patras) or AM (Aigion) or a/a (serial number of my Catalogue appended at the end of my work) or BE (Entry BOOk) prefixed. All pots with the BE. prefix are unpublished, so they are not illustrated in this work.
The fabric of these jars is distinct from that used for both small unpainted vases and for "coarse" or "cooking" ware. It is a buff (e.g., PM.7) or red-buff (e.g., PM.8.b) or reddish (e.g., PM.273) clay. The surface is in all cases well smoothed.

The body shape of the examples varies slightly and according to this and the presence or absence of a base they fall into five different types:

**Biconical (Fig. 1a,b):** More than half of the total number belong here (twenty three specimens: PM.1,3,5,6,7,8,8a,8b,9,10,133,200, 204,270,273,368,382,549,633,770,923, 1047,1048).

**Globular (Fig. 1c):** Only two examples with a comparatively narrow base occur (PM.136,4).

**Globular-conical (Fig.1d).** One example, partially destroyed and restored (PM.a/a 746).

**Ovoid (Fig. 1e)** Of similar proportions to type a,b,d. It is the second frequent variety next to the biconical one, consisting of eight vases (PM.2,132,135,269,271, 274,945,1074).

**Ovoid-baggy (Fig.1f)** One example, with small flat base (PM. a/a 741).
The vases, except for the PM.a/a 741, with a small flat bottom, all have either raised (twenty-five specimens, e.g. PM.945) or ringed (nine pots, e.g. PM.568) base.

All the vases have a relatively high, narrow, concave neck; thick horizontal rim (e.g. PM.770), sometimes rounded on top (e.g. PM.136); four round loop-handies, two of which are set horizontally at the greatest diameter of body, slanting obliquely outward, and the other two, which are smaller, usually placed horizontally (in twenty-two examples, e.g. PM.1) or vertically (in thirteen examples, e.g. PM.7) high up on the shoulder (e.g. PM.770) or less frequently (e.g. PM.368) low, but always symmetrically between the first two. At least six jars (PM.1,10,133,273,1047,a/a 746) have rope-twisted handles, an otherwise rare and idiosyncratic type of handle in the Bronze Age.\(^1\) The paint varies from thick-black (PM.7) to red-brown (PM.9) and clear red PM.1048).

According to their decoration Achaean four-handled jars can be classed in four main groups:

---

BSA (1967) 172 no.54-346 (Mycenae). They are of course, more characteristic of Protogeometric (Desborough, P.P.276 f.n.1), but this type of handle had a long ancestry in the Aegean; e.g. PM.I.fig.10. (From Yortan);
BSA XXV.Pl.XII,j (Mycenae): one each from the Early Bronze Age strata at Servia (W.Macedonia) and Kritsana (Chalcidice) and several from the Early Helladic site at Pelikata in North Ithaka (excavated 1930); Hesperia (1956) 172,pl.48d (Skyphos from Lerna). For Mycenaean parallels cf. PAB (1954) 298, fig.13 (Bambes-Makrygia): Perati vol.IF (1970) pl.136e (oinochoe, no.963 from Tomb 132); Bronner, Hesperia VIII (1939) 393f: figs 74,75 (Athens)(=LHIIIB-C)
1. The first and least common group consists of two (PM.132, 135) vases, the body of which is painted all over with black paint.

2. The second group comprises eleven pots, the body of which is painted all over black or red, except for a reserved zone on the shoulder, decorated with several patterns (PM. 1, 2, 5, 8, 133, 200, 633, 770, 923, 945, 1074).

3. The majority of the pots can be assigned to the third group: Neck painted solid black, reserved zone on shoulder or belly or on both, body banded either with a) equally-spaced stripes (PM.269, 270, 368, 382, 549, 8a., a/a 746) or b) groups of evenly spaced stripes (PM.3, 4, 6, 9, 274, 204, 271).

4. To the last group belong eight examples (PM.10, 136, 273, 1047, 1048, 8b., a/a 741): Lower body and neck painted solid black, the rest of the body covered with bands and several linear (or pictorial PM.7) designs. Broadly speaking the decoration is usually confined to the shoulder of these jars, but there are a few examples whose bellies are decorated (PM.8b, 10, 7, 382, 1047) as well.

1. Reserved zone by lower handles.
2. Reserved zone both in shoulder and belly.
3. The reserved zone on the shoulder has been left plain.
FIG. 1. Four-handed storage jars, shapes (scale not uniform)
I. **Shoulder-zone Patterns**: (Fig.2-3).

1. **Isolated Semicircles**: *PM. 43.* It is the most common pattern. Three main versions of it can be easily distinguished: a) Simple concentric semicircles (Fig.2:9,12,13), set in horizontal rows as an all-over pattern. (*PM.133,945,a/s746,* or combined with other different designs (*PM.1*)(Fig.1:1). They all belong to Furumark's types d and h. The simplest (*PM.945*) has a row of two or three or even four concentric semicircles pendent from the upper band of the reserved shoulder zone.  
   b) Dotted concentric semicircles, (Fig.2:8,10,11) set also in horizontal rows. (*PM.6,200 269*) are usually combined with other different motives, drawn in the same (*PM.6*) or in a different zone (*PM.200*). *PM.269* has its shoulder zone decorated with a more elaborate and unparalleled version of this motive: single concentric semicircles pendent also from the upper band of the shoulder zone and in horizontal rows are dotted inside and in their outer edge. It is very roughly drawn. c) Fringed concentric semicircles: (Fig.2:2-7,14). This version occurs on seven vases (*PM.2,3,4,7,368,633,770*) and is set in horizontal row.

1. **Cf. AE (1910) 232 fig.23 (simple).**
2. **Part of its shoulder zone is decorated with vertically set simple concentric semicircles.**
except for the vase PM.368, where it is used in the vertical variant (running left) to decorate the zone between the handles and PM.3, where it occurs in an alternating row of four semicircles (variety cf. PM.type 27). An unusual feature of this pattern is used in PM.770: simple single concentric semicircles having their inner edge fringed. In general this pattern predominates and either simple or dotted or fringed remain hand-drawn throughout.

2. Joining semicircles. PM.42 (Figs.23:30,4,21). There are three examples of this pattern: On the lower part of the shoulder zone of PM.10, Type 4 is used, while Type 8 occur in PM.7 and Type 6 (variety) in PM.382.

3. Bivalve Shell. PM.25 (Fig.3:26). This pattern is used only once on PM.1047 (variety of Type 23).

4. Concentric Arcs. PM.4411 (Fig.2:1,15) Two examples of this design were identified: Type 2 on PM.1 combined with isolated (simple and fringed) semicircles and Type 10, much more carefully executed on the upper half of the shoulder zone of PM.8.

1. Furumark considers that this design does not begin until LH.III.A2 and he gives no examples of it even at this period on open shapes. Cf. ESA (1964) 252.
5. **Antithetic Spiral.** FM.50 (Fig.3:28-30). There are three examples of this pattern. A variety of Purumark's type 27 occurs on FM.273 (= antithetic-tube spiral from lozenge centre); versions of types 12-15 occur on FM.1048, and a new variety of type 31 ("tube and feather") is used in the zone of the upper handles of FM.10. This pattern is generally carefully drawn.

6. **Wavy line.** FM.53 (Figs.17,24,21,11) A rather crude version of the horizontal type 20 is found combined with zig-zag design on FM.9. A more elaborate version (type 15) of the same pattern is used on FM.549, while the horizontal types 18-19 occur on FM.382 and FM.200.

7. **Zig-Zag.** FM.61 (Fig.2:11,16-19) This is the second most popular pattern in the group. It is found on six jars and there are two types in this usage: type 13 covers the middle zone of the shoulder of FM.200, while type 19 is used on the shoulder of the rest of the five pots (FM.5, 136,9,271; a/a 741). Both types, although handrawn are very carefully executed.

8. **Triangle.** FM.61A (Fig.2:8,15) Type 6 of this pattern, combined with isolated (dotted) semicircles ornament is found on FM.6. An unusual example of this pattern is that covering the lower half of the shoulder zone of FM.8: two rows of double triangles with their tops facing each other.
9. **Foliate Band.** FM.64 (Fig.2:20) There is one example of the type 27-28, running circularly around the narrow zone of the two upper handles of FM.270.

10. **Isolated spiral.** FM.52 (Fig.3:23) PM.8a is decorated with this pattern, type 1.

11. **Stemmed Spiral.** FM.51 (Fig.2:22). Type 23 (hanging row) of this pattern is used on FM.1074.

12. **Panelled Pattern.** FM.75 (Fig.3:25). FM.923 is decorated with successive panels of scale pattern and concentric arcs: the pattern of concentric arcs lies in the middle of four panels of concentric arcs, separated by vertical borders of two dotted lines. This pattern is apparently not illustrated by Furumark.

13. **Unusual Patterns** (Fig.3:27). The shoulder zone of PM.8b is covered with crude spirals and tubes filled with semicircles.

**II. Body-zone patterns** (Fig.4: 1-6).

The body-zone of the above (p.135) mentioned five jars are decorated with the following patterns:

1. **Fish (tail?)** FM.20: PM.8b.

2,6. **Wavy line.** FM.53. Type 20: FM.10 and 270.
FIG. 2. Four-handled storage jars, shoulder zones.
FIG 3. Four-handled storage jars, shoulder zones (continued)

FIG 4. Four-handled storage jars, body zones.
3. **Bird (pictorial)** FM.7 (= fringed concentric semicircles converted into birds in frieze walking left):

4. **Quirk.** FM.48. Type 5: FM.382:

5. **Running Spiral.** FM.46. Type 59. Combined with black "rosette ornament"(FM.17: ?): FM.1047.

Necks and mouths are painted inside and out except for four specimens, the mouth of which is decorated with several designs (FM.7 with double row of dots; FM.200 with zig-zag, FM.61. Type 13; FM.368 with strokes; FM.1048 with groups of strokes) Fig.4: a-d.

All four handles of most jars are monochrome (FM.1,5,8, 8b,132,133,136,135,269,270,271,273,549,a/a741, a/a746,1074, 633,770,1047,945,923), or they bear a simple wide brush band along the top (FM.274), or they are horizontally striped (FM.368,382,1048). Four examples (FM.2,9,7,200) have only their upper pair of handles painted with horizontal bars, the lower handles usually painted solid black or red.

**COMMENTARY.**

Nothing exactly similar in Furumark's Mycenaean pottery. The shape is something like his later type 58 (MP.p.36.fig.8 IIIC:1-2) except that ours have four handles instead of two. The individuality of shape may be due to a local custom with regard to grave furniture. The examples of similar pots from other areas are less well documented.2

---


2. Cf. W. Taylour. MPI.75 and notes.
and there seems particular doubt about the example from Tragana quoted by Vermeule.\(^1\) So I am inclined to share the view of Desborough\(^2\) that the reported pots of this kind from outside Achaea are far less numerous – two from Thebes,\(^3\) one from Kephallenia,\(^4\) one from Phokis,\(^5\) one from Crete,\(^6\) one from Korakou\(^7\) and some from Athens\(^8\) (Stais collection) – against thirty-five from Achaea itself, and this, together with certain peculiarities of clay and paint, might lead us to assume that this shape – about 4 per cent of the whole – must be regarded as a local product of a trend which is known from Middle Helladic\(^9\) and reappears in the Submycenaean\(^10\).

\(^1\) AJA (1960) 5f. no.15. I was unable to find such a jar (i.e. four-handled) in AE (1914) 108 (= two-handled jar with nipples on shoulder-zone only).


\(^3\) AE (1910) p.231-2. figs. 22, 23.

\(^4\) AE (1932). Lakkithra (Tomb Δ ) pl.10.no.150.

\(^5\) Lerat, Locriens, pl.52.

\(^6\) Mon. Ant. XIV (1904) 644, fig.110 (Phaistos).

\(^7\) Korakou p.68. fig. 98 (smaller and with different neck).

\(^8\) AE (1910) 231-2, notes 2,3,4 (National Museum at Athens).

\(^9\) One large four-handled jar (PM.1044) from Drakotrypa (Katarraktis) should be considered as a M.H.'ancestor' of this L.H. shape. Cf. (FAE, 1958, p.173, pl.134a) also Frosymna, figs. 210 nos.380,381; 195 no.499; 185 no. 1048; A. Del t , 11(915) 266, fig.33 (Thermon).

\(^10\) Cf. Styreni us: Submycenaean Studies, p.126.
and Protogeometric periods.¹ This is at best a strong probability, heightened by the fact that the patterns are mostly typical of the Achaean decorative scheme (e.g., isolated concentric semicircles (fringed)).

As regards the chronology of these vases, both shape and decoration might well be used as probable criteria of date. First, according to the general tendency² during the late Helladic period, jars of globular shape (Fig.10) seem to be of earlier date than those of biconical or globular-conical, or ovoid or baggy outline. Rope-twisted handles may be also indicative of a late (IIIC:1 L-SM?) date.³ Secondly the progressive darkening⁴ of the body of these jars can be used as a possible criterion for the dating of these pots. So examples painted all over black (PM.132,135) seem to belong to the latest phase of the LHIIIC⁵ or even to the Submyc.⁶ period, while those whose decoration consists simply

1. Kerameikos no. 586 (Kerameikos I. pl.45): Desborough PP. pl.30 (Kameiros on Rhodes).
2. Cf. MP. p.108.
3. Rope-twisted handles occur mainly in Protogeometric and Geometric times (Cf. Desborough PP. 276. note 1; Coldstream GGP.17,95,121,199), but some isolated Bronze Age examples are known from several sites, see above, p.33 note 1.
4. First by making the bands wider and denser, then by glazing the whole lower body in solid black or red. Especially the examples which are painted all over with black paint may foreshadow the use of total black on the Protogeometric pottery.
5. Cf. MP.428.
of stripes or of stripes and reserved decorated shoulder zone, seem to be earlier in date.

The type of decoration may be finally used as another criterion for the chronology of these jars. With a few exceptions where elaborate designs and attempts at innovations with a happy result (e.g. PM.7) occur, the decoration of these vases, as shown above, is generally coarse and simple, consisting of triangles, semicircles, zig-zags, chevrons zones and spirals. These elements are characteristic of the LH.IIIC: LEFT period, to which most of these Achaean jars might be assigned. In any case, my opinion is that none of these is earlier than LH.IIIC.2.

2. Two-Handled Storage Jars (Figs. 5-6; Pls.47-48).

About eleven examples have been found in Central and Western Achaia, most of them coming from the L.H. Cemeteries at Ano Sychaina, Klauss and Chalandritsa, excavated by Kyparissess. This type of vase is again absent from the region of Aigion.

A little more than half of them (eight: PM.11,12,13,134, 201, 202, 367, a/a 744) are of a fair size, averaging about 0.35m. in height. All the others (three: PM.137, 203, 272) are smaller, the biggest of them hardly reaching the height of 0.295m. (PM.272).

1. Cf. MP.574.
2. Since the shape occurs in MH. times (see above p.144 note 9) but is absent from LH I - III B., the LHIIIC jar must be considered as a revival, not a survival of it.
The fabric of these jars is essentially similar to that of the four-handled jars, but the surface of at least one vase (PM.134) is not well smoothed.

They may be classed, according to their shape, in three groups:

1. Biconical (Fig.5a). The majority of these vases belong here (eight specimens: PM.11,12,13,134,202, 203,272,367).

2. Globular-conical (Fig.5b). This shape is represented by one example only (PM.201).

3. Ovoid (Fig.5c) PM.137 is the only example assignable to this group. Finally a/a 744 is not illustrated, so we cannot assign it to any of the above three groups with certainty.

Although the shape of these vases is similar to that of the four-handled jars, it may be said that in contrast to many such vases with rope-twisted handles, none of the two-handled jars has handles of this kind. The paint is usually of red-brown (PM.137,201,202,203,272) or black (PM.11,13,a/a 744) or clear red (PM.12) colour.

In their choice of motives and of the versions employed the decoration of the two-handled jars has much in common with the four-handled jars, except that none of the former shape has its belly decorated.

Three main varieties of these pots can be distinguished, according to their overall decorative scheme:
FIG 5 Two-handed storage jars, shapes. (SCALE NOT UNIFORM)
1. Painted all over solid black. One example only: PM.134.

2. Neck and body painted over, with reserved decorated shoulder zone: Five examples: PM.11,13,201,367,a/a 744.

3. Neck usually painted solid, (the only exception PM.137) body decorated with groups of bands with reserved shoulder zone (PM.12,137,202,203, 272).

The decoration of the shoulder zone consists of the following motifs:

**Multiple Stem Pattern.** FM.19 (Fig.6:2). This pattern (new variety of type 64) connected with parallel chevrons (FM.58:22) is used in the shoulder zone of one pot: PM.12.

**Isolated Semicircles.** FM.43 (Fig.6:3,8) Fringed or dotted concentric semicircles (variety of type n) occur in the shoulder zone of PM.13 and 367. Type j is found in the shoulder zone of PM.201 combined with simple triangle pattern.

**Isolated Spiral.** FM.52 (Fig.6:1). Variety of type 1 (= fringed) is used in the shoulder zone of only one jar (PM.11). The pattern is symmetrically and well executed.

**Wavy line.** FM.53 (Fig.6:5,6). This pattern occurs twice in its horizontal versions (type 22 in PM.272 and the simple type 18-19 in PM.203) and once in its vertical version (= Type 38) used as a vertical border of the panelled pattern in the shoulder zone of PM.137.
Triangle. FM. 61A. (Fig.6:3). Two different types of this pattern occur in the shoulder zone of the same jar (FM. 201); the usual type 5 is found in the warts' zone combined with isolated semicircles, while another unusual type (not illustrated by Furumark) occurs in the lower part of the shoulder zone, among the group of thin bands covering that part of the pot.

Foliate band. FM. 64 (Fig.6:4). This pattern (type 21) occurs only once, in the shoulder zone of FM. 202 and it is not well drawn.

Panelled Pattern. FM. 75 (Fig.6:7) The shoulder zone of FM. 137 has an unusual type of this pattern, not illustrated by Furumark: central panel filled with concentric arcs, accessory vertical simple or double wavy line, on the one side; on the other side of the pot: central panel filled with wavy lines, accessory vertical double wavy line and dots.

The handles and warts of almost all the pots are painted solid, the only exceptions being FM. 137 the handles of which bear a simple brush-band along the top-side and with its warts partially painted (only their top).

The rims of all vases, except for FM. 137 and 201, are generally painted solid. The rims of FM. 137 and 201 are painted with groups of strokes (the former) or with a continuous row of strokes (the latter).
FIG 6. Two-handled storage jars decorative patterns.
The shape of all these vases is exactly similar to that of the four-handled jars, except that they have usually two warts of the same kind set opposite each other on shoulder of jars instead of the two upper handles of the preceding shape. These warts might well be explained either as a decorative element or, as Vermeule says, as a reminiscence of the upper pair of handles.

It is one of the two most distinctive Achaean shapes - the other being the four-handled jars - unknown also to Furumark (it comes close to his late type 58). Although less common in Achaea than the preceding shape - about 1.3 per cent of the whole - it is certainly uncommon - but not unknown - elsewhere in Greece.

---

1. Cf. fig. la,d,e.

2. PM.201 is exceptional in having four warts (i.e. two on either side of its shoulder zone).

3. AJA. 64 (1960) 7f., and MP, p.425.

4. Cf. Prosymna (from a L.H. house) fig.16 no.1213; AE (1932) pl.9, no.144. (Lakkithra, Tomb A, Kephallenia); BSA. XXV, pl.Xd,e,f (from east basement at Mycenae); Palace of Nestor I, figs.329,373, nos. 818, 1141, 467 (= similar except that they have a flat base); BMA: 1023 (from Kalyrones); PAB (1955) pp.122f. (from a tholos tomb excavated at Pteleon-South Thessaly: very similar to Achaean examples, having one wart on either side of its shoulder); Perati B, Colour Pl. 1. no. 590; Deiras, p.150, pl.XCI, no.1; BSA (1947) p.47, pl.13:1 (Porto Rafti); Knossos (Ayios Ioannis); BSA (1968) 211,pl.53a,b (S.K.). Knossos (Upper Gypsades); BSA (1958-9) 247, pl.56c,e; 57a; Elis, A.Delt. Chr. (1964) pl.202b, Asine, T.I:5. fig.260:8; T.I:7. fig.268:6; T.I:3. fig.233:3. The Achaean examples have been overlooked by Bouzek (Eirene VIII, 104-110, fig.4, Preha, 1970), who feels that warts on these vases may betray a northern influence (p.107, note 59). But without denying it an Aegean origin (Rhodes) cannot be excluded.
Judging from the shape and decoration, it seems that the ovoid shape (PM.137) is earlier (LH.IIIC:le) than those belonging to biconical or globular-conical groups (LH.IIIC:11-SM). Again pots belonging to the first group (Fig.5a) and decorated with groups of stripes and reserved shoulder zone seem to be earlier in date than those whose the greater part of body (lower) is painted solid black or red-brown.

What seems to be the latest pot of all is PM.134, whose fabric is of inferior quality and rather gritty and its paint solid black.

As in the case of the four-handled jars, we can say that all these vases belong solely to the LH.IIIC-SM periods and together with the preceding shape and the duck-askoi (Fig.46-7) are found more commonly in Achaea¹ than elsewhere.


The most common shape among the Achaean closed vases is the ubiquitous stirrup-jar. It has been found especially in tombs and less frequently in settlements (e.g. Teichos Dymaion yielded only a few whole pots² and fragments of others).

Achaea produced 359 examples most of which have been numbered and seem to comprise over one third of the total number of Achaean vases. Many more incomplete are housed in

2. Only ten (10) examples.
the store-room of the Patras Museum. This shape appears with numerous variations in size, proportions, details of shape of base, body, spout, neck, disc and handles.

To begin with, it should be noticed that the vases vary considerably in size from about 4 cms. (EE. 697) to 37 cms. (PM. 546) high, and between these two extremes there are many intermediate types. Classification by shape is not always definitive and the following description deals successively with the chief varieties of the Achaean stirrup-jars, that we have ventured to differentiate.

1. Globular (Fig. 7-8.A).
2. Squat (Fig. 8-9.B).
3. Conical (Fig. 9.C).
4. Hriform (Fig. 9.D).
5. Cylindrical (Fig. 9.E).
6. Big Domestic (Fig. 9.G.)
7. Unclassified (not illustrated).

1. Globular (Fig. 7-8; la, b, c, d,) The most frequent type (60. 7%). The following sub-varieties can be distinguished:
   a. Strictly Globular (F.S.174 and 176-177.) It comprises 55 examples, which have a curved profile with its angle midway between top and base (e.g. PM. 479, 278, 58, 109, 131).
   b. Depressed Globular (F.S.171 and 173)3. Here belong 34

1. Stubbings's type A.
2. Ibid. Type C.
specimens of smaller proportions to the preceding sub-variety (e.g. PM.403, Berlin, no. 30757).

c. **Perked-up Globular (P.S.175)** This is the most common type, comprising 93 pots of similar proportions to those belonging to the sub-variety (a). These pots have a more or less angular profile with an almost level shoulder and their maximum diameter just below the shoulder (e.g. PM.276).

d. **Globular Biconical (P.S.176 and 177)**. It consists of 35 vases mostly of similar proportions to sub-varieties (a) and (c) and with a rather biconical profile (e.g. PM.101, 674).

2. **Squat** (Fig. 8-9B). The second type is less common and consists of 18 specimens only, (5.3%). They correspond to the Furumark's Types 178-181 and have a squat globular (e.g. PM.238) or squat globular-biconical (PM.75, BE.641) or perked-up squat globular profile (e.g. A.M.6, BE.650). Their diameter is almost always greater than height.

3. **Conical** (Fig. 9C). To this type can be assigned only 9 examples (2.2%), corresponding to the Furumark's Type 182 (=high). They have a conical profile with rounded shoulder and almost flat top (e.g. PM. 130).

1. Stubbings's Types B, C; Iakovides's "conical" type (Perati B, p.154, fig.25 A).

2. Here may also be assigned the unique stirrup jar PM.615 with a high conical base.

3. Stubbings's Type D.

4. Ibid. Type G.
4. Piriform (Fig. 9D): The examples assignable to this type are almost equal in number to those of the preceding type (8 examples). They have an "advanced" (e.g., AM.7) or heavy piriform profile (e.g., BE.414, PM.115) and correspond to the Purumark's types 166 and 167.

5. Cylindrical (Fig. 9E). Only three vases of this type have been found in Achaea so far (0.8%). Two of them come from Aigion (BE.486; α/α 816) and the third one comes from the rich cemetery of Klaus (PM.151). They belong roughly to Purumark's type 184 and except for BE.486², the other two are well described by Vermeule³ and Aström.⁴

6. Big Domestic (Fig. 9G). The only example (PM.625) belonging to this type is said to come from Patras. It is of ovoid profile and corresponds to Purumark's type 164.

---

1. Stubbings, Type H. Stubbings says (BSA, 1947, pp.20, 56) that this is a very rare type elsewhere in Greece, though he mentions one example from Mycenae (Athens, N.M. 2253), three or four from the Old Acropolis excavations (B. Graef. Die Antiken vasen von der Akropolis zu Athen. Heft. 1. nos. 106-8) and numerous fragments of such stirrup-jars from the Mycenaean well on the Acropolis (O. Broneer, Hesperia VIII, 1939, p.390-1, fig. 72 a-c). For this shape, see also FLNS, shape no. 51, pls. XLIV: VII no. 40: XVIII no. 130: and Prosymna fig. 357 no. 772.

2. It comes from the excavations of Mr. Mastrokostas (1967) and still remains unpublished. Cf. Ialysos, Annuario VI-VII. p.148, fig. 68 (Tomb XXV).

3. AJA. 64 (1960) 9f: pl. 2:11.

Unclassified. 103 more stirrup-jars are described in the Catalogue of Patras Museum, but I was unable to find them, so it is difficult to assign these to any of the above types with certainty.

As regards the spouts of the Achaean stirrup-jars, it may be noted that all the types, with the exception of Type G and a few examples belonging to Types A (e.g. PM.307), D (e.g. AM.7) and E (e.g. PM.151), have relatively narrow, tubular spouts set vertically or leaning a little outwards (e.g. PM.100) or inwards (e.g. PM.276) with more or less splayed, sometimes ring-shaped (e.g. BE.387) lips. In two examples (PM.126 and AM.5) the potter omitted to form the lip at all. In some other examples the mouth of the spout is splayed out so that the lip touches (e.g. PM.58) or even slightly overlaps (e.g. PM.151, BE.414) the edge of the disc. The big domestic stirrup-jar (PM.625) has a short and wide slightly oblique vertical spout, concave and provided with a sloping lip. The spouts are usually placed at the level of the handle bases and in most examples the top of spout is approximately level with that of disc, or a little lower (e.g. 101), rarely higher (e.g. PM.80) than the disc.

The false neck is usually rather narrow and topped by a flat (e.g. PM.56) or concave (e.g. PM.58) or convex (e.g. PM.151) disc. The disc of the later specimens is very

2. But there occur some examples with short and wide false neck (e.g. PM.54).
broad either flat and thin (e.g. PM.57) or convex with a small elevation in the centre (e.g. PM.396) or more frequently coned (e.g. PM.288). Moreover there occur a few pots which have a flat disc with a sharp coned centre (e.g. PM.223)\(^1\). A ledge moulding at base of false neck occurs only in two pots (PM.625. and Bérlin. no. 30757).

The handles of most vases are of ribbon type, rarely round\(^2\) or ridged.\(^3\). One example is exceptional in having rope-twisted handles (PM.275), a type of handle more common in the four-handled Achaean storage jars.\(^4\). The small pots (mainly those of types 1:b and 2) usually have handles and spouts higher in proportion to the body (e.g. PM.241) than do larger examples (e.g. PM.58). One stirrup-jar found at Teichos Dymaion (PM.898) is unique: apart from the usual two vertical ribbon handles, it has two more round loop-handles, placed horizontally at greatest diameter of body and opposite each other (Pl.93.f) This pot is a very big one (over 0.30 cms. high) and very probably these loop-handles were used to facilitate the lifting and carrying of it. In general the handles are vertical (e.g. PM.394) but in some examples of all types (e.g. PM.151) they incline either slightly towards the top or have a pronounced outward slant (e.g. PM.131).

---

1. Cf. G.G.Styrenius, Op.Ath.IV (1963) pl.II etc. (Salamis) and Kerameikos I, pl.5,6 etc.
2. PM. nos: 82,92,97,100,220,301,428,403,674,453,647,746,898.
3. PM.376,547,546.
The bases are, as a rule, low ringed (139 examples) or conical (62 examples), but there also occur bases of disc-shaped (16 examples) or raised (10 examples) type. Splaying and torus disc types are rare, each of them represented by three examples, while the flat type is represented by only two examples (a/a.816, bE.486).

The cylindrical pot (PM.151) is mounted on three grooved struts. Generally speaking, the bases of the latest Achaean stirrup-jars (PS.175-177) are relatively high, either ringed or conical or disc-shaped) and seem to be more sharply differentiated from the body of the vessel than is usually the case on earlier pots (e.g. PM.238).

With only a few exceptions with flat or slightly concave under side (mainly those with raised base e.g. PM.103) the bases of all the stirrup-jars are hollowed and sometimes have a slight central swelling underneath (e.g. PM.212). Lastly, one vase (PM.625) calls for special mention here, in having a small hole pierced in the base and, as far as I know, only a single Achaean stirrup-jar has an air-hole pierced in the shoulder beside the handles. (PM.542).

1. PM.615 has a unique and relatively low stemmed base (Pl.87.b).
3. This pot has an unusual very large base (Pl.54.f).
4. Cf. BSA. XLII, p.56. fig. 25 A,B,C; pl.18:1,2,3,4 (= ritual vessels); PM.Cat.I.c.158 (Rhodes); Athens N.M. 3566 (Namplia); Prosymna, fig. 290, no.702.
5. The same occurs in Kephallenia, A.E.1933, p.88. (Only one from Metaxata, no. 1479). Cf. BSA.XLII,p.21; Bronner, Fountain, p.389; Deiras, p.144-145 (phase finale du Mycénien IIIIIC); Perati B. p.156 and note 1, where IakoYides does not agree with Kühler (Kerameikos I, p.53) and S. Wide (A.M.35,1910, p.32) that these air-holes make their first appearance in Submyc. times. IakoYides is presumably right on his evidence.
Fig. 7: Sturrup-jars, shapes
(Scale not uniform)
FIG 8. Stirrup-jars shapes (continued)
(Scale not uniform)
FIG 9 Stirrup-jars, shapes (continued)

(Scale not uniform)
Certain limited observations may be made also here, concerning the technique of these vases: the clay is mostly of buff (e.g. PM.459) or red-buff (e.g. PM.211) very rarely of dark-grey (PM.415 and 723) colour and the paint either brown (e.g. PM.284) or red-black (e.g. PM.151) or even matt black (e.g. PM.459) resembles in many cases the paint of Attic Protogeometric pottery.¹

Decoration. Apart from a few vases (e.g. A.M.52), where the decoration is hasty, a rather deliberate² execution and arrangement of the stripes and motives is observable in the painting of almost all stirrup-jars. In a few more examples the decoration is too worn to see paint and designs (PM.479, 123, 128, 647, 614, 130, 121, 241, 124, BE.17, 18).

Broadly speaking, the main decoration is usually limited to the shoulder³ of these jars, the decorative patterns being similar to those found elsewhere in pre-historic Greece, especially to those which occurred in Kephallenian pots. The lower part of the body is either painted solid or covered with stripes, which are sometimes carried on right down to the foot. Spouts, top-disc of false necks, handles and very rarely, bases of stirrup-vases are also decorated, mostly with simple patterns.

Thus, according to their decorative system, the Achaean stirrup-jars fall into the following groups:-

¹ See above, page 158 note 1.
² The painting is hasty in a few pots, e.g. A.M.52, BE.483.
³ Very rarely the belly of these vases is decorated (only in 29 examples).
a. Body covered all over with smeary red-brown (PM.308, 723) or glossy (PM.125, 230) brown or red-brown paint.

b. Body painted solid either from lower handle attachments to base (PM.102, 95, 210, 223, 275, 277, 278, 280, 302, 74, B.3, BE.477, 377, 84, 670, 217) or from mid-shoulder to base (PM.221, 222, 231, 478, BE.389), or from the angle of the profile (PM.56, 206, 101, BE.479) or a little lower than this (BE.390, PM.111, 88, 405, 546, 276, 79) - Reserved zone on the shoulder covered with several designs and thin or wide (e.g. PM.111) stripes.

c. Body covered with equally-spaced stripes (90 examples) or with wide stripes which are alternately filled with very fine stripes (26 examples) or left blank (24 examples) - Reserved decorated zone on shoulder.

d. Body covered with groups of stripes. - Reserved decorated zone on shoulder: (59 examples).

e. Forty three specimens bear decoration either on their belly (PM.37, 310, 120, 151, 542, 651, 794, AM.7, 4, 6, BE.548, 486, 446, 480, 483) or just above the angle of the profile (PM.59, 56, 81, 275, 312, 376, 379, 459, 79, 879, 946, Berlin 30758, 2. This is rather an unusual feature in the pottery of L.H. times. Cf. parallels from: a)Lalysos, Annuario VI-VII (1923-24)192f; b) Kos-Langadha, ibid.(1965-66)232f; fig.249; c) Zephyr-Papoure, P.T.,p.90,pl.XC,fig.100 no.99l,99m. d)Argos.EGH 77(1953)63f;no.6, fig.5,2; e) Attica (Vravron) EBA XLII,p.21,pl.3.2; g) Attica, Kerameikos I,p.56,pl.9 (=Sub-Myc.); h) Perati.B.p.156;pl.41b.(Tomb 145, no.1052).

2. A narrow reserved decorated zone filled with wavy lines occurs below the handles of this jar.(Pl.71c).

3. PM.542 has only the lower body decorated with such stripes, the upper part painted solid black.
BE,440,484), or just below the shoulder band in one
(PM.97, 211, 305, 307, 317, 376; a/a 758. BE.417, 675, 415, 439,
Berlin 30756), or two (PM.615, a/a 815) encircling zones (Figs.24, 25). Pictorial motives are entirely unknown.

The spouts of these vases have usually rings painted around their lips (150 examples), while in many pots (21 examples) the paint is worn off and this ring is not visible.

Some other pots have only the inner surface of the lip painted with a more or less wide ring (6 specimens: PM.55,56, 283,292, a/a 744, 381), and in the case of nine (9) (PM.209, 214,212,225,223,227,294,115,63) other stirrup-jars the lip of the spout has been left undecorated by the potter. Quite exceptionally (9 vases only) we find additional decorative rings in the middle of the spout (PM.305,314,312,114,AM.4), or just above its base (PM.52,545) or high up near the ring of the lip (PM.86). One example (PM.92) has the spout hastily painted in its greater part, and another one from Aigion has it almost covered with paint (a/a 815).

The discs of the false necks (Fig.10), sometimes monochrome (7 examples: PM.102, Berlin 30758, (brown); 218 (red-brown); 217 (brown); 84 (black); 874 (brown); AM.4 (black) (Fig.10:1)) are mostly decorated with concentric circles.

1. Cf. LMTS.p.2 "perhaps a late development?"
2. Compare with those found in Cyprus and Perati.
3. One pot (PM.377) is almost monochrome, except for a very narrow reserved zone around its inner coned centre, which is left blank.
emphasizing the perimeter and the centre (102 examples) or with spirals\(^1\) (Fig.10:12-19), (84 vases), or even with a combination of both (Fig.10:20-22) (4 examples: PM.459, 545, AM.53; BE.390). There occur also a few pots (PM.56,87, 151,300,209,393) belonging mainly to the late Helladic IIIC period the top-disc of which bears more elaborate patterns\(^2\) (Fig.10:23-28). In some other examples the false neck is missing (17 specimens) or the paint of the disc is too worn to see design (45 vases).

Usually the earlier pots (globular and squat) have their top discs decorated with the simpler and sometimes the hastier types of concentric circles and spiral patterns\(^3\) (e.g. PM.58,82) but, as the Late Helladic period advances, they become more elaborate and carefully executed, although they remain handdrawn throughout the whole period. Such elaborate and peculiar patterns are almost exclusively found in the top discs of pots belonging to the LHIIIC period.

---

2. Ibid. p.370, mot. 52, and compare with Palace of Nestor I pls. 393, 394; Perati B. p.157, fig. 26:1-6.
3. The disc of PM.87 is decorated with cross in its innermost circle, somewhat similarly to that illustrated in Palace of Nestor II, pl. 393. no.682.
4. The only exception being PM.300 of early LH.IIIB date.
The handles (Fig. 11). The decoration of handles follows, in general, the same principles applied to the discs of the false necks in the sequence from monochrome to decorated. So, with the exception of a few pots (20 examples) with monochrome handles (Fig. 11:1) and of a few more (21 examples) which are monochrome either with a small triangle (14 pots, Fig. 11:2) or two triangles (2 examples PM.82,234. Fig. 11:3) reserved on top, or painted monochrome with a small part of their back-side left unpainted (Fig. 11:4-5: 5 specimens: PM.54, 211, 317, 14; a/a 758), the handles of the Achaean stirrup-jars are predominantly decorated with horizontal bars or stripes (89 pots; Fig. 11:11-12). To this variety may be assigned some other vases which have their handles decorated with horizontal stripes framed by a thin (PM.545, Fig. 11:14) or wide (PM.546, Fig. 11:13) edging line. One pot (PM.376) has it ridged handles painted with such stripes (Fig. 11:15), while PM.388 has its handles decorated with horizontal stripes hatched by a vertical line and framed by a rather wide edging line (Fig. 11:16). An unusual and rather crude variety of this pattern occurs in the handles of PM.109 (Fig. 11:10).

Handles decorated with edging line, while their central part is left blank (Fig. 11:6-7) are less common (only 19 specimens). The lower ends of the edging line usually terminate down to the mid-shoulder (Fig. 11:9, e.g.PM.56).

Single or double mostly straight wide lines, running down the central part of the handle (Fig. 11:29,8) are found in five examples only (Single: PM.719; BE.480; Double: PM.99,126,

1. Two pots (PM.99,126) have their handles covered with badly executed designs, which seem to be double vertical lines.
More elaborate designs, such as wavy lines, diagonal cross, etc., are very rare indeed. Thus, wavy line, either single or double, running down the middle, with (e.g. PM.52) or without (e.g. PM.90) edging line, occur in only nine examples (Single: PM.52, 87, 276, 237, 84, 90, 459; BE.486; Double: PM.275). (Fig.11:21-27).

Simple diagonal cross\(^1\) (Fig.11:17-18) is found in five pots (PM.221, 302, 745, BE.387, 389), while the same pattern ending in a loop\(^2\) occurs only in two examples (PM.101, 303).

Parallel chevrons\(^3\) (Fig.11:20) are used in four cases (PM.81, 280, 415, Berlin, no. 30758) while net pattern, not carefully executed, is found in the handles of the unique stirrup-jar, PM.151. (Fig.11:19).

In general both handles of the Achaean stirrup-jars are decorated with the same design, the only exceptions being PM.88 and 547, where each handle has its own pattern: in PM.88 coexist the varieties 3 and 6 (Fig.11:28), while in PM.547, the varieties 4 and 15 (Fig.11:30).

They range chronologically from LH.IIIA to LH.IIIC:ie (monochrome)\(^4\) and down to the last phase of LH.IIIC\(^5\).

1. MP.p.377, fig.66.c.
2. Ibid. Fig.66.d.
4. Ibid. p. 377, fig. 66.a; Deiras. p.183 (IIIA:2); Mycenae, ESA.48 (1953) pl.7a,8b; 51\('.1956) pl.29d; FAE (1958) pl.124a; (1961) pl.124b,122a; Palace of Nestor I. pl.395, nos. 696, 394, nos. 675, 614, 696, 615, 697, 699, 809. (IIIB 1-2); EFA XLII.I.15; Perati B.fig.27:1 (IIIC:le).
5. Mainly those decorated with horizontal stripes (Fig.11:10-16).
and Submycenaean times\(^1\) (horizontal stripes and vertical wavy lines.

**Encircling Loop.** Most of the Achaean stirrup jars have two separate rings around the spout and false neck\(^2\) (151 examples), while a single loop encircling the base of false neck and spout is found in fourteen examples only (PM.58, 794,459; AM.3,6,53; BE.480,415,PM.86,669,419,795: Berlin: nos. 30762, 30756).

In two vases both separate rings and encircling loop coexist (PM.52,275,pls. 53,71) while a peculiar feature occurs in PM.305: a single fringed loop encircles neck and spout (Pl.60.b).

There are also about sixty more examples, where the paint of the bases of neck and spout is worn off.

It seems, therefore, that the Achaean potters, in so far as the decoration of these parts of stirrup-jars is concerned, do not always follow the general principles applied to the same pots found elsewhere in Greece\(^3\) in all the decorative details.

---

2. The ring around the false neck of AM.7 is too large, so that its perimeter reaches the ring of the base of spout.
3. See Perati B. pp.159-160, notes 5-9 and 1-3 for the typological and chronological evolution of the loop, and where all the relative information and references are given.
FIG 11 Handles of the sturred jars

FIG 10 Tor-discs of false necks
The Shoulder.

As has been already said, the main decoration of the Achaean stirrup-jars, is almost always restricted to the shoulder zone, which is usually framed by a circular band of varying width and divided by the handles and the spout into one large and two small panels.

Only four such vases have their shoulder left undecorated (PM.428,625,898, BE.431), while that of PM.542 is painted solid black, and that of PM.305 has its two quadrants left undecorated.

All the others bear rich decoration, mainly consisting of the same pattern repeated either without variations both in the quadrants between handles and spout and on the half-shoulder behind them (101 examples - e.g. PM.794) or, sometimes, with some additional or varied ornaments in the half-shoulder (50 examples, - e.g. PM.394) In some other instances (32 pots) the ornament of the half-shoulder is distinctly different from that found in the two quadrants (e.g. PM.104) while in five other examples (PM.151,209,276, BE.548,477) the ornaments differ not only on the half-shoulder and the two quadrants but even from one panel to the other.

1. See above, page 163.
2. The surface of the shoulder of some pots (PM.115,313,233, 300, 316,403, 404, AM.3,7; BE.430) is treated as a single, undivided field.
3. PM.397 has slightly varied patterns in its two quadrants.
4. This is a common feature in Cyprus, see Levant p.19, note 2.
Finally, the surface of the half-shoulder of two other pots is not treated as a single, undivided field, but it is covered with two (PM.379) or three (BE.391) different designs (Figs. 17:w; 22:p).

Although the decoration is not very varied, as regards the choice of motifs—concentric semicircles and cross-hatched triangles predominate—the way their elements were drawn appears to have several minor variations, so that vases with identical shoulder patterns are extremely rare, occurring usually in groups of two or three, rarely in groups of a greater number (five or eight at the most) and then with simple designs only.

In particular the following groups occur:

1. With simple concentric semicircles of different types:
   a. PM. 53 and 89 (Figs. 68, 82)
   b. PM. 68, 75 and 456 (Figs. 65, 89, 87).
   c. PM. 61, 87 and 478 (Figs. 64, 67, 56)
   d. PM. 67, 278, 280, 405 (Figs. 65, 55, 86, 77)

2. With connected simple concentric semicircles.
   PM.389, 390 and 906 (Figs. 80, 75)

3. With dotted concentric semicircles.
   PM. 99 (?) and 277 (Figs. 69, 72)

4. With fringed concentric semicircles.
   PM.284, 65, 227, 78, 310, 395, 281, 547 (Figs. 72, 64, 71, 66, 74, 76, 86, 56)

1. As in some other regions of Mycenaean Greece, e.g. Argolid, Attica, etc.
5. With connected fringed concentric semicircles.
   PM. 59, 292, 63, 672. (Pis. 64, 73; 79)

6. With fringed triangles.
   PM. 90 and 1028 (Pis. 68, 80)

7. With a combination of fringed concentric semicircles and fringed triangles.
   PM. 393, 394. (Pis. 75, 76)

8. With successive horizontal thin wavy lines.
   PM. 233 and 316 (Pl. 49)

9. With groups of vertical lines increasing in height and sea-anemone pattern.
   PM. 54 and 211 (Pis. 82, 70)

10. With net pattern.
    PM. 294 and a/a 783 (pls. 63, 80)

11. With semicircular multiple stem pattern.
    PM. 256, BE. 385 (Pl. 89)

12. With a single row of vertical dashes.
    PM. 235, 403, 641, 404, a/a 782.
    (Pis. 59, 60, 56, 50, 89)

Shoulder Zone Patterns:

1. **Parallel Dashes, PM** (Fig. 12). This pattern as sole decoration placed in a single horizontal row encircling the shoulder, is used in six pots (PM. 428, 403, 404, 235, 641 a/a 782), while another vase (PM. 798) has its shoulder decorated with the same design but in double horizontal row. These parallel strokes are not illustrated as a separate pattern by Furumark,
but as has been rightly observed,¹ they might well be a last survival in the evolution of the Mycenaean III Flower.² Stirrup jars decorated with the same pattern are recorded from other Mycenaean sites.³

PM.124 and 963 have their shoulder decorated with vertical columns of parallel strokes radiated from the base of the false neck.⁴ (Fig. 12:1c; Pl.59d).

2. Parallel Lines. PM? (Fig.12) At least seven stirrup jars have their shoulder zone decorated with this peculiar pattern; (PM.54,211,207.,746,210,304,BE.480). Two main varieties can be distinguished: 1) Groups of parallel lines resting on the shoulder band and increasing in height (PM.54,211,207,746, 210)(Fig.12:2a,b) and 2) thin parallel lines of the same height, resting either on the shoulder band (BE.480 - Fig.12:2f) or on a straight horizontal band (PM.304) which is drawn midway in the quadrants (Fig.12:2e).

As an all-over decoration of the shoulder, this pattern occurs only once (BE.480). In three other specimens it is found combined with sea anemone (Type 4, PM.54,211) or with a peculiar type of vertical Parallel Chevrons (PM.210)(Fig.12; 2a,b,d, Pls. 70b,d; 82c), while in three other pots (PM.207, 304,746) it is used only in the two quadrants, the semicircular field covered with different designs (Pl.73e. 83d. 80a).

2. Cf. ME. p.293, fig. 45 "Handle zone examples" no. 143.
3. Palace of Nestor I, pl. 394, no.699; Perati B. fig.28:865.
4. Perati B. figs.37;350; 7:2a (IIIB2).
This decorative pattern, perhaps made with a multiple brush, seems to be very unusual and peculiar in Achaea and unknown elsewhere in Greece.

3. *Papyrus FM 11* (Fig.12). This pattern occurs only once (Type 15) in the shoulder of one pot from Aigion (BE.387).

4. *Flower FM. 18* (Fig.12-13). It appears on ten examples (Pm.319,426,794,795,796,797, AM.82, BE.484.485. *PAB* (1965) Pl.180 (= sherd)). The types used on the Achaean stirrup jars (the main shape with this pattern) are shown in Fig.12,13. They are all well and carefully drawn and belong basically to the two types illustrated by Furumark as FM.18: 109-132. None of them is distinctly different from those found elsewhere in Greece, the only probable exception being the peculiar type drawn in the shoulder of BE.485.

5. *Multiple Stem. FM.19* (Fig.13). This pattern occurs in the shoulder zone of at least eleven specimens (Pm.58, 318,238,946,455, a/a 743, AM.53, 6,62. BE.385, Berlin no. 30761). It is used either as a single decoration of the shoulder, or combined with other designs (e.g. triangles and concentric semicircles). The following types can be easily

---

1. I owe this observation to Mr. V. Desborough.

2. Cf. *Annuario* (1965-66)p.163, fig.165 (Kos-Langada), no.809; pl.391, nos. 411,412; *BSA* (1947) p.17, figs.4:5 and 5:4; (1966) p.223; fig.1:17b,d,f,g,h (Preh. Cemetery Areas III and IV); (1967) p.151,fig.2:52-213;52-261 (House of the Oil Merchant) and fig.10:1,2,4,5,6,8,15 (West House); *A.Delt.* 20(1965) plan 5:2,3; *Levant.* Pl.XIII, no.15.

3. Cf. Perati B. p.129, fig.15 :2,5,6; Broneer, pp.388,389, figs.69s,70s; *Deiras* pp.169-170,pls: *LXXVII*, 3,9; *LXXXIV*, 7,8; *LXXXVI*, 5,6; *Palace of Nestor I*, pl.394.
distinguished:  

a) Group of arcs used like chevrons, radiating from the centre, with (AM.62, Berlin 30761) or without (PM.238, 946, 58) a circle fill (Fig.13: 5a-d).

b) The group rests on the shoulder band (PM.455, AM.53, BE.385) (Fig.13: 5e, f).

c) The third type occurs once only (AM.6) and seems to be the common PM.19:31 with a fill between the lines similar to that used in PM.43:4 (Fig.13: 5g).

d) Two new varieties, close to Purumark's type 7, are found in two pots (PM.318 and a/a 7432*) (Fig.13: 5h, i).

6. Bivalve Shell FM.25 (Figs.13-14). Four stirrup jars (PM.88, 276, 621, 380) have their shoulder decorated with designs close to types 9-12 of this pattern, which seem to represent an assimilation between the "bivalve shell" and the "elaborate triangle".

7. Sea Anemone, FM.27. (Fig.14). In the shoulder zone of fifteen stirrup jars, various forms of Sea Anemone are used, either being straight forward (PM.232, 314, 388, 401, 402, 419, 101, AM.62 and in a sherd from a stirrup jar found at Teichos Dymaion, MP.p.301, fig.47; BSA (1947) p.17; fig.4:7, 8; (1952), pl.25: nos.460r, 460 H, 4601, 4601A, 485, 518B; Levant Pl.IV, 4, 5 (Cyprus); XVIII, 5 (Egypt); BSA, (1966) p.225; fig.1:9, 10 (Preh. Cemetery); A. Delt (1969) Pl. 73: 33; 34.

1. MP.p.301, fig.47; BSA (1947) p.17; fig.4:7, 8; (1952), pl.25: nos.460r, 460 H, 4601, 4601A, 485, 518B; Levant Pl.IV, 4, 5 (Cyprus); XVIII, 5 (Egypt); BSA, (1966) p.225; fig.1:9, 10 (Preh. Cemetery); A. Delt (1969) Pl. 73: 33; 34.

2. For the decoration Cf. Prosymna II, fig.167: 339.

3. Cf. BSA (1947) p.20, fig. 5:7, 8; (1952) no. 460 B.

4. PAB (1965) pl. 176b.
Berlin. nos. 30759, 30762) or combined with other patterns as a filling ornament (PM.459, 54, 211, 669).

Some types are slightly more elaborate than those used as fills, others are similar. The types given by Furumark¹: FM.27:11, 12, 16, 17, 18, 20, 24, 30, 31, 32, 35, 36) are all found, but there is also a version similar to type 23 but with a dotted centre. (Fig.14:7a).

8. Trefoil rock-work FM.29 (Fig.14). This pattern (Type 16 or 18) occurs only once (BE.432) and is somewhat unusual in Achaean pottery.

9. Circles. FM.41 (Fig.14:9a,b). At least two versions of this pattern occur in the Achaean stirrup jars: a single, continuous row of dots is found in the shoulder of FM.102, (Pl.58:c) while that of BE.430 is covered by double row of dots.

10. Joining Semicircles FM.42 (Figs.14-15). Various versions of this pattern occur in the shoulder zone of nineteen stirrup jars. They are used either as a single decoration of the shoulder (FM.408a,b, BE.4, BE.439, 440, FM.313, 92, a/816), or combined with other different motives such as, concentric semicircles, elaborate triangle etc. (FM.51, 283, 290, 459, 80, 214, 295, 377, a/815), or even as an accessorial design (FM.297, BE.399). They do not correspond

¹ MP. pp. 316: fig.53.
exactly to Furumark's known types: five come close to type 28 but edged on both sides with a fine line (PM.81, BE.4, PM.283, BE.439, a/a 815^2); one (PM.313) is of type 19^3 (= space-filling net). The simplest type 21 is represented by three examples (PM.92, 459, a/a 816^2).

Close to Furumark's type 32 come the designs used on three examples (PM.80, 214, 295) and on the two quadrants of BE.4. Type 23, but drawn upside down, is found in PM.377, while Type 26, again drawn upside down, occurs in the shoulder of BE.440.

This pattern is found on the shoulder of stirrup jars from other sites in Greece. 5.

1. Ibid. pp. 337: fig.57.

2. The shoulder of this pot (Fig.19:15a) is painted with two triangular net patches, which are provided with "pennons" ending in spirals. (Cf. MP. p.339 and 407 and Fur.0.A. (1944) p.198.

3. Cf. BSA (1947) p.16. fig.4:15; (1967) p.172: Fig.10:I7 (?) (West House).

4. But it has straight contours, as AJA 64 (1960) pl.6 M.

5. E.g. Mycenae (West House); Perati B. pp.115-116. (9 examples): fig. 9:g-n, including a discussion of the chronological and typological evolution of the pattern, Deiras, pl.LVI.n° 3. See also Fur. OA.op.cit. p.204. fig. 1.
11. **Isolated Semicircles FM.43** (Figs. 15-19). This pattern is particularly common on the shoulder of Achaean stirrup jars, either in its simple\(^1\) version (over sixty examples) or with the outermost semicircle often being fringed\(^2\) (forty-two examples) or dotted\(^3\) (thirteen examples). It is of some importance that the pattern is not identical in every repetition, the number of concentric semicircles varying from two (e.g. BE.389) to eleven (e.g. FM.283), but usually ranging from 4-7. Sometimes, in the shoulder of one and the same pot several different types of this pattern are used (e.g. FM.721, 100,82).

The types found mostly belong to Furumark's known L.H. types (a-e, g, j, h, n, and 32-35), but some earlier types occur as well (FM.43:4,6,14,17).

In shape they are semicircular (twenty six examples),\(^4\).

---


elongated (fifty eight examples)\(^1\) or pointed (twenty-three examples).\(^2\)

No chronological evolution of types is apparent at Achaea, where several of them are found on the same vase (e.g. semicircular and pointed versions on PM.278, or semicircular and elongated on PM.79, or elongated and pointed on PM.209,379,394).

The suggested pattern: \(^3\) semicircular \(\rightarrow\) elongated \(\rightarrow\) pointed sometimes seems to agree to some extent with the chronology of the Achaean stirrup jars (e.g. PM.279 with elongated semicircles is certainly earlier than PM.478 with pointed ones), but it should not be accepted generally and unreservedly.\(^4^\)

As regards the use of this pattern in the shoulder of Achaean stirrup jars, four main variants may be distinguished:

a) accessoril, in facial composition in the semicircular field\(^5\) (once only: BE.479, Fig.18: l1am): b) as main decoration


\(^2\) 72,73,87,147,277,209,214,288,278,295,379,394,302,423a, 405,546,547,639,478,456,728,721,745.

The centres of almost all types of semicircles are blank, the only exceptions with filled centres being PM.94,114 (both of elongated type).

\(^3\) Fur. OA. (1944) 204.

\(^4\) Compare with the conclusions drawn for the pottery found at Perati (Perati B. 120).

\(^5\) MP. 346. Fig.58:43.
in the same place, usually in a symmetrical arrangement (six examples)\(^1\).\(^c\) as main decoration in quadrant fields, on vases with other designs in the opposite half of the zone (nine examples)\(^2\). and d) as main decoration in the whole shoulder zone (ninety-six examples)\(^3\).

In the last case, the connected types (Cf. also in Cyprus OVA Cyprus I, Pl. 20:9) are sometimes used in the semicircular field (fourteen examples),\(^4\) or the pattern is found in combination with other different motives (eighteen examples),\(^5\) but in most vases the pattern is used as sole decoration of the shoulder (sixty-three examples).

---

1. MB\(^3\)46, fig. 58: 29 (?) (PM. 56, 115, 207, 214, 295, 305).
2. Ibid. fig. 58: 30 (PM. 94, 81, 104, 151, 277, 234, 546, 76, 283).
3. Ibid. fig. 58: 31 (PM. 52, 55, 58, 284, 57, 58, 59, 61, 65, 213, 67, 68, 72, 73, 77, 74, 82, 87, 89, 310, 97, 100, 103, 95, 305, 399, 127, 208, 277, 209, 299 (?), 221, 222, 227, 283, 219, 231, 232, 217, 549, 278, 280, 279, 284, 293, 292, 291, 296, 297, 301, 312, 379, 393, 394, 395, 302, 384, 392, 361, 390, 423a, 405, 413, 418, 84, 281, B.3, 62, 545, 547, 79, 75, 70, 114, B.13, 63 (?), 616, 672, 639, 478, 456, 651, 728, 721, 745, a/a 784, 879, 1130, 1126, AM.4, BE.389, 390, 399, 447, 477, 479, 483).
See IM\(^3\). 8 for the origin of the semicircle motive.
5. PM. 58, 72, 82, 209, 219, 217, 543, 297, 379, 393, 394, 384, 392, 381, 745, 879, BE.389, 399.
Especially worthy of note are some peculiar variants of the pattern not common or unknown elsewhere in Greece. Thus the shoulder of PM.418 is painted with single and simple semicircles, which have their inner part barred with horizontal lines (Fig.18:11 az); PM.100 has its quadrantal fields decorated with single and simple semicircles fringed in their base (Fig.18:11 ax); PM.127 is covered with double elongated semicircles filled with dots (Fig.19:11 ba).

Another small stirrup jar (PM.94) has its two quadrants painted with solid black fringed semicircle (Fig.18: 11 ar); PM.303 has the whole shoulder decorated with groups of three parallel semicircles, which are connected by transverse bars, similar to PM.44:91 (Fig.18: 11 av), while the semicircular field of PM.52 is covered with unusual friezed concentric semicircles (Fig. 17: 11af). Lastly, PM.56, 97, 103 have semicircle groups placed as in Furumark's types d and h but inside an "elaborate triangle" (Figs. 18: 11as; 19: 11bb, bc). On the semicircular field of PM.459 "papyrus" type is used, flanked by two triangular patches of joining semicircles (Fl.78b; Fig.15:109).

Some more specimens (Pm. 64,69,71,83,85,96,129,216,217,224, 226,242,285,287,289,290,296,298,315,406,412,421,454a,b,612,951, 960,962, BE.568) can be grouped here by the description of the Patras Museum Catalogue only, since their painting was too worn to see designs, or because I was unable to find them in the storerooms of the same museum.

1. MP. fig.58; cf. Prosymna, fig.151, no.348 (piriform jar) and AR, (1933) 86, pl. 1. B.10; BSA (1947) fig.4:11.
The pattern in its various versions finds parallels in pots of the same kind, found in other sites of Mycenaean realm.

12. Concentric Arcs. PM.44 (Fig. 19). This pattern is represented only by two examples. Type 11 is found in the shoulder zone of a piriform stirrup jar from (Berlin. no. 30754), while an unusual type, similar to FuruMark’s 44?2, is used as an all-over pattern in the shoulder zone of PM.206 (Pl.83c; Fig.19:12.b).

13. Running Spiral PM. 46 (Fig. 19). This pattern occurs only once on a stirrup jar (PM.223) as a decoration of the semicircular field of its shoulder. It is rather an unusual example and we are unable to find any exact parallel to FuruMark’s illustrated types (Pl.84a).

14. Quirk PM. 48 (Fig. 19) Type 5 of this pattern occurs in the shoulder zone of five stirrup jars (PM.104, 225, 879, AM.5, 52). In the first example it covers only the semicircular field, the two quadrants being decorated with simple concentric semicircles (Fig. 17: 11a). In two other specimens the pattern is used as an all-over decoration in the shoulder zone (PM.104, 225). Another type of Quirk, running horizontally and...

1. BSA (1947) p.16 Figs.4:11 and fig.7:2,3,4 (Salamis Class); Mycenae (Preh.Cemetery III and IV areas). BSA (1966) p.228; Perati B. p.120, fig. 10: 25 a-5; 10:26; Asine,T.1:8 6,9,15,15; T.7:16; Delphi, 4menos T., fig.29; Kameiros,T. 48:3 etc.; Deiras, pl. LX:8; LXIV,7; Kerameikos I, pl.61: 531 (= EM). In Kephallenian stirrup jars the simple concentric semicircles (type d) are very common (e.g.Lakkithra, tomb A, 38; Metaxata, Tomb A (A7); Tomb Γ (75) but the fringed and dotted versions are rare (not unknown: Cf. AE.1952, pl.7:41a).

2. MP. pp.348; fig.58.

3. In contrast with the Kephallenian stirrup jars, where this pattern is very popular (e.g.AE.1932,p.34,pl.6:34,37;1933, p.86,pl.1:B.8,B.4,A.9;pl.2:Γ.3). Cf.also Perati B.fig.34:657.

forming a narrow frieze around the base of the false neck of stirrup jar (FM. 879) is similar to type 26: a row of linked circles with a central dot (Fig. 18: 11 an). AM. 52 has its semicircular field decorated with Type 3 of this pattern, the two quadrants being covered with badly drawn triangles (Pl. 88b; Fig. 19: 14c).

15. **Antithetic Spiral Pattern FM. 50 (Fig. 19).** A new variety, not illustrated by Furumark, of this motive, occurs in the shoulder of one pot coming from the Aigion area (a/a 815).

16. **Wavy Line FM. 53 (Figs. 19-20).** Both the horizontal and vertical versions of the pattern occur in the shoulder of at least fifteen examples. The horizontal type, like parallel chevrons, is used on the shoulder of FM. 52, as an element connecting separate designs of the same kind (friezed concentric semicircles) (Fig. 17: 11a-f). In two other examples (FM. 219 and 79) a rather unusual type of the horizontal type (close to Furumark's no. 21) is found combined with concentric semicircles (Fig. 15: 11g; pls. 66d, 90a). Circumcurrent thin continuous horizontal wavy lines in groups of three or four (Type 13) occur, in the shoulder of two stirrup-jars (FM. 233: group of three; FM. 316: group of four) as a sole decoration of it² (Fig. 19: 16a, b; Pl. 49d, h). Single, horizontal

---

1. Cf. (Simil.) AE (1932) pl. 6: 39; pl. 7: 39a.
2. MP. p. 371, fig. 65 (Ialysos. O.T. 20; GB. 288: 9).
Wavy line (Type 19) is found in the upper half of the shoulder zone of PM.434, its lower part being covered by a double horizontal row of joining semicircles (Fig. 19:16c; Pl.85b).

**Vertical Type:** single wavy lines (Type 32 ?) radiating from the base of the false neck and used as sole decoration are found in the shoulder of PM.410, while Type 37 ("surface filling") is used as an all over pattern in the shoulder of PM.706 (Fig.20:16d,e; Pls.89e,56f). PM.58 has its two quadrants decorated with two groups of three vertical and well-executed wavy lines and simple concentric semicircles (Fig.16:11m; Pl.53f). This version is not illustrated in Purumark's types.

Yet another accessorial use of the motive is that where detached groups (PM.72,86,392,381,114,151) or single (BE.437) vertical wavy lines connect separate elements of the composition (usually concentric semicircles). (Figs.16:11h,i,r; 17:1ly; 20:16f; 21:21a; 22:21m).

17. **Diaper Net.** PM.57 (Fig.20) Type 2 of this pattern occurs as an all over pattern (PM.300,294, a/a 783., Berlin 30757) or combined with other different designs (PM.98: only the two quadrants decorated with this pattern, the semicircular field being covered by another unusual design (chain of lozenges? Fig.20: 17d; Pl.68d). In all cases it is rather well drawn. It is especially interesting that in two of these pots

2. *IF* p.372: "characteristic of the latest IIIB and earlier IIIc:1 phases".
(PM.294 and a/a 783) the pattern is framed by double horizontal bars. (Fig. 20:17b,c; Els.63b; 80c).

18. Parallel Chevrons PM.58 (Fig.20-21). This pattern, which is closely related to Multiple Stem, is very common in the shoulder of Achaean stirrup jars (40 examples), but only in twelve specimens (PM.109,229,228,307,317,376,378, 116,873,874, a/a 758, Berlin 30755) it is used as sole decoration. In all the other examples the pattern is found combined with different designs, or covering only the two quadrants or the semicircular field.

There are seven examples (PM.229,307,317,614a,874, a/a 758, Berlin 30755) of a simple Chevron group (Types 17, 31,29) radiating from the false top in the shoulder zone, and eighteen more, similar but either with fill ornaments (PM.58, 210,3,275,745,960, BE.391) or being used as elements connecting separate designs of the same kind (PM.59,73,213,305, 380,389,390,63,672,946,906,Berlin 30756). In three pots (PM.105,377,380) a vertical group of chevrons framed by two vertical bands on either side, corresponds to those used in triglyphs (Els. 64d, 84f, 74d). PM.719 has only its semicircular field covered with group of vertical chevrons, the

1. Cf. BSA (1947) p.16,fig.4:9 and fig.5:11; pl.1:1; (1966), p.219,230,fig.1:7; Deiras p.172; Anuario (1965-1966), p.264,286,287,fig.295,330b,331b; Palace of Nestor I, pl.394:614,674,698; Perati B.pp.100-101,fig.7,3a,b (18 examples).


3. The type used in this pot is peculiar in having the outermost chevron dotted (Fig.12:2d; pl.70b).
two quadrants being decorated with zigzag design, while the opposite is the case in the shoulder of BE.389, and Berlin 30758, where Type 17 of the pattern is used in the two quadrants only (Pl.57 a,b).

In three other examples (PM.109,116,873) the Chevrons are placed horizontally along the shoulder band (Fig.20:18f,g), while such horizontally placed chevrons, but covering the semicircular field only - the two quadrants being decorated with different designs - occur in four other specimens (PM.304,234,126,402 = New variety of Type 23, Pl.50b).

In the shoulder of PM.228 both vertically and horizontally placed Chevrons (Type 31 ?) occur (horizontal in the quadrants; vertical in the half-shoulder)(Fig.20:18h; pl.49c).

The whole shoulder zone of PM.376 is covered by a peculiar version of this pattern: one vertical and two oblique groups of chevrons are joined, forming a kind of triangle. Two such triangles cover the semicircular field and one on either quadrant. The Type seems to be unique and unparalleled elsewhere in Greece. (Fig.21:18.i; Pl.84d).

Another peculiar type (similar to Furumark's 26, but much more elaborate) occurs in the shoulder of PM.378.(Fig.21:18j; pl.56a).

19. 'N' Pattern PM.60 (Fig.21) This pattern is used twice only in the shoulder of Achaean stirrup jars: A row of 'N' (Type 2) framed by dots is found in the shoulder of a handsome piriform stirrup jar (PM.115). Type 1 in three horizontal
successive rows is used as an all over pattern on the shoulder of AM.3. In the former case the motive is much more carefully executed than in the latter one (Pls. 92c; 62a). In general, this motive is rather rare in the Achaean pottery.

20. ZigZag PM. 61 (Fig. 21). There are four stirrup jars decorated with this pattern: Type 18-19 is used as sole decoration in the shoulder zone of the piriform stirrup jar AM.7, (Pl. 92g). It is not carefully executed; Type 2 is found in the semicircular field of PM.719 combined with parallel chevrons (Fig. 21:20a). A panelled type, similar to Type 17 is used in the semicircular field of BE.389, combined with simple concentric semicircles (Fig. 17:11a). On either side of the spout of PM.97 a design similar to Type 4, but vertical and with friezed borders is found (Fig. 18:11as; Pl. 62f). Broadly speaking the pattern is rather uncommon in the shoulder of stirrup jars.

21. Triangle PM. 61A (Fig. 21-22). Next to concentric semicircles (PM.43) the most common pattern used in the shoulder of Achaean stirrup jar is the triangle. It is represented by twenty seven examples. The number of triangles varies from three to seven or more and most of the used variants correspond to Furumark's illustrated types 1 to 7. Furthermore,

1. Cf. EBA (1947) p.20.fig.5:12; Deiras, p.177, Pl.LXX, nos. 6,8.
some unusual forms such as triangles filled with thin wavy lines (e.g. PM.799, Fig.22:21.1), or with dots inside and out (e.g. PAB.1965, pl.176a (sherd) Fig.22:21.j) or even combinations of different types of this motive (e.g. PM.86) occur in the shoulder of these pots. As regards the form and the way they have been drawn, it will be observed that these triangles have much in common with those occurring in the Kephallenian stirrup jars.  

As in the case of the concentric semicircles, fringed and dotted triangles are the favourite design for the Achaean potters, and it is found in ten examples: (Fringed: PM.86, 394, 1028, 131, 90, 393, 394; Dotted: PM.220, BE.548, PAB.1965, pl. 176a (sherd)).

This pattern is used as follows:

a) As an all over design in the shoulder of sixteen vases (PM.86, 90, 99, 212, 398, 1028, 433, 111, 1129, 131, 799, 220, 878, PAB.1965, pl.176a, BE.414, 443).

b) As an ornament of the quadrants only, the semicircular field covered with different designs in three examples: (AM.52, BE.415, 445) (Figs.19:14c; 22:21k, 1; Fl.88b).

c) As main decoration of the semicircular field the two quadrants being decorated with different designs, once

1. Simple triangles (Type 1) in the half-shoulder, while one of those used in the quadrants is fringed and both of them have the innermost triangle painted solid black (new variety of Type 2) Figs.21:21a; pl.57d. Cf. LMTS.94 note 5 (Cyprus - Idalion).

2. Most of them are painted with this pattern, e.g. AE (1932) p.34, pl.6:42; pl.7:74, 75, 73, 42a; pl.11:173 etc. (Lakithra); (1933) fig.25:A.9 (Metaxata T.A); Fl.2:1, 5, 13 (Metaxata T.5); A. Delt (1919) p.108, figs. 24:1, 3, 25:1, 26:1 (Diakata).


4. Very badly drawn.
only \((\text{PM.}151)^1\).

d) As an element connecting two separate designs of the same kind in five pots: \((\text{PM.}393,394,1128,543, \text{BE.}446)\) (Fig.16:11t,u; 17:11ag; 22:21m,o. Pls.75f,76b,78c,87f).

e) Lastly it is found combined with other different designs only once \((\text{BE.}391)\) (Fig.22:21p).

It should be noticed here that, sometimes, different types of this pattern are used in the shoulder of one and the same vase (six examples: \text{PM.}398, 86, 7-799, \text{BE.}391, 414, \text{PAE.} 1965, \text{pl.} 176a). A peculiar and unique type of triangle, which is formed by dots only, placed in a triangular shape, occurs in the quadrants of \text{PM.} 669 (Fig.18:11au Pl.65e).

As regards the fourth usage of this motive, it seems to owe its form to the analogy with the concentric semicircles and connecting chevrons found on the shoulder of vases of the same kind. Furumark rightly observes\(^3\) a close parallelism, both morphologically and syntactically, between this motive, and the concentric semicircle pattern.

Chronologically, vases decorated with the Types 1, 2, 3, and 5 seem to be of the latest Mycenaean period, although decoration, as has been already emphasised\(^4\), is not always

---

1. A very unusual and peculiar type of this motive, not illustrated in Furumark's types, covers the semicircular field of this pot: Triangles with the outermost two filled with zigzag. (Fig.22:21m; Pl.93c).

2. See above p.189 note 1.

3. \text{MP.} p. 390.

the safest criterion for dating the vases.

Apart from the Kephallenian stirrup jars, the Achaean types of the pattern find more or less close parallels elsewhere in Mycenaean Greece. 1

22. Elaborate Triangle (PM.71) (Fig.22). This pattern occurs on the shoulder of eleven stirrup jars. 2 All the types are of angular form, the only exception being PM.80, which is of dotted curved outline, a form probably influenced from a semicircle design 3 (Fig. 15:10.1; Pl. 66f).

The most common variety is the double (PM.397,209,295 379, Berlin 30758) or triple (PM.396,397,414) quite straight sided and geometrically shaped simple or fringed 4 (Fig.16:11v; 22:22e) triangle with slightly curved filling lines 5 (e.g., PM.396) or with interior fringed semicircles 6 (PM.56,97) (Figs.19:11bc; 18:11as; Pls.53d, 62f).

1. Mycenae, Granary; pl.10:5; Asine, T.6:5,11, ditto, T.5:6; ditto T.1:5,10; BSA (1947) p.22, fig.7:1,6; Sardis pl.5:6; 6:2,4,5; Deiras, pl. LXXVI, no.4; Ialysos, N.T.17:2; ditto N.T.32:1; ditto O.T.12: GB.291:11; ditto, O.T.14:GB.291:24- BM.A.930.

2. PM.56,80,97,209,295,379,396,397,414, BE.417, Berlin 30758. Here, probably, belong and the patterns found in four more examples (FM.86,276,621,380) which have been already described and assigned with some reservation to the "Bivalve shell" pattern, see above p.176.


5. Fur. OA.1944, p.250, fig.13A,B. Cf. BSA (1968) 212, pl.54b,c. (Knossos, A.Ioannis).

4. PM.209 and Berlin 30758 have double triangles, the outer of which is provided with semicircle fringes (Pls. 57b, 70a).

6. This is of Type with "ladder" border.
In five examples (PM.56, 396, 397, 414, BE.417) the composition is uniform, there being triangles both in the semicircular field and the two quadrants. In two vases (PM.295, 379) there is rather large triangle of the elaborate class in the semicircular field only. It is placed either between two separate designs of the same kind (PM.295), or together with another different pattern (PM.379: fringed concentric semicircles) (Fig. 17:11w; 22:22d). As in the case of Parallel Chevrons and Triangle 1 an elaborate triangle is used in two cases (PM.80, 269) to connect two separate designs of the same kind.

Lastly, in one instance (Berlin 30758) the whole semicircular field is covered by a relatively big elaborate triangle (new variety), the two quadrants being painted with vertical parallel chevrons (Pl.57b).

All the pots bearing this pattern seem to belong to the LH.IIIC:16 period or even to Submycenaean times, the only probable exceptions being PM.80, BE.417 and Berlin 30758, which may be earlier in date (IIIC:1.6).

23. Lozenge. FM.73 (Fig. 22-23). This is a rather common design of Achaean stirrup jars and occurs in nineteen 2 such pots. The types found belong to LH.IIIB and IIIC. versions known from other sites of Greece 3 as well. They have straight

1. See above pp. 186 and 190.

or curved sides and only once (PM.223) pennons at the angles (Pl.84a). They are likewise filled with accessory ornaments, such as hatchings (most of them) or smaller lozenges (PM.674) or more elaborate patterns (PM.546) (Fig.19:11bd). Both singly (PM.674, Berlin 30760) or in horizontal chain (PM.411a, 746,615,718) placed lozenges occur. (Figs. 22-23: 23a-f). Eight vases (PM.411a,615,674,670,718,107 ?;1127; Berlin 30760) have this pattern as sole decoration of their shoulder zone. As Furumark points out this usage is similar to that of Sea Anemone.

The pattern in its Type 5 (horizontal row of three connected lozenges but without pennons) is also found in the semicircular field of PM.746 (Pl.80a) while a type peculiar to the LH.IIC:1 style, similar to Furumark's Type 11, covers the same field of another pot (PM.546, Pl.85d). In both cases the two quadrants are decorated with different patterns (groups of oblique line in the former, and dotted concentric semicircles in the latter).

In three other instances (PM.105,223,906) the opposite is the case, there being lozenges in the quadrants only (one on either quadrant; type y in the first; type ae in the second; and a new variety of Type w (fringed) in the third (Fig.23:23g). Finally lozenges used as a fill ornament occur in the semicircular field of five vases (PM.745,312,129,306,BE.387)

1. ME. p.410.
2. Three unconnected lozenges (Type p ?) cover the semicircular field of BE.548 (Fig.22:21q).
together with other different motives (dotted semicircles etc.) (Figs. 17:11a; 18:11a; 12:3a).

24. **Unusual Patterns.**

a) Figs. 13:5d; 14:6d; 23:23g; 23:24a,b show five stirrup jars (PM.377,380,946,906, 14) which are decorated with what appears to be a last survival in the evolution of the Bivalve Shell (PM.25:9-11) or the Flower (PM.18:141) pattern.

In the semicircular field the two bivalve shells or the two flowers in this position have been made into one design of a facial character.

b) Another unusual and badly executed pattern covers the upper part of the shoulder of PM.82. Wide fringed zig-zags or wavy lines on the semicircular field, the two quadrants being decorated with single fringed semicircles (Fig.17: 11x, Pl.54b).

c) PM.101 has its semicircular field decorated with two antithetic simple arcs, which are dotted inside and out and have sea anemone as fill ornament (Fig.14:7h, Pl.83a).

d) PM.98: The semicircular field of the shoulder is decorated with a design which appears to be a new version of concentric arcs. (Fig.20:17d, Pl.66d).
e) **PM.419.** The semicircular field is painted with a design similar to a cross, which is formed by double horizontal and vertical hatched lines. Sea anemone (Type 31) is used as fill ornament (Fig.14:7e, Pl.63d).

f) The two quadrants of **PM.151** are covered by poorly drawn triplets of concentric semicircles, while the semicircular field is decorated with a more elaborate design.¹ (Fig.22:21m, Pl.93c).

g) The semicircular field of **PM.275** is decorated with a design which comes close to an elaborate arc, with central lozenge of unusual type (Fig.19:11be, Pl.71:d).

Before finishing with the shoulder patterns, we must mention here the designs with which the lower border (the perimeter) of the shoulder is decorated. As has been already stated,² stirrup jars with decorated shoulder perimeter are very few (fourteen examples only).

Among the decorative designs the zigzag, the joining semicircles and the foliate band predominate thus,

a) Type 4 of zigzag³ is used in the perimeter of PM.97,  

---

1. See above page 190 note 1.
2. See above page 1645 note 24-25.
FIG 15. Stirrup-jar shoulder zones
Fig. 17. Stirrup-jar shoulder zones.
FIG 19. Sturrup-jar shoulder zones
FIG 20 Stirrup-jar shoulder zones
FIG 22. Stirrup-jar shoulder zones
FIG 23. Slipup-jar shoulder zones
while Type 3 and a new variety of the same type in PM.615 and PM.307 respectively. The shoulder perimeter of PM.305 is filled with hatching zigzags (new variety). (Figs.18, 23, 20).

b) Type 4 (?) of joining semicircles occur twice in the shoulder perimeters of PM.211 and a/a 758 (Figs.12, 20).

c) Foliate band pattern occurs in the shoulder perimeters of three vases: Type 21 in PM.317 and Type 22 in PM.376 and PM.151 (Figs.20, 21, 22).

d) The shoulder perimeter of BE.439 is filled with quirk design (Type 26) (Fig.15) while that of Aigion (OA, 1965, p.90, fig.1:4-6) with

e) a chain of beautifully executed lozenges (new varieties of PM.73:5-6). (Cf. Perati B. p.177, fig.64:46 = similar) (Fig.19)

f) Another pot from Berlin 30756) has its shoulder perimeter decorated with a combination of three different designs: Foliate band - parallel chevrons and chain of simple lozenges (Fig.17).

g) Finally, triangles of various types (3, 5) in an alternating row are used in the shoulder perimeter of BE.415, while that of BE.417 is filled by the same design but in a simpler version (Fig.22).

Body Zone Patterns.

1. Only twenty-nine stirrup jars have their body decorated either in its greater diameter or just above the angle of the profile. In most of them simple continuous or repeated patterns are used, such as zigzag, wavy line, joining semi-

1. See above p.1645 and fig. 24-25:1-30
circles or sometimes more ambitious schemes are found. Especially the following body-zone patterns occur:

a) **Circles of type 8 (?)** are used in the body zone of AM.6, while Type 6 (in double horizontal row) is found just at the angle of the body and shoulder of PM.151. (Fig. 24:2-3)

b) **Joining semicircles of Type 7** are used in three examples, PM.312,946,BE.484.² (Fig.24:4,5).

c) **Isolated semicircles in an alternating row (Type 27)** of two or three semicircles, the innermost usually painted solid are found in three specimens (PM.651, BE.548³; q.814⁴).

Type e of this pattern occurs on the body zone (above the angle of the profile) of PM.56, while semicircles in an inverted zone⁵ (Type 8) covers the body of the cylindrical stirrup jar BE.486. (Fig.24:6-10)

---

1. EBA(1947), fig.6 (similar); (1967) p.167, fig.11:5.
2. Ibid. (1967) fig.11:10; Perati B.p.177, fig.64:15.
4. Cf. Clara Rhodos, VI-VII, 138 ff; and 146,figs.171-2 (Kameiros T.48);LATS pl.3c.
5. The semicircles are irregularly drawn on this jar.
d) **Concentric arcs** (Type 11) rather well executed are found in the body zone of one stirrup jar only (PM.378) (Fig.24:11)

e) **Quirk** (Type 5) occur once only, in the body zone of BE.480(Fig.24:12).

f) **Wavy line**: Horizontal wavy line(s) of several types, is the most common pattern on the body of Achaean stirrup jars, occurring in seven examples (PM.59,81,87, 275,310,379,BE.440)(Figs.24:13-18; 25:19).

It is of some importance that not a single vase has its body zone decorated with the vertical versions of the pattern, a feature which is common elsewhere in Greece.²

The relation of the horizontal wavy line to zigzag is, as has rightly been observed³ obvious and sometimes (e.g.BE. 440) it is difficult to differentiate between a wavy line and an angular line or zigzag. This pattern in short stretches, rather than a continuous band occurs once only (BE.440).

Only one example (PM.310) of the panelled type (Type 27) is found, alternating with groups of vertical bars (PM.64), while type 29 of the pattern occurs in four examples (PM.59, 275,379,81).⁴ The body zone of PM.87 is decorated with a rather badly executed wavy line, which comes close to Furumark's

---

1. Cf. (similar) Perati B. p.177, fig.64:18.
2. E.g. BSA (1966) p.230, fig. 1:11,13,14; (1967) p.171 fig. 11:14,15; Perati B. p.177, fig. 54:8,15,14.
4. On PM.81, which seems to be a chronologically advanced pot, wavy lines are drawn in two superimposed rows enclosed within horizontal parallel stripes.
Type 20.

g. Parallel Chevrons of a continuous narrow horizontal row\(^1\). (Type 32-33) occur in the body zone of five examples (PM.120, 542, AM.4\(^2\), 7, BE.483). Furumark\(^3\) relates this pattern to the Foliate Band pattern (PM.64:28, 29). The pattern in all examples is rather well drawn except for BE.483 where it is not carefully executed. It usually covers the zone of the greater diameter of the pots (PM.120, 542, AM.7), but exceptionally it is found in the zone just below this greater diameter (AM.4, BE.483). (Fig.25:20-23).

h. Zigzag, in three various versions is found in the body zone of five Achaean stirrup jars. ... (PM.459, 794,879, 79, Berlin 30758). Type 3 is found once (PM.459) while Type 4 is represented by two examples (PM.794, 879). Apart from the last (PM.879) example, where it is rather hastily executed, in the two other specimens (PM.459, 794) the pattern is excellently drawn in a way that reminds the best examples from the Argolid.\(^4\). The elaborate version, Type 18, is found in the body zone (just

---

1. Cf. BSA (1947) p.20, fig.6; (1966) p.230 fig.1:13; (1967) p.171 fig.11:17; Perati B, pp.101,177,fig.64: 9,10; Annuario (1965-66) p.162, fig.162:Deiras,pl.LXXXVI, no.5.

2. MP. p.381. To the Types 27-28 (= running right) of the latter pattern seem to belong the parallel chevrons used in two examples (PM.542, AM.4).

3. AM.4 has only its lower body zone decorated with this pattern.

4. Cf. BSA (1966) 231; (1967) 152, fig.2:52-261 and 171 fig.11:18,19. PM.459 seems to be an import from there, judging from both the fine fabric and decorative design (suggestion of Mr. M. Popham).
above the angle of the profile) of two vases (PM.79, Berlin 30758)\(^1\). (Fig.25:24-28).

i. Foliate Band, as a body zone pattern is used twice only. BE.446 has Type 22; AM.4 is the most complex piece with three patterned body zones, two of which have Type 22 of this pattern. Other patterns similar to Types 27 and 28 have been discussed under Parallel chevrons.\(^2\). (Fig.25:30,22).

j. Bivalve shell pattern of Type 27 is found in one example only (BE.675).\(^3\). This pattern, as a decorative design of the body zone of stirrup jars, is recorded from several other Mycenaean sites.\(^4\). (Fig.24:1)

k. "Ribbon". The legged cylindrical stirrup-jar PM.151 has its body walls decorated with dropping dotted "ribbon" consisting of pendant wavy lines. (Fig.25:29)

The bases of Achaean stirrup jars are covered with a strip of glaze (e.g. PM.52) or more frequently they have a ring daubed around the joint with the body (e.g. PM.58) or are painted solid all over following the paint of the lower body (e.g. PM.56) or even sometimes left entirely unpainted (e.g. PM.459, AM.4,52).

1. In both pots it is so broad that it covers the best part of the body. (Cf. LNTS, pl.18a (from Cyprus).

2. See above page 911.

3. This Achaean example is so similar both in shape and decoration with one from Mycenae (MT.II.fig.41 and BSA (1967)152, fig.2:52-213) that they must be contemporaneous, if not an import from there.

4. Cf. e.g. Perati B. 177, fig.64:33,34,35,44,45 (similar not identical); BMC.557 (Enkomi, Cyprus); BSA (1966), 228; (1967) 170, Fig.11:1-4.
FIG. 24. Stirrup-jar, body zones
FIG 25. Stirrup-jar, body zones (continued).
Moreover, seven examples have single (FM.718,963) or concentric (double: BE.400; triple: α/α/816, FM.873) circles or cross (BE.437,438) painted underneath the base. This feature is not new to the pottery of this district, for the Achaean potters had used it in other vase-shapes (alabaster, jugs) as well. Stirrup jars having their base decorated with circles are also recorded from other sites of Mycenaean Greece.².

What seems to be an original and distinctive element in Achaean pots is the cross pattern which, so far as I know, is unknown elsewhere in Greece.

COMMENTARY.

Stirrup jars either of large or small size are indeed the most popular shape in Achaea. (37.3%)³. Almost all the types of shape known from other areas are represented here,⁴ although the globular variety, usually with sloping shoulders,⁵ predominates.

But there are a number of local peculiarities distinguishing the Achaean stirrup jars from those of other districts:

1. To these two examples three more (BE.589,636,702) must be added, coming from our recent excavations at Aigion (1970).


3. It comes closer to the E.Vermeule's figure (35%) than to that given by V. Desborough (50%). LMTS.10.


First, as regards the shape, the material from Aigion, which is stylistically different from, and generally earlier than, that of the rest of Achaea, includes some stirrup jars, which are rather less frequent on other sites of Mainland Greece, such as advanced and heavy piriform stirrup jars, sometimes with an unusually wide base. The same region also produced two cylindrical stirrup jars, almost of the same shape and proportions. The occurrence of these two vases is of special importance, since this shape is very rare indeed. Furumark refers to three or four Late Helladic specimens only from the whole of Mainland Greece. Aström to another similar to those of Aigion from Cyprus (unpublished) and to some more from Crete, while Iakovides mentions five more from Perati, Kos, Cyprus and Crete. It is worth mentioning here that our excavations (Aigion 1970) have produced among some other peculiar finds, two stirrup jars, one of which (BE. 636) belongs to Furumark's Squat Type (178?) and has an unusual and hardly visible very low ring base; this is unique in Achaea and almost unparalleled elsewhere in Greece.

2. See page 156 and notes 2, 4.
5. Ibid., p.92 note 3.
7. For one similar but not identical pot, Cf. Deirae Fl.XCV nos. 2-3.
The individuality of the other pot (BE.697) lies in its size and decoration: it is, in fact, the smallest stirrup jar ever found in Achaea (only 0.04 m. high) and is covered by an unusual Flower design on the shoulder zone.

As regards Western Achaea, we have already mentioned the peculiar and unusually wide ring base of PM.109, as well as the combination of the traditional strutted pyxis shape with that of the stirrup jar in the case of the unique stirrup jar from Klauss (PM.151)\(^1\). This latter pot finds more or less good parallels in Perati\(^2\) and Cyprus\(^4\): Another stirrup jar (PM.898), which was recently found at Paralimni (Teichos Dymaion)\(^5\) - a settlement site - is unique and peculiar in having two horizontal loop handles at its greatest diameter, in addition to the usual two on the shoulder. The probable usage of these handles has been already explained.\(^6\)

\(^1\) See above, page 159 note 3.
\(^2\) See above, page 156 note 3.
\(^3\) Perati B. - pp. 153-4, fig. 25E (525) and vol. I, pl. 53a, 5.
\(^4\) Cf. V. Karageorghis, Kypriakai Spoudai (1956) p. 11, pl. V. E. Vermeule, cites (AJA, 1960, p. 9, no. 27) a good parallel for the strutted pyxis body of this jar from Kephallenia: AE (1932) pl. 11, no. 172 (=legged pyxis with tall narrow neck). Vermeule also dates this jar (PM.151) to the LH IIIC period, a date which must be considered quite right since the pot comes from a LH IIIC tomb, and because it differs considerably from the other earlier examples quoted by Purumark.
\(^5\) PAE. (1963) p. 96; pl. 72d;
\(^6\) See above page 158
So far as concerns the handles of the Achaean stirrup jars, some trends of the local style might be observed in the rope-twisted handles of PM.275 and the ridged form of some others (PM.376, 547, 546).

It is also notable that airholes pierced through the shoulder, frequent elsewhere in Greece at the end of the LHIII period, are almost unknown in Achaea. One pot (PM.625) is unusual in having a pierced base but this feature is also exceptional elsewhere.

For decoration, one may agree to some extent with Desborough that the system of painting much of the body of these jars with successive and equally-spaced, usually narrow, bands is a local characteristic, though by no means unknown elsewhere in Greece. But at the same time, and in view of the recent evidence provided by both the published and the unpublished material from several Achaean sites, especially from Aigion, we do not think that his opinion that

1. E.g. Perati B. p.156: 65 specimens with such a hole: BSA (1947)21; Deiras, 144-5 (Phase finale du Mycénien III0).
2. The only exception being PM.542.
3. Such holes occur in other shapes, but not in stirrup jars elsewhere in Greece (see page59note 4).
5. Mr. Desborough has suggested to me that the technique of decorating with such bands down to the base starts early in LHIII. period.
6. e.g. Kephallenia, (AE, 1932, pl. 7:38) and very occasionally in the Argolid, (Deiras, pl. LX, nos. 8,9)(Cf. also Ithaka (Polis) BSA (1938-39) 69, pl.4 no.69.
8. Op.Ath.1965,p.92.fig.2(Aigion) and p.97 (Aigeira); Excavations (1967) and (1970) = unpublished. At the time Desborough reached his conclusion the greater part of the material had never been illustrated (LMTS,p.14)
"only a few (stirrup jars) retain the alteration of thick and thin bands" (LMTS.p.99) must be unreservedly accepted.

What seems to be also a local peculiarity is the painting of the body of many (59 in total) such jars with groups of stripes. A few pots which have the greater part of their body painted over show a close connection with the Kephallenian examples and may belong to the Submycenaean period or even foreshadow the Protogeometric style.

Apart from all this, decoration is almost entirely confined to the shoulder, and, as has been already mentioned, subsidiary decorated zones are found on a relatively small number of vases. With the exception of a few examples, globular, perked-up globular and globular biconical (Figs. 7-8A: 1a, c, d) stirrup jars are the most lavishly ornamented examples, painted with several decorative designs as triangles, concentric semicircles, parallel chevrons, elaborate triangles, lozenges and less frequently with more elaborate and individual patterns (e.g. Figs. 17, 19).

Depressed globular, squat, conical, piriform and cylindrical stirrup jars (Figs. 7-8 Alb; 8-9B, C, D, E) are mostly covered with less carefully executed or simpler patterns.

1. See above, page 164 [Group b.]
2. E.G. AE (1932)pl.6 no.38,35 etc.
3. Cf. Styrenius, Submycenaean Studies, 125, and figs. 7-8 (Kerameikos Grave. S. 1520.)
4. Cf. AJA 64, (1960)p.18; also Styrenius, Submycenaean Studies, figs. 56-57.
5. See above page 164.
such as sea anemone, flower, multiple stem, parallel dashes. (Figs. 12-14) The only example of big domestic type (Fig. 98) has its shoulder left undecorated.

As to the peculiarities in decorative motifs a greater tendency to use fringed or dotted concentric semicircles and triangles is clearly visible in this area than elsewhere in Greece. The panelled design occurring in the body zone of FM.310 (Pl.74a) is a new and distinctive feature, but such panelled compositions are uncommon on the shoulder zone of the Achaean stirrup jars.

This taking together with the total absence of pictorial motifs in these jars shows clearly close connections with its West Coast adjacent areas (Kephallenia, Eglis. 1.) where similar decorative motifs occur. But this does not apply to all Achaean stirrup jars, since such fringed and dotted designs are almost entirely unknown in the jars discovered in the region of Aigion. 2.

Knowledge of the Argive Close Style is suggested by the shoulder decoration of seven stirrup jars. 3. Rather poor evidence; either the connection itself was very tenuous and not at first hand, or the Achaean potters did not feel, themselves, competent to undertake anything elaborate. In any case, there is no sense of dependency on any central area.

1. E.g. ADelt. 1961-62, pl.18 (Strefi); BCH. (1956). p.575, fig.2 (Diasela).
2. The only exceptions being two vases (BE.548,391).
3. FM.80,81,82,209,394,378,79. I am much indebted to Mr. Desborough for his comments on most of these vases.
As regards the chronology of the Achaean stirrup jars, it should be observed that although the great majority of them belong to the LH.IIIC period, the earlier IIIA and IIIB phases are sufficiently represented both in Western and North-Eastern (Aigion) Achaea; more frequently in the latter than in the former.

Imports seem to be only two: PM.459 and α/a 815 (Aigion). Both shape and decoration (elaborate ornaments in the shoulder zone) betray their foreign provenance and, in my opinion, they come in all probability from Argolid.

1. The expressed opinions concerning the chronology of the Achaean stirrup jars (by Vermeule, AJA, op.cit.p.9 and and Desborough LMTS, p.98) must now be modified to some extent.

2. I thank Mr. M. Popham for drawing my attention to the individuality of this pot.


Note: Stubbings's suggestion (BSA,1947,p.24) that stirrup jars will only pour in a dribble and may easily be tightly stoppered seems to be confirmed by the presence of remains of such stoppers collected by E. Mastrokostas at Teichos Dymaion. (PAE,1964, p.67, pl.68y). (Our plate 93a,b.)
4. **Piriform Jars.** (Figs. 26-27. Pls. 94-97).

The shape is represented by thirty-seven examples, which were found exclusively in tomb-sites. The vases vary much in size; most are between 10 and 14 cms. high, but there occur smaller (e.g. PM.693 = 0.06m) as well as bigger (e.g. PM.623 = 0.41m; Berlin 30763: 0.19m; BE.673: 0.485m) examples.

The clay is either of buff or buff-yellowish (e.g. PM.191) or even pinkish (e.g. BE.397) colour.

Rims average 0.08 - 0.4 m. with a maximum of 0.13m. (PM.623). Ridge at the base of the neck is almost unknown, except for the two big examples, PM.623 and BE.673.

The specimens of average size have three horizontal handles on the shoulder, as on Alabastra. In the Argolid the handles are often set vertically, but I know of only four examples (PM.372,623, BE.661,673) of this fashion from Achaea (Pl.96g,97c).

According to their shape the Achaean piriform jars can be classed in six main groups:--

1. **Cylindrical** (Fig. 26:1). Only one example (BE.661) of small size belongs here. It has been recently found at Aigion and can be assigned to Purumark's Type 33. Body

---

1. e.g. Klaus, Vrisarion, Katarraktis, Chalandritsa etc., and from our excavations at Aigion (1970).
3. Ibid. p.44; This also occurs in Olympia (PAE,1954,p.295; figs.9,10,11,15) and Messenia (Palace of Nestor I, p.387,figs 375,376) and more frequently in Rhodes.
4. Our excavations there in 1970. Cf. for parallels: Eleusis Gr. 3:376; Ch.T.529: 2 and 3 similar but with horizontal handles.
tapering cylindrical, wide, concave low neck with thin horizontal bevelled rim; three flat vertical handles; flat base.

2a. **Conical** (Fig.26:2a) Four specimens (PM.330, 324, 693 a/a 757): Relatively wide and low concave neck with bevelled horizontal rim; torus (a/a 757) or more usually, splaying base.

2b. **Conical-Piriform** (Fig.26:2b). Seven examples (PM.443, 444, 1050, 149, 190, 747, 743) of the same proportions as those of the preceding group or slightly larger. Both this and the former sub-varieties correspond to Furumark's Type 44.1.

3. **Conical-Angular** (Fig. 26:3) It is represented by two pots only (PM.191, 323). They are of medium size and have an angular profile with a fairly wide neck and bevelled horizontal rim. What seems to be rather peculiar is the conical foot which ends in a spreading ring base²(FS.47).

4a. **Piriform** (Fig.26:4a). This shape, which corresponds to Furumark's Type 45,³ is the most common, comprising thirteen examples (PM.569, 194, 195, 193, 325, 727, AM.1, 2, BE.19, 397, 704., Berlin 30763, Baur no. 40). Fully rounded upper part, slowly tapering to a short, stem-like lower part, which ends in a splaying (e.g. PM.325) or torus (PM.193) base; concave wide neck with horizontal, usually bevelled, rim.

---

1. It is not altogether clear which FS group is most suitable to two of these vases: (PM.444 and 743), particularly as the former is assigned to the group only on the basis of the description of the Patras Museum catalogue, while the lower body of the latter is almost missing.

2. Cf. Palace of Nestor I.p.386, pl.375; no.419 (similar base; vertical handles).

3. And to Stubbings' Type B (BSA, 1947, p.44, fig.19).
4b. **Piriform (Big)** (Fig. 26.4b). Only two examples: one (PM.623) found at Kallithea and the other at Aigion (BE.673). They can be assigned to Purumark's 35 and 34 Types respectively. Narrow, ring base; piriform, bulging, body, relatively narrow, concave neck, set off from body by very slight ridge; broad horizontal bevelled lip; three flattened (PM.623) or ridged (BE.673) loop handles set vertically in shoulder zone, dividing it into three approximately equal panels. Three successive encircling rows of small warts on the shoulder of the latter vase.

5. **Advanced-Piriform** (Fig. 26:5). Three specimens (PM.196,726, Baur 39) may be assigned to this group. They differ from the above mentioned piriform jars (group 4a) in having a more or less biconical profile. (FS.47?).

6. **Piriform-Ovoid** (Fig. 26:6). This shape, which corresponds roughly to Furumark's Type 49, occurs only once (PM.372). The pot is rather carelessly executed. Part of the rim and all three vertical handles missing; wide and low concave-splaying neck with short bevelled horizontal lip; narrow flat base.

Four more specimens (PM.192,1124, AM.8, a/a 792)

1. More sherds belonging to this shape were found scattered in the dromoi of some chamber tombs excavated by us at Aigion. (1970).

2. They end in a small dent or knob.

3. Cf. MP.I. pl.16:7,8 (from Olympia).
FIG 26. Piniform jars, shapes

(Scale not uniform)
are not illustrated, so it is not possible to suggest to which of the above mentioned groups they should be assigned. Especially worthy of note are some examples belonging either to the 4a or 5th. group. They have a particularly narrow foot, which gives a rather top-heavy appearance (e.g. Baur 39).

As regards the decoration of these pots, it consists of horizontal stripes with a broader band of paint round neck and foot and simple linear patterns between the handles on the shoulder. The patterns on the shoulder zone can be classed in three main groups:

A. The first and most striking is the facial design of
1. Lily *(FM.9:7)*, used on the shoulder of the cylindrical piriform jar (BE.661) from Aigion. (Fig.27:1).

B. The second group comprises the surface designs which are extremely common, as elsewhere in Greece. The following have been recognised so far: (Fig.27:2-7).
2. Diaper Net *(FM.57)* Type 2 is used in all examples of this pattern *(FM.194,195,192,747,323,743,444,330,443, BE.397, Baur no.40)* The closeness of the net and the care with which it is drawn varies considerably, e.g., FM.195 and 330 (Fig.27:2,3).

1. Cf. *BSA* (1964)p.250 giving references to other examples and pl.68a (vertical and more elaborate version). In the Achaean pot the horizontal version of this pattern is used, bordered by two bands. Cf. also *Annuario*(1965-66), p.55, fig.26, no.352 (alabastron) and *Prosopisi*, no.1181, p.419, fig.688; *BSA* (1952), fig.3:29.
2. e.g. *BSA* (1964)p.247 (Mycenae, The Atreus Bothros).
3. In two pots *(FM.330,443)* this pattern reaches well below handles. Cf. Berbati, fig.39:15 (Tomb XI); fig.47 (Tomb XI); fig.29 (Tomb VIII).
3. **Zigzag** (FM.61) Two variants of this pattern are used: Type 18 covers the handle zone of Berlin no. 30763, while type 19, that of FM.727. In both cases the design is well executed. (Fig.27:4,5).

4. **Isolated Semicircles** (FM.43). This pattern occurs in the handle zone of two vases: Type 35 (connected) is found on FM.623, while Types a (in a dotted, new variety) and d are used simultaneously on FM.727. In the latter case the pattern is badly and carelessly drawn. (Fig.27:6,7).

C. **Circumcurrent Designs**, the third group, are also sufficiently represented. The following patterns occur: (Fig.27:8-17).

5. **Running Spiral** (FM.46). Type 53, of this pattern is used once only (FM.1050)\(^1\). It is finely drawn. (Fig.27:8).

6. **Curve-Stemmed Spiral** (FM.49). Type 10\(^2\) of this pattern is used once only on the handle-zone of FM.1050, combined with Running Spiral (FM.46:53) pattern (Fig.27:8).

7. **Wavy Line** (FM.53). The broad and fairly deep Type 5 is used on the shoulder zone of FM.191\(^3\) while the narrow

---

1. Cf. (similar) Ialysos, BMA.832.


3. Cf. for a similar Type in A.Delt (1919)114,fig.29:3 (Prokopata-Kazata, Kephalenia).
handle zone of PM. 726 is covered by Type 10 of this pattern. Both vases have groups of small bands as linear decoration on the lower body. (Fig. 27:15-16).

8. Parallel Chevrons (FM. 58) One example (FM. 193) has a plain horizontal band of Type 32, in a zone below the neck band. (Fig. 27:9).

9. Foliate Band (FM. 64). This is the second most popular pattern in this shape. Both simple and double versions of the motive occur: Type 18 is used in the handle zone of PM. 196, while that of AM. 1 is decorated with the Type 19. Some other examples have the straight comparatively developed Types 21 (FM. 190, 324, 325) and 22 (AM. 2). The double version (Type 27-28) is used once only (FM. 693)(Fig. 27:10-14).

10. Whorl-Shell (FM. 23) The Catalogue reads as follows: "Between the handles, panels of shell pattern or debased flowers in groups of three banded on the right by a series of slightly curved strokes". Very bad illustration.

11. Rock Pattern II (FM. 33). A new variety of Type 18 of this pattern combined with sea Anemone (variety of

1. Cf. BSA (1964) p. 253 (Mycenae, from the South Section).
4. Cf. for a similar (not identical) Type in Prosymna, fig. 372, no. 858.
Type 11) is used in the body zone of one jar, (BE.704) from Aigion. (Fig.27:17).

1. **Relief Decoration** consists of regularly distributed plastic knobs, which form three horizontal rows, occurs in the handle zone of the unique large jar (BE.673) found at Aigion (1970) and on many other sherds collected there and almost certainly belonging to similar vases. As in the majority of cases, known from Rhodes the handle zone of the Achaean jar is decorated with the LH.III flower (similar to Furumark's Type 61 or Fig.41A).

Finally there are other specimens either too worn for the design to be visible (PM.149,569,a/a 757) or totally undecorated (BE.19) while in the case of two other examples (a/a 792 and AM.8) no detailed description or good illustration is available to see design.

The rim of many pots has a reserved band on the flat or bevelled top and a few have this decorated with dots (PM.323) or Foliate band (PM.325,Baur, no.39, BE.673).

As regards the base of these jars, so far as I know, only one example (BE.661) has Spiral painted underneath, all the others painted solid black or dark-brown.

---

2. Cf. Ialysos, NT.7:1; ditto;GB.286:3; ditto;NT.50:1.
Fig 27. Piriform jars, decorative patterns
COMMENTARY.

The large 'Palace' style amphora of the LH.II period, continues in a modified form, in LH.III (Fig.26.4b), but though it is fairly common in the Argolid and more so in Rhodes, it was until recently altogether unknown in Achaea. So far, two such jars have been found at different sites there. One of them (BE.673) found at Aigion, is so similar to those known from Rhodes that we were led to wonder if it might not be an import from there or, at least, a very successful imitation of the Rhodian ones. In any case, they certainly must be contemporary, belonging to the LH.IIIA:2 (Cf. Levant, pl.II:4, Ialysos). The other one from Kallithea, (PM.623) seems to be later and judging by its context and shoulder pattern - the shape is earlier - it can be assigned with certainty to the transitional period LH.III B-C.

---

1. Cf. Ch.T, pl.XVII nos. 16,24; Prosymna, figs.305:701;351:790;357:769;425:157;529:1024; R.T.Dendra, p.107, fig.81:54, 55,56; N.T.Dendra, p.67:5 (fig.79); p.68 no.6 (fig.80); p.70 no.11 (fig.85); Asine p.359 no.1 (fig.233 no.1); pp.370,580 nos.5,6 (fig.248 no.2.3),7 (fig.249 no.1); Deiras, p.147, pl.XCVI:1 (all IIIB); Deiras, p.146 pl. LXVIII:1 (IIIIA:1).

2. See above, page 221.


4. See above page 221, note 2.

5. It was found among other finds in a LH.IIIB-C chamber tomb (Tomb B) (unpublished).

The small piriform jar occurs fairly frequently, the most common varieties being, as has been already stated,\(^1\) those of a piriform or conical-piriform outline. In general they do not differ in shape from other known examples occurring elsewhere in Greece.\(^2\) The shape belongs to the LH.IIIA:1 - A:2.1. period; for it is common among the Late Helladic pottery from Tell-el-Amarna, Berbati,\(^3\) Khalkis\(^4\) and Mycenae\(^5\) but scarcely occurs at all among the Kephallenia\(^6\) finds and at other sites\(^7\) which represent chiefly the latter half of LHIII. Of special interest is the cylindrical piriform jar\(^8\) (BE.661) from Aigion, a shape not hitherto known in Achaea.

So far as the decoration of these jars is concerned, it should be said that apart from some minor local variations, the decorative patterns are in general, similar to those

\[\text{References:}\]
1. See above, page 223.
2. E.g. Attica, BSA (1947) p.45, fig.19B and pl.12; Khalkis, BSA (1952) pl.21,22; Argolid, Prosymne, fig: 134:410, 369; fig:255: 644,643; fig:368:354; fig:454:125; fig:464: 154 etc, Ch.T.519, pl.XLIV, no.2; 525, pl.XLV, no.7, Asine p.403, fig:268: 5; Cyprus, BMC 445, 457, 458; Itallysoc BMA 823.
3. See above page 216 note 3.
6. Metaxata, one example, AE (1933) p.86 pl.1:B2; Nazarakata, three examples, Παραδοτική Αρχαιολογία - 356, fig:439,440; p.369 fig:465, Prokopata-Kazata, one example A.Delt,1919, p.114,fig.29:3.
7. Athens, Acropolis, Hesperia (1939) 317 ff; The shape is very rare (only 1 pot, no. 1155) in Perati (ΠΕΙΡΑΙΩΤΙΚΗ ΑΡΧΑΙΟΛΟΓΙΑ) Perati 6,199.
8. See above page 222.
recorded from other areas. What seems to merit special mention here, is the unusual facial design of horizontal Lily used in the individual jar (BE.661) and the relief decoration of plastic knobs found on the shoulder zone of BE.673.

It is difficult to say how late the shape persists in Achaea, since, in most cases, there is no stratification to help, but two late (IIIB2 – IIIC1 le) forms (PM.372, 3.623) do occur, while what seems to be, up to now, the earliest form (LH.II) is represented by the cylindrical piriform jar (BE.661) from Aigion.

5. Small Handleless Jars (Fig. 28 Pl.97-101).

This shape is represented by thirty-two specimens found on several sites of Achaea. The height of these pots averages 0.07 – 0.13m. and the body diameter 0.08 – 0.12, while their base varies between 0.037m. and 0.054m.

The fabric is of pinkish (e.g. PM.568,933) or yellow-buff (e.g. AM.20, BE.11) clay.

According to their shape they fall into three main groups:

1. Ovoid (Fig. 28 a-b). This is the most popular variety, comprising more than half of the total number (17

1. See above, pages 226-9 and notes.

2. Both this and the former jar (BE.661) come from our recent excavations at Aigion (1970).

3. My thanks are due to Dr. P.H. Stubbings for help in dating this pot.
examples) either of depressed ovoid (PM.168,170,166,171,341,342,568,447b, 692,703,709,717, BE.12) or depressed ovoid conical (PM.732,740, BE.10,13) profile.

2. Globular (Fig.28 c-d) To this group belong 10 examples of globular (BE.384, PM.449, Berlin 30767, AM.20,22) or depressed globular (PM.169,333,447a,933?, AM.21) outline.

3. Alabastron-like (Fig.28:e) This third group is less common, represented by four specimens only. (PM.156,157,167, BE.11). One handleless jar from Aigeira (Berlin 30772), has a biconical bulging shape. (Fig.28:f).

For decoration, one may distinguish four different groups:

1. Vases covered inside and out with brown-black (PM.157,168,341,447a,b, 717) or red-brown (PM.156,692,703,709) or black (PM.732,933?,171, AM.21,22) or yellow (PM.740) slip.

2. Decorated with stipple pattern all over the body - stripes on the neck and at the base (PM.170,166?,342,568,449 BE.10, AM.20).

3. Painted with simple successive encircling stripes (PM.167 333, BE.12).

1. Handleless alabastra (PM.442,161,162,335,340,589, a/a 785, 1069) which have three knobs instead of three horizontal handles, could be assigned here (Purumark's later Type 79) but, as their general outline and decorative patterns are closer to those of Alabastron-shaped jars, we preferred to examine these pots under the latter shape (see p.239).

2. Only the upper half of the body of this pot is stippled, the lower part being left blank. Perhaps more Achaean pots like this are decorated with stipple pattern, but in many cases, the decoration is worn off.
FIG 28. Small handleless jars, shapes and decorative patterns

(Scale not uniform)
4. Decorated with parallel chevrons (FM.58:33) on the upper body: (one example, Berlin 30767) only) (Pl.100a).

COMMENTARY.

The large number of examples of this shape in Achaea is impressive compared with the few isolated specimens found elsewhere in Greece.¹ All the Achaean examples correspond more or less to Purumark's Type 77.²

Almost all of them have a flat base,³ short neck and horizontal flaring rim. The shape, as has been rightly observed⁴ appears to have been influenced by the ostrich egg rhyton.

As regards the decoration of these pots, it may be observed that it follows in general the same principles of painting known from other areas. The stipple pattern⁵ used in seven examples is indeed striking, but not unknown elsewhere in Greece.⁶

1. Twice as many as those so far found elsewhere in Greece. Purumark (MF. p.596) knows eight examples only. We must now add to this number eight more specimens coming from: 1. Attica, FM.W. pl.XVIII.120 (Alyki); BSA (1947), p.47, pl.12:7 (Kopreza); 2. Khalkis, BSA (1952) p.74, pl.22 (Trypa T.VII); 3. Argolid, a) Prosymi, figs.109:210;110:219; b) Mycenae-Priftiani, ABA (1952) 24ff:fig.8 (where a detailed discussion about the origin of the shape by the late Mr. Charitonides); c) Deiras, p.163, pl.LIII:7 (IH. IIIIC.16); 4. Elis, A.Delt (1963) Chronika, pl.137e (Kladeos, Tomb 1).

2. MF. figs 5 & 11; page 596. 3. The only exceptions with a raised base being FM.166,170,568,692, BE.12 AM.22, Berlin 30767.):

4. Cf. BSA (1952) 74.

5. MP. p.423 where probable explanations of its origin.

6. For parallels Cf. BSA, (1947) pl.12:7; (1952) pl.22 no.471; (1964) p.245, fig.15; AB (1952) p.23 fig.8; Prosymi, figs. 109, 210; 110:219 etc. Four examples, (Mycenae, Ch.T.517:9; Asine fig.205:1; EM.4735 = C.499 = CVA, G.B. pl.224:25; Deiras, pl.LIII:7) banded all over the body belong to the later half of the LHIII period.
What appears to be quite uncommon and peculiar to Achaea is the parallel chevrons pattern (Fig. 28:g) found in a horizontal row in the shoulder of one pot from Aigeira (Berlin no. 30767) a usage of the pattern unknown to Purumark and unparalleled on other sites.

Finally, as to the persistence of the shape in Achaea, it could be said that it is known to occur at least until the late phase of the LHIII A and the early LHIII B periods, judging, in the former case, by the shape and pattern of the example from Aigeira with the parallel chevron pattern (Berlin no. 30767) and in the latter by another example (PM. 568) whose context is known.

6. Rounded Alabastra (Fig. 29-31 PIs. 102-110).

This is the second most popular shape in the Achaean repertory, comprising 78 examples found on almost every tomb-site excavated.

They vary considerably in size, the smallest being a vase of unknown provenance (PM. 346: 0.035 m. high) and the biggest one found at the rich cemetery of Klaus (PM. 264: 0.22m. high). The body diameter varies between 0.07m. and 0.23m.

1. But the great majority of the pots belong to LH.III A: 1 period.
2. It was found outside the Tholos Tomb B at Katakraktis (FAE, 1956, p. 195) together with two other pots (PM. 569, 570) which the excavator dated to the LH.III B period.
3. FAE (1937) 86: fig 4 (right)
The vases are made either of buff (e.g. PM.464) or pinkish-buff (e.g. PM.1069) clay.

As to the shape, they may be distinguished according to their form and to the shape of their mouth and base into three main varieties:

1. **FLAT** (Fig. 29:1) To this group belong five specimens of (a) flat (PM.464) or (b) high (PM.599, BE.552) or (c) medium (BE.14, 660) proportions. They correspond to Furumark's Types 82-84.

2. **COMPACT** (Fig. 29:2). The examples of this type amounting to 61.4% of the total number fall into two sub-varieties:
   b) **More Rounded**: nine examples (PM.374, 20, 153, 264, 154, 164, 570, 724, 336).

All the vases of the second variety correspond more or less to Furumark's type 85.

3. **GLOBULAR-BAGGY** (Fig. 29:3). Two sub-varieties may be distinguished:
   a) **With round base** (FS.86) Five examples (PM.23, 251, 673, Baur nos. 41, 43). Neck slightly splaying, three horizontal

1. **Stubbing's Type A**.

2. **Ibid. Type B.** The shape is found at most LH.III sites, e.g. Thebes, Khalkis, (BSA 1952, 72, no. 462A).
loop handles.

b) With flat base (FS. ?). Two vases: one from Vrachneika*(a/a 730) has a body sagging to the flat base and a flaring neck with two angled handles (Fig. 29:3b; Pl.108b); the other vase from Teichos Dymaion*(PM. 892) has also a flaring neck and two high round loop handles slanting obliquely outwards. Both these vases appear to be unique in Achaia.

4. HANDLELESS*ALABAstra (Tall)(Fig.29:4) To the above three main varieties, one more must be added, comprising 9 alabastra of globular-baggy shape, neck almost straight. The handles* are atrophied and in their place there are three knobs. (PM.442,161,162,335,340,689, a/a 785,1069, BE.401). For eight other examples (a/a 790,791,PM.16,252, 470,737, 338,339) we have no illustration or drawing, so that their shape is unknown.

1. It is described by Mrs. Vermeule in AJA (1960)8, no.21. pl.2; fig.15.
2. FAE (1962) 132, pl. 138b.
3. A probable handleless alabastron is recorded from Khalkis, BSA (1952) 85, pl.17, no.553G.
4. Usually there are three horizontal round handles, but there occur four examples with only two such handles: PM.892,785, a/a 750, AM.55. Alabastra with two handles are known from other sites as well, e.g. Khalkis, Papavasileiou, fig. 24e; BSA, (1952) p.77, pl.16. no.496; Thebes (eight examples in all).
FIG 29. Rounded alabastra, shapes
(Scale not uniform)
For decoration one may note that the lip, neck and handles of almost all pots are covered with paint, and there is a reserved zone between handles filled with several conventional designs.

In particular the following groups can be distinguished:

A. Covered all over the body with black\(^1\)\(^{(PM.160)}\) or dark brown \((PM.710,253)\) paint.

B. Painted with successive linear round stripes: \(PM.162,1069\).

C. Painted with rock-pattern I \((PM.32)\)\(^2\) round the base of the bowl and the handle zone usually filled with rows of strokes\(^3\) or dots\(^4\) or Sea Anemone motive \((PM.27)\):

26 examples, \((PM.435,436,465,18,464,17,164,250,373,334,19,713,724,16,18,19,470,737,AM.15,17,18,19,BE.14,401,552,660)\). All the examples, but one\(^5\) are variants of the simple continuous Type 5, though the exact outline of the rock varies and so the dots filling the background \((Figs. 30:1-7; 31:55)\). Almost all, with the ex-

1. Cf. Khalkis, \textit{BSA} (1952) \(80,pl.17,\) no \(524\)
2. \textit{MP}. fig. 54. Parallels almost everywhere in Greek sites, where this shape occurs.
3. \(e.g. PM.435\) \((in two horizontal rows)\). Cf. \textit{BSA} (1952) \(pl.17,\) no. 450A; \textit{Ch. T.} \(pl.LVII,\) 21, 22.
4. Set either in horizontal \((PM.373, AM.18,19)\) or vertical \((PM.17,250)\) rows. At least nine examples \((PM.18,19,164,464,465,713,724,BE.14 AM.17)\) have no fill ornament above the rock pattern. In Thebes alabastra with simple wave pattern tend to be LHIII in date.
5. \textit{BE.660} is decorated with Type 19 of this pattern, which \textit{Furumark} dates IIB on account of the blob.
ception of one pot (PM.250) have band(s) below the main pattern on the lower body near the base.


The following handle-zone patterns occur: (Fig.30-31).
1. Sea Anemone \textsuperscript{1} (FM.27). Types 15 and 17 combined with rock-pattern I are found in four examples: (PM.334, 436, AM.15, BE.552. (Fig.30:6).

2. Diaper Net (FM.57). The second most prevalent design, after the rock-pattern I. Type 2 of the pattern is used in 13 examples (PM.22, 158, 264, 741, 159, 346, 347, 66, 20, 696, 702, 338, 673). In almost \textsuperscript{2} all specimens it is well drawn, and in one case it reaches well below the handles. (PM.702). (Fig.30:8).

3. Quirk (FM.48). This pattern occurs in three pots only: variety of Type 5 in double horizontal rows is found in the handle zone of PM.155; Type 5 in AM.12, while another unknown \textsuperscript{3} version of the motive is used in PM.154. (Fig.30:9-10).

\textsuperscript{1} Of Khalkis Op. cit. p.63, figs(2:8 and pl.17, no.402E; Ch.T. pl. LIII:7. \textsuperscript{2} PM.338 and 673 have been assigned here only on the basis of the description of the Patras Museum Catalogue, as no illustration of them is available. \textsuperscript{3} No illustration available.
4. **Isolated Semicircles (PM.43).** There are at least seven examples of this pattern used in the handle zone of the Achaean alabastra: on one (PM.153) pot, type a occurs; Type 1 is found in the upper zone of the handleless alabastron PM.161, its lower zone being decorated with spiral (Type?). A new version of the pattern, set in two vertical rows and bordered by single wavy lines is used in PM.345, (Fig.30:29) while Type d and 2 (early) are drawn below the handles of the same jar, and those of PM.347 respectively. Another, hitherto unknown version of this pattern is found in the upper part of the handle zone of PM.339, the lower part being covered by trefoil rock-work (PM.29, Type?); Type 16 (but upside down) is found in Baur, no.41 and Type 22 on an alabastron-sherd from Teichos Dymaion. (Fig.30:11-15).

5. **Foliate Band (PM.64).** It occurs on five specimens: One (PM.442) has Type 28; two others (PM.332, AN.55) are painted with Type 14 and two other pots (PM.479, 476) with the straight simple Type 20 (Fig.30:16-18)

---

1. Vermeule describing this pot (AJA.1960.p.8) speaks of "a local version of isolated semicircles under the influence of solid filling fashion". Cf. similar, Khalkis, RSA (1952) p.84, fig.5:41, no.541).

2. Not illustrated.


4. And one alabstron-sherd from Teichos Dymaion, Cf. Ibid.
6. **Stemmed Spiral (FM.51).** A new version of this pattern\(^1\) (variety of Type 20) is used in PM.369 (Fig.30:19). It is very carefully drawn.

7. **Wavy Line (FM.53).** There are three\(^2\) examples of this pattern: Type 13 occurs in PM.336 and Type 28 in Baur no.43, while an unusual and new version of this pattern is found on one vase from Patras (PM.599): groups of successive horizontal wavy lines bordered by two thin isolated semicircles (Fig.30:20-23; 31:34).

8. **"N" Pattern (FM.60)** It occurs once only (Type 1) in the individual pot from Vrachneika (a/a 730). (Fig.30:24).

9. **"U-Pattern"(FM.45).** The pattern, Type 4, occurs in the handle zone of one pot (PM.165), while Type 1 (upside down) is found in an alabastron-sherd from Teichos Dymaion.\(^3\) (Fig.30:25-26).

10. **Triangle (FM.61A).** There are two handleless alabastra decorated with this pattern: Type 1 in PM.340: Type 5 or 7 in PM.335. (Fig.30:27-28).

11. **Panelled Patterns (FM.75)** The two-handled alabastron from Teichos Dymaion (FM.892) is decorated with an individual

---

1. Spirals do not often occur on alabastra. There is none in Thebes but there are spirals on three alabastra in Khalkis (BSA, 1952 p.63, fig.2:3, nos. 402Δ, 450B, 553A and sherds from Vromousa I (423)); cf. also Talyssos, BMC.I, A613; Sieveking and Hackl, no.36.

2. To these must be added two alabastron-sherds from Teichos Dymaion, see above, p. 243 and n. 3

3. Ibid.
version of this motive, not illustrated in Furumark's designs: connected multiple chevrons are bordered by two panels of thin horizontal wavy lines (Type 5?) (Fig. 30:30).

12. **Zig-Zag (FM.61)** This pattern (Type 1) occurs only once (FM.344) (Fig. 30:31).

13. **Parallel Chevrons (FM.58).** It is also used (Type 17) only once (AM.16) (Fig. 30:32).

14. **Joining Semicircles (FM.42)** Type 22 (triangular patch) is found in one alabstron-sherd from Teichos Dymaion.1 (Fig. 31:33).

Underneath the base are painted either concentric circles2 e.g. FM.158,163,713 or an isolated spiral3 e.g. FM.161,162,335. The "wheel"4 pattern (Type 2) occurs only twice (FM.464, BB.660). There are also some pots the decoration of which is too worn to see design: FM.437,437a,b, 23,183,1252,1124,21,374,251,570,710,711,a/a785.

---

1. **RAE (1965) pl.161b.**


4. MP. mot.58, no.2. (compare with those found at Khalkis, where this pattern is quite frequent and its number of spokes varies (BSA,1952,p.66.no.426A etc).
FIG 30. Rounded alabaster, decorative patterns.
FIG 31. Rounded alabastron, decorative patterns (continued)
Commentary

This shape (Purumark's Squat Jar), is, as has been already stated, very common in the Achaean repertory. Examples of the first and second varieties find parallels elsewhere in Greece, but a few tall, rounded specimens (e.g., PM.264) are almost unparalleled and peculiar to Achaean.

What seems to be another local peculiarity is the presence of the handleless alabastra, an unusual shape in other areas. The individuality of shape of two other pots (a/a 730 and PM. 892) has already been mentioned. So far only one flat alabastron (PM.464) has been found there.

---

1 e.g. Mycenae, Ch.T. pls. XXVII,XXXIX,XL,LXXII,XXXIII,XXVIII,LI, LIII,LVII; Attica, BSA (I947) pl.II; Khalkis, BSA (I952) pl.I5,I6,I7,I8; Prosymna, figs. I04,I05,I06,I11,I25 etc. Ialysos, Levant, pl.I:8,4; Cyprus, Levant, pl.VI:4.

2 This unwieldy shape, is an outsize version of the LH III alabastron. Cf. Prosymna, fig.254, no 731, (H.O.123); RA 3e Série, XXXVII I38, fig. 15, from Livatho in Kephallenia (H.O.15); Khalkis, BSA (I952) p.76, nos 436 and 541 (H.O.16; 0.23).

3 Cf. BSA (I952) pl.I7, no 553G.

4 See above, page239.

5 It has been well described by E. Vermeule in AJA (I960) 8, no 15.
As to the decorative motives one should observe the popularity of the rock pattern I and diaper net pattern. But the presence of some other unusual designs, such as triangles, concentric semicircles or panelled patterns (PM. 892) betrays a late date for those pots where they are found.

Judging from the shape and decoration of the Achaean alabastra we can say that they were made there continuously from the LH IIB until the early LH IIIC period. In most other areas (e.g. Mycenae, Khalkis) the shape hardly survives the LH IIIB period, while it is entirely unknown in some LH IIIC sites, such as Perati and Palace of Nestor. But the shape is fairly commonly found in Kephalenia.

Type 19 of this pattern occurring in Be. 660 was until recently (1970) unknown in Achaean. Variations of the pattern are to be found at most LH II sites; Mycenae, Ch.T., pls.XVII, nos.2,3; XLVIII, no 12, where alabastra which have a dotted edge to the wave pattern usually have the dots repeated below the neck; Prosymna, fig. 687, no II67; fig. 207, no II68; sherds from the Aspis, BMC, vases I i,A 797; Asine, fig. 270, nos 4-7; Berbati, p.74, fig.53;10 (Tomb XII); Dendra, N.T. 26, no 9; Athens: Graef I, pl.3, no 72a; Thebes: 428 (Kolonaki, T.26, no I6); 441 (ibid., no I9); 442 (ibid., no I8); 459 ( Hagia Anna T.2, no I7); 462 (ibid., no I4; AE I9I0,figs.17,18b); 503 (Kolonaki T.14, no II); 521 (ibid., T.9, no 9, A.Delt.III (I9I7), fig.107); 531 (Ismenion, T.3); 549 (ibid., T.2, no 7); Khalkis, BSA (1952) p.65 nos 4I4B; 426A; 542Γ; 492A, 450Γ, 553B.

1 Type 19 of this pattern occurring in Be. 660 was until recently (1970) unknown in Achaean. Variations of the pattern are to be found at most LH II sites; Mycenae, Ch.T., pls.XVII, nos.2,3; XLVIII, no 12, where alabastra which have a dotted edge to the wave pattern usually have the dots repeated below the neck; Prosymna, fig. 687, no II67; fig. 207, no II68; sherds from the Aspis, BMC, vases I i,A 797; Asine, fig. 270, nos 4-7; Berbati, p.74, fig.53;10 (Tomb XII); Dendra, N.T. 26, no 9; Athens: Graef I, pl.3, no 72a; Thebes: 428 (Kolonaki, T.26, no I6); 441 (ibid., no I9); 442 (ibid., no I8); 459 ( Hagia Anna T.2, no I7); 462 (ibid., no I4; AE I9I0,figs.17,18b); 503 (Kolonaki T.14, no II); 521 (ibid., T.9, no 9, A.Delt.III (I9I7), fig.107); 531 (Ismenion, T.3); 549 (ibid., T.2, no 7); Khalkis, BSA (1952) p.65 nos 4I4B; 426A; 542Γ; 492A, 450Γ, 553B.

2 Cf. Khalkis, BSA (1952) no 514, fig.3:3I; Olympia, MPI. pl.I6, nos: 5,6.

3 See Catalogue appended at the end of the chapter (PM. nos. 155, 159, 345, Baur no 4I and all (9) handleless vases); Cf. BSA (1947) pl.I2 no 8; (1952)85, pl.I7, no 553 G; Hesperia (1939)386, fig.66b.

4 e.g. Lakkithra, TombΔ; Metaxata, Tombs B,Γ.
7. **Square-sided Alabastra [Figs.32-35 Pls.110-118]**

The shape is almost equal in popularity to the rounded version in Achaea, comprising 73 examples in all. There is considerable variety of size; some are as much as 15 (PM.179) or 16.5 cms. (PM.385) high, others not more than 3.5 cms. (PM.45, AM.56). Body diameters average 0.10 - 0.14, with a maximum of 0.16m. (AM.9). They are made either of buff (e.g. PM.355) or red-buff (e.g. PM.36) clay.

The small examples, not always but frequently, have only two handles, rather than three (e.g. Pl.115, PM.640, 617, 37, 469, 34, 328, 712, 869, AM.54, 56). Taking into account variations in form and in the shape of their mouth and base we can distinguish the following groups:

**Cylindrical** (Fig.32:1). To this group can be ascribed all those vases corresponding more or less to Furumark’s Types 92-94.

(a) FS.92: Only one example (BE.699).

(b) FS.93: Twelve examples (PM.33, 38, 32, 331, 471, 31, 439, 691, 694, 700, AM.9, BE.703).

(c) FS.94: Twenty six examples (PM.39, 37, 438, 385, 466, 869, AM.11, 13, 14, 34, 59a, 10, Berlin.30764, 30765, BE.15, 16, a/a788).

Cylindrical body, sloping rounded shoulder, low concave neck, splaying to sloping rim, flat or slightly convex bottom; horizontal round handles either three or two opposite (e.g. PM.869). Height always greater than diameter. It is the most frequent type (nearly 50% of the whole). It is not always possible to distinguish between examples of Types 93 and 94.

---

1  Stubbings's Type C; Iakovides's Type B.

2. **Compact.** (Fig.32-33:2). The second most popular variety, comprising 21 examples and corresponding to Furumark's Type 96: (PM.640, 1068, 181, 163, 617, 35, 469, 34, 257, 328, 329, 712, a/a549, a/a745, AM.54, BE.394, 422, 402, 393, 427, 550). They are usually taller than those of the preceding group. Lower part straight; high splaying or spreading neck; flat, or sometimes convex bottom; two opposite round horizontal handles on the shoulder, placed in a line with the sides at the angle between the lower and upper part of the body, but usually turned slightly outwards.

3. **Based** (Fig.33:3). One example only (BE.428). Shape as preceding but this has a low ring base and two round horizontal handles. It corresponds to Furumark's Type 97.

4. **Side-handled** (Fig.33:4). This Type (Furumark's Type 98) is again represented by one example only (PM.178). Height greater than diameter; straight-sided cylindrical body, flat base; short collar neck; two opposite horizontal handles round and oblique.

5. **Legged** (Fig.33:5). To this group (Furumark's Type 99) belong 5 examples: (PM.182, 263, 355, 800, AM.56). Shape as preceding, though in most vases the sides of the lower part are slightly concave; three short legs either grooved (e.g. PM.355) or flat (e.g. AM.56).

6. **Handleless** (Fig.33:6). Two specimens only (PM.45, 180). Shape as in group 2 (new variety of Furumark's Type 96?). The latter pot (PM.180) has, just at the angle of the profile, three small warts instead of three handles.

---

1 Iakovides' s Type C.
2 There are a few exceptions with low cylindrical body (e.g. PM.640, 617).
3 e.g. PM.35.
4 Many such pots with ring base have been found in Kos (Langada), cf. Annuario(1965-66)figs.72 no.25; 175 no.128; 263 no.217; 297 no.254. See also Perati B, p.207, fig.79 (nos.63, 775, 1097).
FIG 32. Square-sided alabastra, shapes

(Scale not uniform)
FIG 35. Square-sided alabastra, shapes (continued);
Alabaster pyxis, shape.  (SCALE NOT UNIFORM)
7. **Unusual Type** One pot found recently at Teichos Dymaion (PM.785) is unique in shape, as it stands between the round- and straight-sided alabastron (Pl.118b). Three pots (PM.179,861,862) are not illustrated and the description of the Patras Museum's catalogue is inadequate for any certain classification.

So far as concerns the decoration of these pots, it should be observed that, as on the rounded alabastron jars, neck and handles are painted solid black or dark brown. Only a few examples have their handles barred¹ (PM.355,AM.54,56(?),BE.402,393,427,550) while those of BE.394 are painted with zig-zag (PM.61:2?). This pot (BE.394) has the inner surface of rim painted with two bands.

A rather unusual feature and unique in the Achaean square-sided alabastra, is the painting of the lip of one pot (PM.32) with groups of strokes. (Pl.110g)

As for the shoulder and cylindrical body, three main systems of decoration may be distinguished:

A. **Banded all over** (shoulder and body): 9 examples (PM.35,34,257,328,329,712,a/a549, BE.394,422). This system of decoration is popular in Achaea, occurring also in other shapes, such as 2- and 4-handled-jars, stirrup-jars, amphoriskoi, but square-sided alabastra with linear decoration only are fairly uncommon² elsewhere in Greece.

B. Banded on the vertical sides - shoulder zone filled with the following designs: (Figs.34-35).

1. **Diaper net (PM.57:2)**: 11 examples (PM.32,37,38,438,370,31,439,700,a/a788,AM.9, Berlin 30765). [Fig.34:1].

2. **Foliate band (FM.64)**: Type 21 occurs in eleven examples (PM.163,385,331,440,30,467,468, BE.427, 691,AM.11,34); a new variety of Type 19 is used in AM.34; Type 20 is found in two examples (PM.257,466 and PM.861?);

---

² Of. BSA(1965) p.186 (Mycenae "The Terrace below the House of Shields"); only one such pot with linear decoration was found at Khalkis (BSA,(1952)pl.18, no.461). But many two-handled square-sided alabastra from Kos (Annuario,1965-66,pp.7-311,figs.24:348:67 no.14;72 no.25;87 nos.281,285,279,278;175 nos.124,128; 276 no.230;297 no.251) bear linear decoration only.
Type 27 is used only once in BE.428. Generally this is
the most prevalent pattern of all in Achaea, as in many
other areas.  

3. **Wavy line (FM.53)**: Type 5 of this pattern occurs
in three pots (PM.33,39,181);
Type 33-34 in two other examples (AM.13 and 56 (body).

4. **Parallel chevrons (FM.58)**: Type 32-33 of this pattern
is found in three specimens
(PM.640,377,AM.14); Type 37 only once (PM.869).

5. **Bivalve shell (FM.25)**. This pattern (Type 28) occurs
only once (PM.178).

6. **Concentric arcs (FM.44)**. Type 8 of this pattern occurs
in BE.15, while Type 3 in
PM.36,AM.59a. This pattern used as a decorative design
on this sort of pot is unknown elsewhere in Greece.

7. **Running Spiral** (FM.46). A quite new version of this
motif is found on PM.694;
Type 54 occurs on BE.393. The pattern appears to be unique.

8. **Curve-STEMMED Spiral (FM.49)**. This pattern (Type 10)
occurs only once (BE.16).

9. **Isolated semicircles (FM.43)**. The fringed version of
the pattern, so common
on the Achaean vases, is used on one example (PM.695).
It is nicely executed, and remains unknown elsewhere in

---

1. Cf.e.g. Attica, BSA(1947)pl.11:7,8; Khalkis, BSA(1952)
pl.18 no.469B; Perati B,pl.76a, no.154; Prosymna,fig.153:
494;403:838;572 no.761; Olympia-Diasela, BCH (1956),
p.576,fig.9 etc.

2. It covers also half of a part of the shoulder of AM.13.
Cf. Annuario (1965-66),p.72,fig.42 no.379.

3. Ibid.p.239,fig.263 no.219; Perati B,p.208,fig.80 no.382.

4. In other areas it is usually found in the body-zone,
e.g. Khalkis, BSA(1952)pl.18 no.451A.

5. But it is relatively common elsewhere in Greece,e.g.
Khalkis, BSA(1952)pl.18 no.451.Fand Mycenae, BSA(1964)
p.252 (body-zone); Prosymna,fig.109:212; and Rhodes,
BM 815,816 (shoulder-zone).
1. Lozenge (FM.73). The LH.IIIA Types b and e occur simultaneously on the shoulder-zone of the handleless alabastron PM.180. [Fig.34:17].

2. Quirk (FM.48). One pot is decorated in the shoulder-zone with Type 18 of this pattern. (BE.550). [Fig.34:18].

3. Triangle (FM.61A). Type 1 of this pattern is used just under the handles of AM.9. [Fig.34:19].

4. Curved Stripes (FM.67). Type 3 being carefully executed, occurs in PM.471. The pattern is not unknown in other areas. [Fig.34:20].

5. Tongue Pattern (FM.19). Type 22 is found in the shoulder-zone of Berlin 30764 while Type 37 in PM.785. [Fig.34:21-22].

6. Panelled Patterns (FM.75). AM.54 has an unusual panelled pattern nowhere found in Furumark's motifs. [Fig.34:23].

C. Decorated all over (shoulder and body). The two-zone system of decoration is not common in the Achaean examples, occurring only on seven vases most of which (five) are of the legged form (PM.182, 263, 355, 800, 469, AM.56, BE.402).

7. PM.182 (legged) (Fig.34:24). Just at the angle between the upper and lower part of the body it is decorated with a new variety of Foliate Band (FM.64:287). On body concentric arcs (Type 10).

---

1. Langada, Annuario,(1965-66)p.89, fig.67 no.15.
2. Cf. for parallels Annuario(1965-66)p.266 fig.297 no.254 (but Type 5).
3. e.g. Khalkis, BSA(1952)pl.18 no.428; Thebes K.T, 14, no.16.
4. BSA(1952)pl.18 no.520A, 415, 526, 451A, B, , Prosymi, fig.109:212; Mycenae, BSA(1964)p.248; Rhodes, BMC.A 815, 816.
17. **PM.263** (legged): The shoulder is painted with a chain of four double-axes on either side (FM.35:14); on body unusual panelled pattern, consisting of vertical stripes which form panels for parallel arcs. It is not illustrated in Furumark's motifs and appears to be unique. [Fig.34:25;35:26].

18. **PM.355** (legged): Shoulder decorated with concentric arcs (FM.44:12); body painted with a carefully drawn but otherwise unusual panelled design (FM.75:?): Alternating panels of four converging hatched triangles, four concentric semicircles in corners with semicircular bridges. [Fig.35:27].

19. **BE.402**: Chain of lozenges (FM.73:? a new variety of Type 3) on shoulder; On either side of the body different versions of the same pattern: Front side painted with Antithetic Spiral pattern similar but not identical to PM.50:19; Back side covered with a new type of the same pattern (similar to Types 15 or 16). This body pattern occurs mainly on kraters and deep bowls, but it is quite unknown and uncommon on alabastra elsewhere in Greece. Thus this pot appears to be unique in having such an unusual decoration. [Fig.35:28-30].

20. **PM.800** (legged): The shoulder, which in all probability was decorated, is missing; On body panelled pattern (FM.75:?) very similar to that of PM.355, with the only difference that this pot has one more panel filled with wavy line (FM.75:18). [Fig.35:31].

21. **PM.469**: This vase is painted all over the shoulder and body with net pattern (FM.57:2). [Fig.35:32].

22. **AM.56** (legged): The shoulder design is worn off, but on body one can recognise vertical wavy lines, similar to those used in AM.13 (shoulder). (FM.53:37). [Fig.34:7].

---

1 Both this pot and the succeeding one (PM.355) are fully described by E. Vermeule in *AJA*, (1960)p.9 (nos.25,26).

2 I owe this observation to Mr. M. Popham.

FIG 34. Square-sided alabaster, decorative patterns.
FIG 35. Square-sided alabastra, decorative patterns (continued)
23. BE.703 : Shoulder covered with net pattern
   FM.57:2); body with deep wavy line¹

(Type 4).

Finally in some examples (FM.466,AM.11,14,34,59) the
greater part of the sides (body) is left unpainted,²
while one small example (BE.699) is painted³ all over
with smeary black paint.

The base is usually decorated with concentric
circles (FM.163,181,etc.).

Commentary

The shape, which is certainly a variation on that
of the ordinary alabastron with curving profile, is one
of the most popular in Achaea.⁴ They usually have a
curved base, but the flat and low ring base are also
found. But what appears to be a clearly local peculiarity
is the presence of legged specimens,⁵ a feature known
also in some other areas,⁶ but less popular. They must
be certainly regarded as a local product, since we know
from other shapes (stirrup-jars, duck-askoi) that the
Achaean potters were fond of mounting their pots on legs.

---

1 Cf. Khalkis, BSA(1952)pl.18 no.451; Prosymna,
   fig.109, no.212.
2 Cf. Attica, BSA(1947)pl.11 no.9.
3 Cf. Langada, Annuario (1965-66) figs.113 nos.62,
   61;194 no.149 (brown or red-brown paint.)
4 The shape is also "reasonably common" in Kephallenia,
   see LMTS,p.105.
5 E. Vermeule commenting on these pots says that
   "this is a fairly common habit on the west coast,
   occurring also at Tragana (AE,1914,pl.108,fig.13.
   LH.IIIC:11) and on Kephallenia" (AE,1932,pl.10
   nos.146,pl.11 nos.171,172, Lakithra, Tomb Δ),
   while Desborough suggests links with Attica
   (SM.-PG.) or even Crete LMTS,p.100, note 5.
6 Parallels come from: 1) Attica, a) Koporza, BSA(1947)
   pl.11:12; b) Perati B,pp209-211,fig.81 nos.404,783,
   961 and 1114; c) Salamis, A.Delt.20 (1965)Chr.pl.98
   2) Thebes, A.Delt. (1917)fig.109 (K.T.10); 3) Elis-
   Trypes, A.Delt.19 (1964)Chr.pl.1865; 4) Kos-Langada
   Annuario, (1965-66)pl.272,fig.310 nos.293 and 277.
   To all this must be added the examples cited by
   Furumark (Mf.,p.600,shape 19, Type 99) coming from
   Ialysos, Kalymnos, Asine and Ligori.
Small examples either with three or two round horizontal handles and corresponding to Furumark's Types 93-94 are not uncommon here and they find parallels in many other areas. The relatively large number of pots corresponding more or less to Furumark's Type 96 is very striking. This variety appears to be more popular in the region of Aigion, where a local version of the form is observable.

It is possible that one can assign to this type a small vase from Teichos Dymaion (PM.785), which is unique in shape, as it stands between the round- and the straight-sided alabastron.[pl. 118.b]

Another individual pot (PM.180) with three small warts instead of handles, appears to follow the general trend of the local style.

The individuality of two other pots PM.178 and BE.428 has already been mentioned.

As to the peculiarities in decoration, one may note the occurrence of some decorative patterns, such as lozenges, parallel chevrons, bivalve shell, panelled patterns, which are known to be used more frequently on

---

1 Cf. MP., p.99, Shape 19, Types 93-94. (Examples from Egypt, Palestine, Cyprus, Thapsos, Dodecanese, Thessaly, Attica, Thebes, Argolid, Cyclades, Euboea, Aigina, North Slope of Acropolis (Athens) and Vourvatsi). To this must be added some more from a) Kos-Langada, Annuario (1965-66) fig.67,72,85,87,94,175,194,269,271,276,297; b) Pylos, Palace of Nestor I, Shape 64, p.402-403,pl.585,586 no.470,464; c) A. Elias Ithorias, PAE(1963)pl.166a; d) Naxos, PAE(1960)pl.275; e) Khalkis, BSA(1952)p.58,pl.58. Lefkandi,p.19,fig.35; f) Attica, BSA(1947)p.43,fig.18c,pl.11:4,6,7,8,11,13,14; and PAE(1954)p.77; Perati B,p.207-209,fig.B; g) Laconia, A. Ioannis-Menemvasia (A.Delt,23 (1968) p.180,pl.78 nos.61 and 63; h) Euboea-Limni, BSA(1966) p.108,pl.22c (FS.93).

2 It hardly finds parallels elsewhere in Greece, e.g. Elia-Types A.Delt(1964)Chr. pl.185e; Kos-Langada, Annuario (1965-66) figs. 24, no.348; 85 no.112; 87 no.278; 94 no.31,35,11; 175 no.124,123; 297 no.251; See also ME., p.600, Shape 19, Type 96 (nos.1-8,13,15).

3 Warts instead of handles are found also in some other Achaean Shapes, such as two-handled jars, rounded alabastra, amphoriskoi.

4 See above, page 251 and note 4.
other shapes, but which are uncommon on the square-sided alabastra in other areas.

It may be specially noted that the use of fringed concentric semicircles in at least one case (PM.695) appears to betray both the fondness of the Achaean potters for this design and the late date of the pot.

Some more remarkable and unique decorative new features are: a) the usage of antithetic spiral pattern on the body-zone of BE.402, which, as stated above\(^1\) is common/kraters and deep-bowls but not on straight-sided alabastra of any kind. b) the ladder-like design on the shoulder-zone of AM.54. c) the panelled designs of double-axe (butterfly) and the parallel arcs both used in one and the same pot (PM.263) and d) the concentric arcs (Types 3,8,12) found in four pots (BE.15,PM.36, AM.59a,PM.355).

Apart from this, net pattern and Foliate Band, in their various versions, are the most prevalent designs on the Achaean examples, as they occur elsewhere in Greece.\(^2\)

The system of covering the vase all over with successive bands is less common\(^3\). Lastly one pot (BE.699) appears to be exceptional in being painted all over with smeary black paint.

There is no doubt that the shape had a long life, as the earliest example (BE.699) goes back to LH.IIB period and continues to be made in Achaea until the latter half of the LH.IIC period (PM.263). It should be stressed, however, that the great majority of these vases belong to the LH.IIIA and IIIB periods.

---

1 See above, page 257 note 2.

2 Cf. for parallels of A) Diaper Net: a) Attica, BSA(1947)pl.11:9 and 13; Athens, Acropolis N.Slope, fig.391b; Perati B,p.208,fig.30(4) nos.1093,99,290, 674,378; b) Palace of Nestor I,figs.385,386 no.410; c) Prosymna,figs.357 no.771,472 no.931,572 no.1168; Euboea, (Limni) BSA(1966)pl.22c; Schoinochori T.E.:25; Ialyssos, BMA 817; ditto N.T. 17:25 B) Foliate Band see, above page 255 and note 1.

3 See above, page 254 and note 2.
Narrow-necked jugs (Oinochoe) \(^1\) [Figs. 36-37 Pls. 118-122]

So far thirty two examples have been found in Achaea, coming mainly from tomb-sites.\(^2\) They exhibit no little variety in details and in size, which varies between 0.045m. (AM.58) and 0.29m. (a/a729) in height. Variations in the colour either reddish (e.g. PM.729) or buff (e.g. PM.697) and quality of clay and paint \(^3\) black (e.g. PM.458) or usually brown (e.g. PM.391) are also observable.

As regards the shape of these vases, one has to take into account variations in the shape of the body, neck, rim and base as well as the placing of the vertical handle, in order to distinguish the following main groups: \([\text{Fig. 36}]\)

1. **Narrow-necked jugs — handle from rim to shoulder** (FS.118): Seven examples; These vases have a depressed globular (PM.244,371,698,699, AM.58), or Squat Globular (PM.458) or biconcial \(^4\) (PM.172) body, resting on a ring base; tall, slender narrow neck; perpendicular handle extending from rim to shoulder.

2. **Narrow-necked jugs — handle from below \(^5\) rim (FS.120-3):**

   The most frequent type, amounting to more than half of the total, consists of seventeen examples. These jugs are of three different shapes, but common to them all is the placing of the handle below the rim: a. Biconical (a/a762, PM.697) or Globular-conical shape (FS.120); Raised or ring base, usually higher than on preceding (PM.648,173,424,771,779,a/a729,a/a786,AM.76). b. More or less perk-ed-up globular shape (FS.121-2): PM.348, 391,618. c. Globular (FS.123): PM.174,637,729,EE.382.

---

1. Cf. BSA(1947)p.51 for the probable origin of these jugs ("partly from late stirrup jar types").
2. Three examples (PM.908,a/a786,PM.779) come, however, from a habitation site (Teichos Dymaion).
3. Cf. Deiras, pl.LVIII no.6.
4. Cf. Deiras, pls.LIV no.8;LXIV no.1;LXXXV no.8; LXXXVII nos.1,2; Prosymma,figs. 131 no.888;327 no.847; 557 no.972; Kephalenlia, (Lakkithra) AE(1932)pl.5 no.23;pl.7 no.67,68; (Metaxata) AE(1933)p.84 fig.30: B6,B4; Kos, Anuario(1965-66)figs.120 no.67;214 no.166; Attica, BSA(1947)pl.14:10.
5. It has an angular-conical profile.
6. Cf. MP.,p.604 (FS.122); Mycenae, Ch.T. 517:49.

\(^{4a}\) This vase has a baggy shape with a wide raised base.
3. **Globular jug with cut-away neck (FS.136):** One example only (PM. 254).

It is of globular-conical shape with concave cut-away neck, perpendicular handle from rim to shoulder and has a ring base.

4. **Globular jug with pinched rim (FS.137):** One specimen: PM.908, from Teichos Dymaion, has perked-up globular profile; trefoil mouth; round perpendicular handle from rim to shoulder; raised base.

5. **Low-beaked jug**\(^3\) (FS.144-146): Three examples. Ovoid-conical (Berlin 30768) or globular (AM.24) or depressed-globular (Berlin 30769) shape. Raised (AM.24) or flat base. The **Berlin** examples have ledge at the base of the neck; beak and rim forming a curve (AM.24, Berlin 30769) continued by the arched round flattened handle. At least one (Berlin 30768) of them has a pseudo-rivet\(^6\) at the base of the handle.

Three more narrow-necked jugs (PM.197,537,613) cannot be assigned to any of the above groups, since we have no illustration or drawing of them, and the description of the Patras Museum catalogue is brief and not detailed enough to permit any classification.

As for the decoration of these vases three main systems are easily distinguishable:

A. **Painted all over the body with solid black or brown paint:**\(^7\) Eight examples (PM.174,197,537,697,908,AM.58,76).

---

1. Cf. for parallels: (a) Berbati; T. I, no.2; T. 11 no.11; (b) Mycenae, Ch.T. 535 no.18; (c) Asine, T. 1; ditto, T. 7 no.10; (d) Deiras, pl.XLIX no.6; pl.LIV no.5; pl.LVI no.1; pl.LXIII no.3-4; pl.LXXX no.7; (e) Prosymna, fig.126 no.257,256; fig.150 no.1050;174 no.309;173 no.312;252 no.862;305 no.747;328 no.768 etc.; (f) Kephallenia (Lakkithra) AE(1932)pl.5 no.22;pl.12 nos.227,229; (Metaxata) (1933) page 82,fig.26:A:1; (g) Attica, BSA(1947)pl.14 no.9;15 no.1; (h) Ialyssos, N.T.28 no.10; ditto, N.T.53:10.


3. Stubbings's Type B.


7. Monochrome examples are generally rare: Cf. e.g. Perati B, p.246 nos.853,1105 and 1109 (out of 62 specimens in total); Deiras, p.191,pl.LVIII no.6.
1. Various Narrow-Necked Jugs (FS 118)

2a Narrow-Necked Jugs, Handle from Below Rim (FS 120)

2b (FS 121-22) 2c (FS 123) 3. Globular Jug with Cut-Away Neck (FS 126)


FIG 36. Narrow-necked jugs (Amorcas), shapes

(Scale not uniform)
B. Painted with successive round stripes all over the body: 1 Three examples (PM.176, 771, 779).

C. Painted with stripes encircling the lower body and the belly; rings of paint around the lip and the base of the neck; Shoulder decorated with several linear designs, usually very similar to those of stirrup-jars: Twenty one examples. The decorative patterns are illustrated in Fig. 37 and have as follows:

Multiple stem (Type 64?) occurs only once (PM.244) [Fig.37:7].

Joining semicircles (FM.42:4) combined with simple concentric semicircles (FM.43:d) are used on a/a729 [Fig.37:14].

Isolated concentric semicircles 2 (FM.43). It is the most popular pattern in the narrow-necked jugs, as in stirrup-jars. It is used in the simple (PM.424, 648) or dotted (PM.348) or fringed (PM.172) versions. [Fig.37:8, 10, 2, 3]. Connected semicircles (Type 32) occur in two examples (PM.391, EE.382), drawn in a very similar way to those found in some Achaean stirrup-jars. 3 [Fig.37:6, 7].

Concentric arcs (FM.44:11). It occurs only once (a/a762) combined with a circular fringe around the ring of the base of the neck. [Fig.37:15].

Running Spiral 4 (FM.46): Type 49 of this pattern, with an accessorail fill of triangle, is found in one pot (PM.458); Another pot (PM.729) is decorated with an unusual type of the same pattern, not illustrated by Purumark. [Fig.37:9, 13].

Wavy line (FM.53). The LH.IIIB vertical version (Type 32) occurs as a sole decoration on the

---

1 Cf. Perati B, p.246, nos. 380, 403, 409, 1171, 449, 1036, 306; Deiras, pl.LXXX, no.7; Berbati, p.23, T.I no.2; T.12, no.12; Prosymna, figs. 126 no.256; 173 no.312; 252 no.862; Kephallenia, (Lakkithra) AE(1932)pl.5 no.22; pl.7 no.68; 12 no.227.

2 Cf. Kephallenia (Lakkithra) AE(1932)pls.5 no.23; 8 no.112; Salamis (Styrenius) pl.IV, no.30621.

3 e.g. FM.389, 390, 63, etc.

4 Cf. Mycenae, Ch.T. 524:21; Prosymna, figs. 126 no.257; 150 no.1050; 251 no.667; Khalkis, BSA(1952)pl.24 no.437; Deiras, pl.LVI no.1.
shoulder of PM.698, while Type 37 is found combined with concentric semicircles in BE.382. [Fig.37:11,7].

Parallel chevrons (FM.58). It occurs twice: Type 15 in AM.24 [Fig.37:16], while an unusual type2 is used on PM.618.

Triangle (FM.61A). This pattern (Type 1) is found on PM.173.3 [Fig.37:4].

Zig-Zag (FM.60). Type 19 of this pattern occurs on PM.699. [Fig.37:12].

Foliate Band (FM.64). It occurs on three pots: Type 194 on Berlin no.30769. [Fig.37:18]; Type 22 on a/a786 and Berlin 30768. [Fig.37:17].

Elaborate Triangle (FM.71). An elaborate Triangle (Type 9) between two antithetic spiral designs (FM.50:31?) is found in PM.371. It is very carefully executed. [Fig.37:5].

The handles are also decorated in a similar way to that of stirrup-jars, with stripes across (PM.244,348,371,391,172,648,a/a786) or along (PM.458,698,699,a/a729,a/a762) their backs.

Commentary

This shape, in its various forms is well represented in Achaea. Both big and small examples occur with or without a beaked mouth and a vertical handle extending either from rim or below it to shoulder. They usually have a relatively tall narrow neck and in at least two examples a ridge round the neck is observable, while the only pot with a "rivet" at the base of the handle comes from Aigeira (Berlin 30768). Most of the Achaean examples find parallels elsewhere in Greece.7

1 A similar pattern occurs in a stirrup-jar (PM.307).
2 The description of the Patras catalogue is not helpful in identifying this pattern.
3 Cf. PM.212 (stirrup-jar) for a similar design; Also Salamis (Styrenius)pl.IV no.3622.
4 Cf. Prosymna, fig.174 no.304.
5 Berlin nos.30768,30769.
6 Stubbings's dates the pots with "rivet" earlier than those which have rid themselves of it. (Attica, BSA (1947)p.49;fig.20;Types B-C).
7 See above, pages: 263 notes 3-6; 264 notes 1,4-6
FIG 37. Narrow-necked jugs, decorative patterns.
What appear to be unique in shape to Achaea are three specimens: one from Kangadi (a/a762) with a concave-biconical body; another one (PM.697) with a rather baggy body and raised large base; and one more (PM.908) with a trefoil-shaped mouth from Teichos Dymaion. The close similarity between these vases and the stirrup-jars as regards their decorative scheme has already been mentioned.

Judging both from the shape and the decoration, almost all the Achaean pots are late in date (LH.IIIB-C) the only early exceptions (LH.IIIA) being the vases from Aigeira (Berlin 30768,30769) and Aigion (AM.24).

---

1 See above, page 263 note 4α; 264, n. 2
2 See above, page 266 note 3. Cf. also Karageorghis *Nouveaux Documents*, 188ff; fig.47 nos.9-14 (Idalion "Ayios Georgios" Tomb 2, Sub-yc.).
9. **Small globular jugs (Fig. 38 PIs. 122-125)**

At least forty three specimens of sizes varying from 0.062 to 0.136m. high have been found on Achaean sites. Rims average 0.02-0.05m. Most of them (thirty three) are from the S.W.Achaea, but there are some (ten) from the Aigion area. The fabric is either pinkish (e.g. FM.387a,c.) or pinkish-buff (e.g. BE. 475) or yellow-buff (e.g. BE. 425).

They have the form of jug familiar from most Mycenaean sites: The roughly globular body usually rests on a slightly raised (e.g.255) or flat (e.g. FM.431) base; tubular or concave splaying neck with rim turning outward; vertical flat or flattened round handle reaching from shoulder to rim.

They correspond more or less to Furumark's known types 112-115 with many minor variations in all details.

According to the form of their neck, they can be classed in two main groups:

A. With tubular neck: 3 examples (FM.349,350,352) (Fig.38A)

B. With concave splaying neck: 40 examples. They have a concave splaying neck, either narrow and high (e.g. FM.387c.) or wider and short (e.g. FM.431) (Fig.38:B).

By far the commonest type of jug is FS. 112 comprising twenty five examples (FM.150,185,255,353,354,425,431,429a,429b,429c, 430,535,733,871,911,AM.25, a/a 865, BE.392,424,425,475,478,549, Berlin 30770,30771.) but vases with globular or globular-conical profile (FS.114-115) are also present: FS.114: four examples: FM.349,350,352,351; FS.115: six examples: FM.175, 387a,387c,387,725,176(?)

For eight more examples (FM.463a,463b, 467,682,683,680,177, and 859) we have no illustration or drawing to assign them to any of the above Types.

Most commonly the vases are covered with slip of: a) black (FM.680,353,725,859,BE. 392) or b) brown-black (FM.150,175), or c) brown-red (FM.425,429c,671, Berlin 30771,353,BE.424,425) or d) reddish (FM.429a,429b,683,871,349), or e) dark brown (FM.451,733, Berlin 30770,) or f) yellow buff (FM.350) colour.

---

1 MP, figs. 5-6, p.602. 2 Stubbings's Type D; Iakovides's Type A and B(Perati B,fig. 95).

3 It has an unusual squat body. This pot and FM.535 (of angular biconical body) are well described and illustrated by B. Vermeule(Cf. AJA, Op. cit. p.8 nos 22,23, pl.2 figs.12 and 14.)

4. These two vases (FM.463a,463b) is said to be handmade.
FIG 38. 1. Small globular jugs, shapes and decorative patterns
2. Hand-made miniature jugs, shapes

(Scale not uniform)
Only a few jugs are painted\(^1\) (ten examples: PM.176,177,184, 350,431,351,352,BE.425,478,549), but they show little variation:

a) Single stripes on the lip, at the base of the neck and round the base, and a group of stripes round the belly of the jug: seven examples (PM.176,350, 351,352,431, BE.425,549).

b) One example (PM.177) is said to be painted with successive round stripes all over the body.

c) Two other specimens (PM.185 and BE.478) are painted solid or with round stripes on lower body, but on shoulder the former is decorated with cross-hatched triangles (PM.61A:5), the latter with double row of dots. \([\text{Fig. 38: b-c}]\)

Commentary.

The Achaean examples in their various types are very much like those found elsewhere in Greece\(^4\). The fabric is good and the pots well made. Unlike the Kephallenian ones\(^5\), only two of them are handmade. Apart from a few examples which are painted either with round stripes or with stripes and simple designs on the shoulder zone, the great majority consists of monochrome pots.\(^6\)

The shape appears to persist at Achaean from LH IIIA\(^7\) until the very end of the LH IIIC\(^8\) period and to have close similarities in shape with those recorded from Kephallenia\(^9\).

---

1 In the painted category, the neck is sometimes (e.g. PM.350)—though still fairly broad (e.g. PM.431)—considerably narrower than in the undecorated group.

2 The proportions of this jug, especially of the neck, and the way in which the shoulder is painted (PM.64:22) remind one of jugs from Vourvati (Cf. Attica, BSA, Op. cit. pl.15:5); Also AE (1932) pl.11, no 169.

3 From the description of the Patras Museum catalogue.

4 Cf. examples listed by Furumark (for his Types 112-115, MP, figs. 5-6, p.602.), by Blegen (Palace of Nestor I, p.375, for his Types 34,35,figs.367,368) and by Lakovides (Perati B, p.236 and notes 1-19.)

5 A great many of which are handmade; Cf. AE (1932) p.34 (Lakkithra) and ditto, (1933) p.87, fig.34 (Metaxata, T.A-R).

6 Compare with the Kephallenian ones, all of which are painted monochrome (AE.1933, p.88); Cf. also: Prosymna, figs.297 no 716; fig.516 no 19.

7 To this period may be assigned, according to the context, most of the jugs found at Aigion.

8 Here can be certainly assigned, according to its shape, decoration and context, one vase (PM.535) found among other LH IIIC:II finds (e.g. duck-askoi) in a chamber tomb at Kangadi.

10. **Globular wide-necked jugs** [Fig. 40 Pl. 125]

There are two globular wide-necked jugs in the Patras museum, found at the settlement sites at Drakotrypa (Katarraktis) (PM.1043) and Teichos Dymaion (PM.775) in a very bad state of preservation but restored from many pieces.

They vary in size, the latter being smaller (0.15m.) than the former one (0.22m.)

The fabric in both cases is of poor gritty dark grey clay and is covered by a slip of brown (PM.1043) or white (PM.775) colour.

They are of a globular shape; relatively wide, concave neck with rounded rim; one vertical flattened handle from rim to shoulder. The pot from Teichos Dymaion is handmade. Both examples are left undecorated.

The shape corresponds to Furumark's Type 109. Similar examples are known from the Argolid and Messenia dated from LHIIA to LHIIIA period. Judging by the context and shape, the vase from Teichos Dymaion should be assigned to the LHIIA, and the other one from Drakotrypa to the LHIIIA or IIIB, period.

11. **Squat jars with one vertical handle** [Fig. 40 Pl. 126]

Only eight examples (PM.47, 343, 387b, BE.605, 655, 672, 662, 698) have been found so far in Achaea, over half the number of which (five) come from our excavations at Aigion (1970).

All of them are of relatively small size (0.04-0.06m. high), but what distinguishes the Aigion's pots from the others found in S.W. Achaea, is the apparently better fabric and the fact that they are painted, while all those coming

---

1 *MP.*, 601-602, examples from Mycenae, Asine, Schoinochori, Zygouries, Korakou, Berbati and Malthi (Ch.T).


3 All other vases found there are dated LHIIIA-C, see *PARE* (1958) 175f.
from the rest of Achaean are of poorer clay and monochrome (black or black-brown).

Two variants of proportions may be distinguished:

a. Medium: Here belong all the examples from Aigion (BE.605, 655, 672, 662, 698). They are of an alabastron-like shape.¹

b. High: All the pots from S.W. Achaean (PM.47, 343, 387b)² Squat-globular or alabastron-like shape.

Both variants have a concave or concave-splaying neck with short horiz., or no lip (PM.47); one raised flat loop handle on shoulder either quite vertical, attached in a metallic fashion (PM.47) or oblique; rounded or flattened base.

The shoulders of the five pots from Aigion are ornamented with simple patterns, such as sacral ivy (FM.12) and double spiral (FM.47). Handles are painted with stripes along (BE.655) or across (BE.672) their backs; Neck and inner surface of rim usually painted solid.

Commentary

This "Maket Tomb" shape (Furumark's Type 87⁴) is so far rare and one of the earliest shapes in Achaean. Some similar vases have been discovered in Crete, but the shape seems to have had a much greater vogue on the mainland than in the island. The Achaean examples judging from their shape and decoration, seem to belong to LHIIA (Aigion) and LHIIIA:1 period (S.W. Achaean).

---

¹ Cf. for some close parallels, Ergon (1963)127, fig.135 (right). (Aetolia-Ayios Elias).

² Cf. for parallels, Kephallenia AE (1932)12, fig.15 (OiKopeda); pl.15, nos.232, 235, 236, 239, 246, 253, 256 (Lakkithra); (1933)81, figs.25:49; 28:B9,B4; 30:B8,B4,B9; 31:F4,Γ5; 32:Γ6,Γ; (Metaxata).

³ Evans, Palace of Minos, II, p.512, fig.315d.

⁴ MP. fig.11, p.598.

⁵ Where it begins in LHI and lasts until the beginning of LHIII; Cf. Korakou, p.34, fig. 48, no.1; Khalkis, BSA,(1952); pl.23, no.419 and the examples listed by Furumark. (Op.cit. p.598).
12. **Handmade miniature jugs** [Fig. 38 Pl. 126]

This shape is uncommon in Achaea. It was until recently represented by only two examples of coarse gritty ware and unslipped surface (PM.432, 690). To these may be added a third one (BE.680) found at Aigion¹ (1970), which is of better quality of clay (buff) and is covered by a yellowish slip. Size averages 0.068-0.07m. in height.

As to the shape, they are all of globular-baggy outline; low and wide spreading neck; raised handle from rim to shoulder; rounded base. They correspond to Furumark's Type 126².

The first two (PM.432, 690) are undecorated, but that from Aigion (BE.680) is ornamented with deep wavy line (FM.53:5³) pattern on the body; circle underneath base; round stripe on base of the neck and around lip; handle barred.

They find parallels in other areas, and the first two, according to the shape and their context, may be assigned to the early LHIIIC⁴ period, while the third one is apparently earlier belonging to the LHIIIA:2¹⁵ period.

13. **Amphoriskoi** [Figs. 39-41 Pls. 126-132]

Next to the stirrup-jar and alabastron (round or square-sided) the most popular Achaean shape is the amphoriskos. There are sixtyone specimens in the Patras Museum, found almost exclusively⁶ on several tomb-sites.

---

¹ Inside a large piriform jar (BE.673).
Cf. also Tiryns, A.Delt.20 (1965), p.148, fig.6:6 (EH.IIIB:2).

² ME. fig.7, pp.34 "they belong exclusively to the Mainland repertory" and 604. ←

³ Cf. Thebes, K.T. 21 no.5.

⁴ The were found in LHIIIC chamber-tombs at Chalandrites and Kangad̂a. Cf. for parallels, ibid. K.T. 16 no.9.

⁵ Cf. for parallels: a) ibid, T. 21 no.5; b) Mycenae, (Boliari) A.Delt., 19 (1964) Chron. pl.178a; c) Prosymna, fig.508 no.66; Mycenae, Ch.T. 527 no.16.

⁶ Only 3 such vases (PM.910, 935, 936) are recorded from a habitation-site (Teichos Dymanion).
Their size is fairly standard with a height generally between 0.07 and 0.105m., but there occur smaller (e.g. PM.1092: 0.06 m.) as well as bigger (e.g. PM.205: 0.195m.; PM.265: 0.22m.) examples. Diameter of rim varies between 0.05m. and 0.08m.

The fabric is mostly a pinkish-buff, or pinkish (e.g. PM.645) clay, and the surface is in all pots more or less well smoothed.

According to their form and to the shape of their mouth and base they may be distinguished into:

A. With spreading neck (Fig.39:A): The most frequent type (Purumark's Type 59) comprising twenty eight examples. These vases are of several different shapes, but common to them all is the spreading neck: (a) Oval: ten pots (PM.144, 320, 326, 870, 650, B.33a, BE.398, 420, 433, 476); (b) Squat: five examples (PM.375, 445, 249, 446, BE.426); (c) Globular: three examples (PM.145, BE.435, 419); (d) P-U. Globular: seven examples (PM.26, 29, 247, 322, 538, a/a 739, a/a 781); and (e) Ovoid: three specimens (PM.27, 383, BE.434).

B. High-necked (Fig.39:B): The second most popular type in the group: fifteen examples. Here can be assigned all those pots with a high (cylindrical, e.g. PM.321, or splaying, e.g. PM.910) neck. They are chiefly (a) biconical (seven examples: PM.25, 645, 248, 539, 707, 910, a/a 780), but (b) the globular (two examples: PM.742, 246), or (c) globular-conical (three examples: PM.205, 321, BE.421) or (d) P-U. globular (PM.148) or (e) squat (two examples: PM.24, BE.444) variants are also represented.

1 This pot is mounted on a curious high base. (see below p.277)
2 MP. fig.9, and p.594; Iakovides's Type A (Pertti B, fig.77, p.198); Stubbings's Type D.
3 It is of a large size and very similar to 2-handled jars with warts on the shoulder. See above, page 148, fig.5.
4 It has an unusual narrow neck.
5 MP. fig.9, p.594; Type 60.
C. Wide-based (Fig. 39:C): Here belong 4 examples (PM.15, 28, 142, 327) similar in shape with those of the A Type, but having an unusually low and wide raised base, which gives these pots the form of a squat or flattened globe. No real parallel is known to us from other regions and they probably represent an Achaean ceramic tradition.

D. Collar-necked (Fig. 40:D): This type (Furumark’s globular jar Type 64) is represented by one example only (PM.1032): Two horizontal handles slanting outwards and two pairs of horizontal pierced lugs on shoulder zone; short neck. It probably originally had a lid tied on through the lugs. Buff clay, reddish-brown paint; linear bands on neck and body, but worn off; "splash" handles (Pl.132c).

E. High-based (Fig. 40:E): To this group belongs an individual pot found at Klauss (PM.265) together with a round cup, which probably does not belong to it, but used as a lid over the short flaring and unrimmed neck. It has the shape of an amphoriskos mounted on a curious high openwork base which terminates in a flat ring; two round horizontal handles slanting outwards at the greatest diameter and four vertical pierced lugs in the upper shoulder zone. Neck and body ornamented with wide bands except for the upper shoulder zone which is decorated with a group of five horizontal wavy lines resting in a zone of continuous vertical parallel lines; Brushstrokes on the handles and lugs. Buff clay, black glaze-paint. The pot is also well described by E. Vermeule, who cites

---

1 ME, p.595, but our example is smaller (0.07m. high).
2 Cf. for parallels: a) Attica, BSA (1947), pp.46-47, fig.19, Type F and, pl.15:10, 11; Perati B, fig.77, p.199; FLMV (Alki) XIX, 140; b) Mycenae, BSA (1957) 274, pl.41e; c) Deliras, pl.49, pl.LX no.7 (without lugs).
3 ME, pp.89 and 95.
4 Cf. PAE (1937) p.86, fig.4.
5 AJA (1960) 9, no.28, pl.3 fig.21.
some parallels from Attika and finds connexions with the four-handled jars from Italy. No exact parallel to this Achaean pot with such an unusual base is, however, known to us from other regions and the shape still remains unique not only in Achaean, but elsewhere in Greece (Pl.132d, e).

There are twelve more examples (PM.143, 146, 147, 491, 590, 591, 935, 936, 1075, 1092, BE.487, 494) described briefly in the Patras Museum Catalogue, but as no illustration or drawing of them is available we are unable to assign these to any of the above types.

All the vases belonging to A, B and C Types, have small loop handles set horizontally at the broadest part of the body, usually with an upward slant (e.g. PM.27, 249) or on the shoulder (e.g. B.33a, PM.445). On some vases (nine specimens: PM.25, 144, 375, 321, 445, 645, 650, 910, B.33a) this slant is almost perpendicular. Bases are usually low, either ringed (e.g. PM.205) or raised (e.g. PM.326) except for three examples (PM.645, 27, 910) with a conical base.

Decoration: Only three amphoriskoi (PM.146, 147, 935) were left unpainted. All the rest, according to their decorative scheme, fall into the following groups:

a. Monochrome: ten examples are painted with black (PM.246, 248, 445, 590) or red-brown (PM.326, 383, 538, 936, 1092, BE.398) shiny or smeary paint.

b. Painted all over except for a reserved zone between handles, which is either left blank (PM.910, a/a 780, a/a 781) or is decorated with several patterns such as con-
A. WITH SPREADING NECK

(a) PM. 870
(b) B. 330
(c) PM. 445

(c) PM. 145
(d) PM. 26
(e) PM. 27

B. HIGH-NECKED

(a)

(b) PM. 645
(c) PM. 539
(d) PM. 910

(b) PM. 742
(c) PM. 321

(d) PM. 148

(e) PM. 24
(a) PM. 142

C. WIDE-BASED

FIG 39. Amphoriskoi, shapes  
(Scale not uniform)
D. COLLAR-NECKED

E. HIGH-BASED

GLOBULAR WIDE-NECKED JUGS

PM. 775

SQUAT JARS WITH ONE VERTICAL HANDLE

a. Medium

b. High

BE. 672

PM. 47

FIG. 40. 1 Amphoriskos, shapes (continued)
2 Globular wide-necked jugs
3 Squat jars with one vertical handle. (SCALE NOT UNIFORM)
centric arcs (PM.25\textsuperscript{1}), simple concentric semicircles\textsuperscript{2} (PM.645), hatched triangles\textsuperscript{3} (PM.539), and foliate band (PM.64:22) (PM.247). One pot from Aigion (BE.476) has two different designs (wavy line - lozenge\textsuperscript{4}) on either side of its handle zone.\[\text{[Fig.41:6,3,31,8,14,17]}\]

c. Painted all over with equally-spaced bands or with groups of bands: six examples (PM.144, 145, 320, 650, 707(?), BE.419).

d. Body and shoulder ornamented with bands framing a zone between the handles, which on 29 examples, has the following patterns: (Fig.41)

Isolated concentric semicircles (PM.43): A new version of the pattern (Type K?) on PM.15\textsuperscript{5}; Type h on PM.322.
Semicircle groups set vertically and running from left to right\textsuperscript{6} on PM.446; The fringed\textsuperscript{7} version of the pattern on PM.143; Another pot (PM.26), whose decoration is too worn, seems to be ornamented in the handle zone with concentric semicircles and triangles, which have their innermost part filled with diaper net (new version)\[\text{[Fig.41:1-2,43,42,28]}\]

Foliate Band (PM.64) Type 19 of this pattern occurs twice (PM.28, BE.444), while Type 22 once (PM.247) (Fig.41:7,8).

Zig-zag\textsuperscript{8} (PM.61): Type 1 on B.33a, BE.426, 421; Type 18 on PM.24 (Fig.41:10,11,9)

---

1 Cf. Asine, T. 1, no.28.
2 This pattern is fairly common and on the Kephallenian amphoriskoi, Cf. \textit{AE} (1932), pls.6, nos.33, 36; 7 nos. 33a, 36a.
3 Cf. Op.cit. pl.7, no.86 (Lakkithra); \textit{A.Delt} (1919) 108, figs. 25 no.2:27 no.4 (Diakata); \textit{AE} (1933) 86, pl.1 A.5 (Metaxata); Cyprus, \textit{AJA} (1937) pl.1 nos.41, 15, 57 (T.26a), though these are not black.
4 \textit{MP}. fig.71, (motive 73:7) p.412. "It should be regarded as a crossing zig-zag design".
5 Cf. Lefkandi Tomb 8 (unpublished) and Tomb 32 Skoumbri cemetery (PG.) (Personal communication from Mr. V. Desborough.)
6 The type is not illustrated by Purumark in \textit{MP}.
7 Which is one of the most popular designs of the Achaean repertory.
Wavy line (FM.53): Type 19 on BE.420, 434; Type 20 on FM.27 (filling two separate zones on handle-zone and on upper shoulder); Type 22 on PM.265. (Fig.41:12,13,15).

Quirk (FM.48): Four pots are decorated with Type 5 (FM.142, 205, 327, 742) while Type 15 occurs once only on PM.870 (Fig.41:16, 18, 19). This pattern is fairly common on the Achaean amphoriskoi.

Panelled pattern (FM.75): One pot (FM.375) is decorated with a panelled pattern (Type 4?), similar to a ladder-like design. It is not illustrated by Purumark. (Fig.41:20).

Joining semicircles (FM.42): This pattern (Type 7-8) combined with parallel chevrons (FM.58:33) is used (as a fringe) between the bands of the handle zone of PM.321 (Fig.41:23). Type 20 is found in the form of space-filling net on BE.494 (Fig.39:26).

Scale pattern (FM.70): This pattern (Type 2) occurs once, on FM.148. (Fig.42:30).

Tassel pattern (FM.72): Type 12 occurs on BE.487; the late type 7 on PM.1075. (Fig.42:31,32).

Triangle (FM.61A): Cross-hatched triangles (Type 5) separated by a vertical line are used on PM.491. (Fig.42:29).

Unusual pattern: One pot from Aigion (BE.433) has its handle zone decorated with a design which stands between the multiple stem and tongue pattern (FM.19) and the Flower pattern (FM.18): Two high-curved lines terminate in wavy lines, while the space between is fringed with small vertical parallel lines. It is unknown to Purumark, and appears to be unique. (Fig.41:27).

One pots is exceptional in being decorated with differing

1 Cf. Perati B, fig.78, nos.491, 30.
2 Ibid., nos.180, 1236, 995, 459.
3 Cf. Kos (Langada), Annuario (1965-66), p.104, fig.85 no.105 (but with a different panelled design).
FIG42. Amphoriskoi, decorative patterns (continued)
patterns (BE.435: Running Spiral, Type 58-59 - Quirk, Type 5, Fig.41:24-25; BE.476: Crossing zig-zag design, PM.73:7(?)- Double, horiz. wavy line, Type 21, Fig.41:14,17) on either side of the handle zone.

Necks and mouths are mostly painted inside and out, but there are some examples, the neck of which is ornamented with band(s) (PM.144, 327, 145, 265, 321, 419, 421, 444) or left undecorated outside but having a band inside the rim (BE.426, 434, 435) or left undecorated inside and out (BE.433, 476). One amphoriskos (PM.249) is exceptional in having its neck decorated with Diaper-Net pattern (PM.57:2). (Fig. 41: 23, Fl.127f).

Rims are mostly painted solid, but there are a few vases the rim of which is decorated either with dots (PM.205, BE.434) or strokes (PM.249) or with a combination of both. (PM.521). (Fig.42).

Handles are decorated along their backs (e.g. PM.539) or they are horizontally striped (e.g. PM.205) or painted with simple brushstrokes, while most of the bases are left unpainted, the only exception being one pot (BE.420), the base of which is painted underneath with three concentric circles. (Fig.42).

Commentary

The shape, as has been already stated, is fairly common in Achaea - 6.4 per cent of the whole - and must be regarded as a local product, judging both from the quality of clay, the shape and the style of decoration.

The Achaean amphoriskoi are, of course, closely related to Kephallenian ones in their shape and decorative patterns, but even among these there are some which do not occur in Kephallenia (e.g. the wide-based variety\(^1\), and the two high-necked pots PM.205, 321).

The individuality of four other specimens has already been mentioned\(^2\) (B.33a: narrow-necked; PM.1032: collar-necked; PM.265: high-based; PM.320: with two warts on the

---

1 They seem to be of local manufacture.
2 See pages: 276 and notes 3, 4; 277, note 1-5; 278, n. 1-3
3 See also above, p.281 (BE.476).
As to the decoration of these vases, it may be observed that it is almost entirely confined to the handle-zone and that a fairly limited range of mainly rectilinear and curvilinear motives, such as quirk, zig-zag, wavy line, foliate band, triangle and isolated semicircles (the fringed version of which occurs at least once (PM.143)) is used.

Apart from this a few vases are worthy of special mention from the point of view of their decoration, as they find hardly any parallels elsewhere in Greece: PM.321 seems to follow the lines of the local style in being decorated from rim down to the base with equally-spaced bands, leaving only a narrow patterned zone between the handles. To some extent the same system of decoration occurs on three other vases (PM.205, 320 and 265).

Mention may finally be made of the small spread-necked amphoriskos, PM.249, which has its neck instead of the handle zone decorated, as is the common practice, and of the two amphoriskoi from Aigion (BE.435 and 476) which are decorated on either side of the handle zone with two differing designs.

Chronologically the shape in Achaea is almost confined to the LHIIIC period and it seems to persist right through this period. A few examples, however, are survivals of the preceding LHIIIB period.

To sum up and taking together, variations in form and decoration provide the following types of amphoriskoi:

1. Three wide-based (PM.28, 142, 327), some spread-necked oval (e.g. PM.370, B.33a) and the one collar-necked

---

1 The same occurs on some four- and two-handled jars and many Achaean stirrup-jars.

2 Cf. Perati B, p.201, where only one such pot (no.123) occurs.

3 My opinion is that they are probably a later development of the rounded alabastron-shaped vases, a shape which hardly survives in the latter half of the LHIIIB period.
examples, survivals of LHIIIB types.

2. Most of the spread-necked, three high-necked globular-conical (BE.421, PM.205 and 321), one P-U. globular (PM.148), one wide-based (PM.15), the squat and ovoid examples and the high-based example (PM.265). They are usually ornamented with round bands and simple patterns in the handle zone and may be assigned to the early LHIIIC:1\(^2\) period.

3. All high-necked globular and biconical\(^3\) examples. They are mostly either painted all over or have a narrow handle zone ornamented or left blank. These pots belong to the latter half of the LHIIIC:1 period.

14. **Globular flasks** \([\text{Fig. 43, 45 PIs. 132-133}]\)

Until recently only three globular flasks (PM.51, 472, AM.23) were known from Achaea, but our excavations at Aigion (1970) doubled this number by producing three more examples (BE.639, 640, 644)\(^4\).

They do not vary considerably in size ranging from 0.097 to 0.13m. in height. The fabric is yellowish-buff or pinkish clay and their surface is well smoothed with slip of yellow colour, which is worn off in one example (PM.472).

There are two types of globular flasks among the LHIII pottery of Achaea:

---

1 A fairly big example from Mycenae (West House) (BSA, 1967, p.163, pl.38c) is dated by E. French to the LHIIIB:1 period. Another example of small size, very similar to the Achaean one also from Mycenae (BSA, 1957, pl.41e) can be dated to the end of LHIII B. But the examples from Attica and Argos belong to LHIIIC:1. See Perati B, 204 and notes 7, 8, 9.

2 Cf. Mycenae, Ch.T. 515 nos.55, 56; Thebes, K.T. 16 nos.14-16; Ialysos, BMA nos.960, 963 and 965, 961.

3 Cf. C.G. Styrenius, Op.Ath. IV, pl.VI, VII (Salamis); and Kerameikos I, pl.16-20.

4 All three pots come from one and the same tomb (T.4th).
A. Bottle (Stubbings's Type A): This type (Furumark's horiz. and vertical types Forms 48-49) is represented by 4 examples, one from Vrachneika and three from Aigion: Shape (a) globular (PM.472, BE.644) or (b) depressgd globular (BE.640) or (c) somewhat baggy (BE.639); concave high neck with sloping lip, in one example (PM.472) with a slight moulding at base of the neck, usually arched flattened handles from the middle of the neck. One pot (BE.639) has sloping and round handles just from below rim to shoulder; Ring-base of ordinary type.

PM.51 probably belongs to this type: it is described in the Patras Museum Catalogue as "a bottle having its neck and handles missing". I have not seen the vase.

The decoration of these vases, is on the whole similar to that of the stirrup jar; that is to say the body is painted in all examples but one (PM.472), with groups of broad bands filled with very fine stripes, and the space on the shoulder between the handles occupied by a simple pattern such as a multiple stem (BE.639, 640) or a more elaborate design consisting of quirk between two fringes of joining semicircles (BE.644). The example from Vrachneika is exceptional in being striped from handles to base, while no description of the decorations of PM.51 is available.

B. Pilgrim Flask (Stubbings's Type B): Only one example of this type (Furumark's Form 48) has so far recovered in Achaea, and this comes from the region of Aigion (AM.23): Slightly destroyed; pinkish clay, buff slip, good red paint: Each face is decorated with a design of concentric circles, drawn in the Tell-el-

1 MF, p.616 (FS.189-190-192).
2 Cf. Kos-Langada, Annuario (1965-66), (LHIIIc:1) fig.85 no.111 with similar handles, but ours is certainly earlier.
3 Cf. Mycenae, Ch.T. 521:8.
4 Cf. Deiras, pl.LXXXIV no.5(?).
5 It is described by E. Vermeule in AJA (1960) 11f; no.41; pl.4 fig.29.
6 MF, p.616, Types 187-188.
7 Cf. Op.Ath. V (1965) 94, (no.33). Paul Aström simply refers to this pot without describing it. Cf. for parallels: Attica, BSA. (1947), pl.16 nos.5, 6; Prosyma, figs.192 no.158; 357 no.1101; 372 no.859; Deiras, pl.LXXXII, no.5.
Fig. 43. Globular flasks, shapes (scale not uniform)

A. Bottle
a. (PM.472)  
b. (BE.440)  
c. (BE.459)

B. Pilgrim Flask

Fig. 44. Askoi, shapes (scale not uniform)

A. Baseless Askoi
a. (BE.383)  

B. Based Askoi
b. (AM.61)  
c. (BE.429)  
d. (BE.488)  
e. (AM.27)  
f. (AM.26)
Fig 45. Globular flasks and askoi, decorative patterns
Amarna style, with broad bands and groups of fine lines. The two faces are separated by a broad zig-zag (PM.61:12) pattern, extending from the handles to the base (Fig.45a). Thick stripes on neck and immediately below the rim; slightly raised ridge at junction of neck and body; flat loop handles painted solid red.

Commentary

Neither of the two types of globular flask is common in Achaea, as elsewhere in Greece. Purumark says the type is of Oriental origin and is more frequently found in the Levant and Egypt than on the mainland. There seem, however, to be a number of bottles from Argolis, Attica, Aigina, Thebes and Messenia, as well as Rhodes and Kos, and Crete.

The Achaeian bottles are more or less similar both in shape and system of decoration to those found in the above areas, and belong either to the LHIIIA:2 (early BE.640; late FM.472) or to the first half of the LHIIIB period (BE.639, 644).

---
1 Cf. e.g. in Attica, where only 10 examples in all are known (5 bottles and 3 "pilgrim-flasks") Cf. BSA (1947) pp.51-52 and pl.16 nos.1-7 and Collignon-Couve, pl.VII, nos.108 and 116.
2 MP. pp.32 and 67.
3 Five were found at Prosymna (Prosymna, p.442); Five at Mycenae, Ch.T. (two) 521 no.8; 573 no.2; West House (three) BSA (1967) pp.164, 166, 169 (PS.192: IIIIB:1); six at Argos, Deiras, p.148.
4 Seven examples in all (BSA (1947) p.51.)
5 Cf. AE (1910) T.3, no.37.
6 Cf. A.Delt, 3 (1917), K.T. 25 no.35.
7 Cf. AJA (1957) pl.43 no.21 (T.E.4).
8 Cf. examples listed by Purumark (MP. p.616). Sjoquist thus appears to be wrong in listing this shape among "Levanto-Helladic specific shapes" (Problems fig.18, type 11).
9 Kos-Langada, Annuario (1965-66). figs:7 no.300; 85 no.111; 185 no.133; 232 no.184; 318 no.459.
10 Cf. Mycenae Ch.T. 521 no.8.
11 According to E.Vermeule, but it seems to me to be a little later (IIIIB. Cf. Argos, Deiras, p.148).
12 Cf. examples listed by Purumark (MP. p.617, Type 192) and Mycenae (West House) BSA (1967) pp.164, 166, 169; Argos, Deiras p.148, pls.LVI, no.8 (fragmentary); LXXXIV, no.5. Kos-Langada, Annuario op.cit. fig.232 no.184.
The other type of the shape which is well-known as "pilgrim-flask" may have been as has rightly been observed, developed from the "bottle-type".

The shape with its bi-facial decoration, is known in Crete as early as LM.Ib, but apparently only reaches the mainland in LHIII, where it remains throughout the whole period extremely rare, while, as it has been frequently noticed, is very common in Cyprus. This type of vase is well represented among the Tell-el-Amarna sherd and the Achaean example also probably belongs to the later phase of the LHIIIA:2 period.

Generally these pots (both bottle-type and pilgrim-flask), as it appears from their context, shape and decoration, do not persist long after the end of the LHIIIA and the beginning of LHIIIB period in Achaea, as elsewhere in Greece.

15. Feeding Bottle [Fig. 54 Pl. 132]

In the Patras collection there is only a single example (a/a 728) of unknown provenance.

It is of relatively small size, its height (the basket handle included) hardly reaching 0.12m. and has been

---

1 Prosymna, p.442.
2 e.g. the flask from Palaikastro, Palaikastro Excavations, pl.XVIII, 1.
3 Six were found at Prosymna (Prosymna, p.442) one of them particularly fine and large (Ibid, pl.VIII); one at Argos, (Deiras, p.148, pl.LXXXII, no.9); four in Attica (BSA, 1947, p.53 and pl.16 nos. 5, 6 and Collignon-Couves, pl.VII, no.116); A.Delt. (1966) Chr. 99, pl.97b (Vravron, T.B.); two at Athens a) Areopagus (Hesperia), XVII (1948) 157-8, pls.39, 2c; 40,2.b) AAA III (1970) 175, fig.6, but at Mycenae so far scarcely any.
5 Levant, p.92.
6 Purumark (MP, p.617, Type 193) knows only one example of LHIIIC:1 date from Rhodes (Ialysos, N.T. 35, fig.107:4); another one is recorded from Kos (Langada, T.10 no.111), while the shape is entirely unknown in other LHIIIB/C sites, such as Perati, Palace of Nestor and Kephallonia.
reconstructed from many sherds: Globular-baggy body on ring base; neck splaying with no lip; flattened basket handle rising in a high loop and set at an angle of 90° of the spout above the mouth; tubular tapering spout from shoulder. Light buff clay and slip; brownish red paint almost entirely worn off.

The shape, one of those imitated by Philistine potters, was common enough during LHIII times and remained unchanged to the end of this period. It is more frequently found in tombs than in habitation sites. Examples with basket handle set in a line with the spout (different from ours) are recorded from (a) Tomb-sites: Prosymna (over twenty examples), Mycenae, Argos, Asine, Schoinochori, Aigina, Monemvasia, Pylos, Astelia, Attica, Boeotia, Khalkis, Kos, Naxos, Rhodes, S. Italy and (b) Habitation-sites:

2. Cf. BSA (1965) p.175.
3. Prosymna, p.444.
5. Deiras, p.155-156 pls.LIII no.10; LXV no.4; LXVII no.1; LXX no.3; LXXXI no.9; XCII no.1; XCVI no.4.
6. Asine, T.7 nos.13, 14; ditto Gr.32; ditto T.1 no.34.
8. Aigina, Munich Cat., no.24.
10. Ergon (1964) p.79 figs.95 and 94 (Volimidia T.A.).
15. Kos, Annuario (1965-66): figs.16 no.332; 30 no.360; 72 nos.27 and 26; 85 nos.100 and 54; 94 no.34; 100 no.42; 117 no.64; 126 no.265; 157 no.95; 194 no.150; 245 no.196; 265 no.220; 318 no.443.
16. Cf. examples listed by Purumark (MP, p.609-610, Types 160-163) and Stubbings's Levant, p.16, pl.II nos.7, 8.
17. Taylour, Mycenaean Pottery in Italy, p.93 pl.11 nos.24, 26; Biankofiore, pl.XIV, 78.
Korakou, Zygouries, Thessaly, Athens, Kea, and Pylos. The shape seems to be very rare in Crete, but persists throughout the period.

The Achaean example, judging by its shape and paint, may be assigned to Furmark's Type 160 (different handle), thus belonging to the LHIIIA.2 period. It is worth mentioning here that this vase with its basket handle set at right angles to the spout, a feature almost unknown on mainland sites, finds very few parallels in other regions.

---

1 Korakou, p.67, fig.97 (left).
2 Zygouries, pp.168 fig.162; 172 fig.167 (from the Ch.T. XXXIII, and XXXIV).
3 Wace-Thompson, Prehistoric Thessaly, p.207, fig.143; Tsountas, Προϊστορική Μυκονόλας, p.152, fig.67.
4 Hesperia VIII (1939) p.392, fig.73; ditto, (1952) pl.25c.
5 Hesperia XXIII (1954) p.9, pl.6b.
6 Blegen, Palace of Nestor I p.379 figs.369, 370 (21 examples, one from Chamber Tomb K1 "clumsy descendants of earlier types").

Three specimens (IMIII) from the Mavrospelio cemetery, see BSA (1926-27) p.272 and 279, Tomb XIII no.4 and Tomb XVII nos.14, 15 ("side-spouted jars").

10 Cf. Rhodes (Ialysos), Annuario VI-VII, p.142 fig.63; ditto XIII-XIV, p.260 fig.4; Kos (Langada) ditto, (1965-66) p.251-2 fig.276; Amorgos, E. Langlotz, Griechische vases in Würzburg, pl.2, 19; Khalkis, BSA (1952) p.69, pl.22 nos.449A-B; Athens, Hesperia XII (1952) pl.25b; Cyprus Fur. Op. Arch. III (1944), p.236-237 fig.10, II, 12. (ICIIIA and B). They are, however, of a different shape and proportions. Cf. also C. Schaeffer, Missions en Chypre, pl.35, 1 fig.40, 37 and Sjoqvist, Problems of the late Cypriote Bronze Age, fig.18, 2a, b (=Sub-Myc.). Furmark is, therefore, wrong when he says (Op. Arch. III, 1944, p.237) this is a feature never found in Mycenaean specimens.

For a general discussion of the "feeding bottle" shape and its use cf. Prosymna, p.258; Ch.T. p.162, 167; Attica, BSA (1947) pp.53-54, where Stubbings disputes the term "feeding-cup" or "tea-pot", instead of which he thinks that "drinking-jar" would be a far better name for these vases. And Perati B, p.244. Though the shape first appears in LHIIIA times (Perati B, p.244), there occur some possible Early Bronze Age prototypes of it among pottery from Zygouries (Zygouries, figs.89, 115) and Euboea (Khalkis) (Papavasileiou "Περί τῶν ἐν Εὔβοια Ἰρχαίων Τάφων" p.17, pl.1A σ. χ', 7).
of the Mycenaean world.

16. Askoi [Fig. 44 pls. 133-134]

Eight askoi have been found so far in Achaea. They come almost exclusively from the region of Aigion and are of a fairly small standard size, averaging 0.07-0.10m. with a maximum of 0.13m. (BE.477) in height.

Two main varieties occur:

A. Baseless Askoi (PS.194): This type is represented by two examples differing in shape and proportion:

The first pot (BE.383) is of the usual curved and crescent-like outline; one end opens in a small mouth or spout, the other terminates almost in a point. It has a closed top or back, surmounted by a flattened loop handle placed longitudinally. Pinkish clay, painted with red paint all over the body, now partly worn off. (Monochrome). Height 0.075; length 0.095 (Fig. 44:a). The other vase (AM.61) has an unusual bird-shaped body; small tail turning upwards; slightly ridged back; neck ending in a head with a rather tubular bill and crest on top; no mouth, but instead of this it has a small hole pierced through its deep rounded breast and another under the tail. Flat basket-handle extending from the middle of the neck to the middle of the back. Red-buff clay, buff slip, dark brown paint. Lower half of the body left unpainted; one broad band encircles the upper body which is decorated with simple vertical curving lines. This wide band from the breast continues up to the tubular bill where it is divided into three smaller ones, one on top side and two on either side of the head; Handle barred. Height 0.055; length 0.11 (Fig. 44b). The shape appears to be unique in Achaea; it stands between the Achaeon legged duck-askoi (see below, p.298)

1 Only one (PM.477) comes from Western Achaea (Kangadhi).
2 Stubbings's Type B. (BSA, 1947, p.53, fig.22).
and the footless duck-askos from other areas. By having a crest on top of its head this pot seems to imitate a footless cock. Purumark illustrates no exact parallel, nor have we found any from other sites.

B. Based Askoi (FS.195): Askoi of this type are much more common than those of the preceding form. Globular (PM.477, BE.429, BE.493) or depressed globular (BE.488) or ovoid (AM.27) shape. One pot (AM.26) represents a new variety of the type, in having a cylindrical body with convex top and a slightly convex base.

All these vases have a tubular spout with concave splaying (AM.26, 27) or spreading (BE.488) lip; flat or flattened loop handle with both joints on top of the body in a line with spout; raised (BE.429) or ring (AM.27, BE.488, 493) base. (Fig. 44:c-e).

Only two specimens (AM.26, 27) are monochrome, painted with brownish-black paint. The rest are ornamented with broad stripes round the body of the pot and on the neck and handle, the shoulder being covered with simple linear designs such as single horizontal wavy line (BE.429), lozenge (BE.486) or parallel chevrons (horizontal type) combined with cross-hatched lozenges (PM.477) (Fig.45:b-d). One pot (BE.493) is exceptional in being striped all over the body.

1 e.g. Mycenae, Ch.T., 524 nos.1, 14; Prosymna, fig. 307, no.695.
2 MP. fig.20 p.617.
3 Stubbings's Type A (BSA, Op,cit. p.52-53 fig.22).
4 Spout missing. It is classed in this group on the basis of the description of the Patras Museum Catalogue, since no illustration of it is available.
5 It has been described briefly by P. Astom in Op.Ath. V (1965) p.94 (no.34).
6 This vase has a particularly narrow base. Cf. Boll. d'Arte 1955, 159 (Phaistos), Vrokastro, 153, 152 fig.92:5 (Ch.T., VI).
7 No illustration of the vase is available, but we have the description of the Patras Museum Catalogue.
8 Again no illustration is available, but we have a rough drawing of the vase.
The askos is generally a rare shape in Mycenaean contexts, but less so in Achaea. Here, in Achaea both the baseless and based variants are represented, the former type being less common than the latter.

The individuality of the cock-shaped (AM:61) baseless askos has already been noticed, while the other baseless vase finds parallels elsewhere in Greece and is undoubtedly an imitation of a goatskin. Chronologically the latter pot seems to be earlier (LI:IIIA:1) than the former, which may be assigned to LI:IIIA:21 period.

As to the Achaean based askoi, it may be said that, as a rule they have much in common both in shape and decoration with other examples found elsewhere in Greece, but at least two monochrome examples (AM:26 and 27) appear to be unique and peculiar to Achaea. The former pot, as has been mentioned, with its cylindrical body, finds very few

---

1 For a discussion of the shape, its origin and use see, Furumark, MP, p.68. Blegen, Prosymna, p.453-454, and Lakovides Ferati E, p.251 and note 2.
2 It survives, however, until the very late Myc. period. Cf. AE (1933) p.82, fig.27 A.4 (Kephalenia-Metaxata, Tomb A), and AE (1932) p.120, pl.8 no.120 (Lakkithra, Tomb B, barrel-shaped).
3 Cf. above p.295.
4 Cf. examples listed by Furumark, MP, 617. Type 194, (IIB-IIIC:1) and, Mycenae-Atreus Bothros, BSA (1964) 248; (1965) p.175 (Terrace on the Atreus Ridge) and p.186 (Terrace below the House of shields); Deiras, 162, pl.IXXXII, no.8; Prosymna, p.454 figs.133 no.364; 220 no.491; 305 no.745; Messenia-Pyllos (Volimidia) Ergon, 1964, p.79 fig.95 (T.7); Athens, Hesperia XXI (1952) p.107 pl.26c; ditto, ELMV, pl.16 no.109; Attica, BSA (1947) p.53, fig.22B, pl.16, no.11, 12 and PAS (1954) 76, fig.3; Tiryns, A.Delt. 20 (1965) p.148; Kos, Annuario (1965-1966) figs:10 nos.307 and 317; 112 no.57; 276 no.226; 318 no.267, Euboea-Limni (BSA, 1966, 108, pl.22d).
5 Cf. above, note 1 (Lakovides's explanation, which seems to be well documented and convincing).
6 Cf. an almost identical one from Euboea-Limni above note 4; also Mycenae-Atreus Bothros ibid.
7 Cf. for some parallels (not exact): Mycenae Ch.T. 524 nos.1, 14 (LHIIIA:21); Munich Cat, no.51; AM. 11, pl.3 (LHIII B:1).
8 e.g. Korakou, fig.97.
parallels in other regions\(^1\), while the latter with its longitudinal ovoid body and very narrow ring base is not known to Purumark, nor have we been able to find any real parallel from other areas.

Another local peculiarity which distinguishes these Achaean pots from those found in many other sites\(^2\), is that the basket handle, in all specimens, has both joints on top of the body.\(^3\)

Judging from the shape and decoration (and in some examples from the context)\(^4\), we can assign all these vases to the transitional LHIIIB:2/0:1e\(^5\) period.

17. **Duck-askoi** /Fig.46-47 PIs.134-136\(^7\)

In the museum at Patras there are at least seven examples. They come exclusively from L.H. excavated tombs at Klauss\(^6\) (PM.260, 261, 262, 362) and Kangadhi (PM.541, 629, 630), and almost all\(^7\) are in a very good state of preservation.

Four of them are well described and illustrated by E. Vermeule\(^8\) (PM.260, 261, 541, 629), for two others (PM.262, 362) we have the illustrations of the original report and a rather detailed description of the Patras' Museum Catalogue, while for another vase (PM.630) no illustration or description is available, except for the very vague information

\(^1\) Prosymna, fig.62 no.560 (LHIII from Grave XXX); A.Delt. (1915) 193 fig.2 (Kythera, LHII).

\(^2\) Cf. examples listed by Purumark, MP, p.617, Type 195 (IIA-IIIC:1); also Euboea-Limni (BSA, 1966, pl.22:1); Wace, Mycenae etc. fig.70 (LHI from Grave III); Momemvasia, A.Delt. (1968) p.186 pl.82d.

\(^3\) Cf. for parallels with similarly placed handles, Korakou, fig.97; Prosymna above, note 1; Kephallenia, Am (1953) p.62, fig.27. A.4 (Metaxata, Tomb A.)

\(^4\) All the pots with the prefix BE, which were found in LHIIIIB Ch.T. at Aigion, (1967, unpublished)

\(^5\) Cf. MP, p.428 (for the monochrome vases) and Korakou fig.97 (for the shape).

\(^6\) PAE (1937) figs 3 and 9; no.5; pp.85, 90.

\(^7\) The only exception being PM.541, the head, spout and handle of which are broken off.

\(^8\) AJA (1960) pp.11-12, nos.43-46; pls.4 and 6.K; figs.30-32.
of the same Catalogue "legged bird-shaped vase similar to PM.629".

The pots vary considerably in size, ranging from 0.11m. to 0.22m. in height and from 0.17m. to 0.29m. in length.

The fabric is either buff (PM.629, 541, 260, 262) or pinkish-buff (PM.261, 362) clay and the surface is well smoothed in all examples.

Though there are many variations in size, proportions and in details of handle, back, spout and feet the shape is essentially the same in all vases corresponding roughly to the Furumark's "ornithomorphic" type (MP. p.68): Duck-shaped body, mounted on three or four legs; curved neck ending in a duck's head with a tubular bill; vertical, tubular spout straight or slightly concave with splaying or rounded (PM.261) lip; basket handle extending from spout to back, which terminates in a small pointed (PM.260) or flat spreading tail.

On matters of detail, variations, in legs (shape, number, position) and position of basket handle provide the following main groups of duck-askoi: (Fig.46)

A. 1. **Four-legged**: One example (PM.260). It has four tubular legs ending in splaying pads.

   2. **Three-legged**: All the other specimens. They have three flat¹, or flattened legs, two of which are placed behind and one in front (PM.262, 362, 541), or one behind and two in front (PM.261², 629).

B. 3. **Handle from rim of spout to back**: Two examples (PM.262, 362).

   4. **Handle from below rim of spout to back**: All the rest pots (PM.260, 261, 541, 629).

Other minor variations may be noted briefly:

1. The flat legs of PM.362 and 541 are splaying slightly outwards.

2. The legs of this pot are double-grooved.
FIG 46 Duck-askoi, shapes. (SCALE NOT UNIFORM)
The spout in most specimens is placed near the neck and only in one example (PM.262) is set in the middle of the back.\(^1\)

The handle, flat or flattened, is more or less of Purumark's perpendicular type, but at least one duck-askos (PM.629) has a clearly sloping handle.

The back of these pots is either flat (PM.362, 261, 629) or ridged (PM.260, 262) or slightly undulating (PM.541).

The neck varies in thickness and length, and on one vase (PM.541) it begins well before the front end of the body.

The head of these pots imitates more or less successfully that of the real duck, but the tubular bill\(^2\) is somewhat alien to that of the actual prototype, especially in one vase (PM.362) where it widens towards its end.\(^3\)

Decoration: The decoration of the body of two specimens (PM.262, 362) is simple (Fig.46:1-2), consisting in the former pot of vertical, slightly curved parallel lines bordered by an ellipsoidal broad band, and in the latter of two horizontal lines along body with vertical strokes between. All the other vases are decorated with several Close Style derived patterns, imitating the bird's plumage. They are illustrated in Fig.47:3-6. One duck-askos (PM.541) is exceptional in being painted on either side of its body with different designs: a) wavy lines and chain of simple lozenges bordered by vertical lines; groups of horizontal wavy lines on both sides of this panelled design; concentric arcs in the corners. b) roughly the same with a primitive deer-walking scene in the center.

It may also be mentioned here that almost all these pots have their lower half of body left unpainted, the only exceptions being PM.260 and 629, having this part of the body painted solid with brownish black paint in the former and with a chain of cross-hatched lozenges and a group of

---

1 The type with central spout is as old as that with tail spout, e.g. LHIII from Ialysos, Annuario VI-VII, 173, fig.100.
2 It is pierced in all the Achaean examples.
3 Cf. for a similar bill in Ohnefalsch-Richter, Kypros, the Bible and Homer, pl.98, no.6. (Lapithos).
FIG 47. Puck-askoi, decorative patterns.
fringed concentric semi-circles in the latter. (Fig. 47:5b).
Lega, breast and basket-handle usually barred; spout and neck striped; head and tubular bill painted with horizontal or round stripes, or with a combination of both (PM.260, 629). In the last example (PM.629) the protruding eyes of the bird are indicated by two concentric circles with a central dot, the outer circle being fringed to imitate eyebrows. Another vase (PM.261) has moulded "ears" (eyebrows?) instead of eyes. In all duck-askoi the paint is of a black (PM.629) or a good brownish-red colour.

Commentary

Though the duck-askoi are well described and commented on by Mrs. Vermeule, it seems desirable to give a summary and to add some further observations concerning typology, development, distribution and chronology of the vases.

These vases, which might also be called a variety of askos and are a combination of vase and terracotta figurine, are found more commonly in the Achaean tombs than in any others of LHIIIC date.

Indeed this shape is one of the most distinctive in the local repertory and appears to be unparalleled in other areas of the Mycenaean realm. All other known examples from Late Helladic sites are obviously of inferior quality and poor workmanship, in comparison with the "astonishingly developed" Achaean type.

1 The legs of PM.541 are painted solid with a brush-stroke, while in PM.262 and 362 the paint of handle is entirely torn off.
2 A dot on either side of head is used to indicate eyes in PM.362, though the decoration of the head is almost worn off.
3 AJA 64 (1960) 12.
4 Wace, Ch.T. 173.
5 Ibid. pl.XXII, (T.524) nos.1, 14; Prosymna, figs.307 no.695; 100 no.391; 235 no.469; Attica, BSA (1947) pl.17, no.10; Naxos (Kamini) PAA (1960) 335ff. fig. 275a (Tomb Γ); Rhodes (Ialysos), Annuario, VI-VII, 173, fig.100; Hidelberg GVA 3, Inv.61/6, Tafel 95:8-10 (Submyc.-P.G.).
6 Desborough, LATTS, 99.
They can be matched only by some duck-askoi from Cyprus, of a slightly earlier or contemporary date.¹

The duck askoi are discussed by Gjerstad² and others.³ Since this particular type of vase does not seem to be anywhere earlier represented than in Cyprus, where it occurs in Middle Cypriot times and reappears towards the end of the Bronze Age⁴ lasting well into the post-Mycenaean times,⁵ Gjerstad is probably right in claiming Cyprus to be their original home⁶. This essentially Cypriot shape, although it had found its way to other parts of Greece, is perhaps the best evidence from ceramic sources for a link between Achaea and Cyprus, possibly through Attica⁷, at the very end of the Bronze Age period.

---

¹ Cf. Dikaios, Enkomi, IIIA, pl.137, no.21 (and no.20?). They presumably had a bird head, and are dated to the level IIIB, i.e. probably earlier than 1100 B.C. See also pl.176, 30, and CVA Cyprus I, pl.34, no.1 (Enkomi); Ohnefalsch-Richter, Kypros the Bible and Homer, pl.38, no.6 (early 11th century) (lapithos); Karageorghis RDAE (1967) 22, fig.10, nos.40, 41, 39(?) (c.1100-1050 B.C.) (Palaeokhous-Kouklia, Tomb 3).

² SCE. IV, 2, 293.

³ By Vermeule, see above, note 3; Karageorghis, Nouveaux Documents 1957 and Bouzek, Eirene VIII, 111ff.

⁴ This reappearance of the duck askos may be due as Gjerstad says (op.cit. p.294) to a revival of the old-Cypriot tradition or even to a re-introduction of this shape from the West by immigrants from the Mainland Greece (Cf. Akerström, Der geom. stil in Italien, 64ff.)

⁵ Cf. SCE., IV, 2, fig.VII: 7 and 13 (C.G.IA); R.DAC (1970) 92ff., pl.XII-XVI (C.G.). For other post-Mycenaean specimens from other areas, see Portetsa, especially pl.106, no.1518, F.G. (Crete); BSA (1932-33) pl.32 no.84 (South Italy, in a Geometric Warrior Tomb at Tarquinia).

⁶ Bouzek's attribution (Eirene op.cit.) of the form to a Helladic origin does not seem to me to be sufficiently founded, since all the quoted Helladic examples by him (Mycenae, Prosymna etc.) are technically inferior than the Achaeans and Cypriot ones.

⁷ The Athens and LefKandi vases (Cf. Kerameikos I, pl.63, no.535; ditto, VA, pl.144 no.1309; AM, 78 (1963) Beil 54; A.Jelt. (1968) Chr. pl.31; AAA 1 (1969) 101, fig.8) are late Sub-Mycenaean, where datable, so if there is a link from Cyprus-Attica-Achaea, it should be c.1075-1050.
This, of course, does not mean that the Achaean pots have been imported from outside, for their clay and paint show clearly that they are local products. They are also closely similar in fabric to the two other two distinctive Achaean shapes, the large four- and two-handled storage jars, which, like the duck-askoi, represent the latest phase of IIIC or even the Sub-mycenaean period in Achaea.

So far as concerns the decorative motives used in these vases, they are without exception handrawn and have much in common with those found in other Achaean shapes (e.g. fringed concentric semicircles, circles, and triangles occur in PM.629, while the ellipsoid perimeter of PM.541 is fringed.)

This supports our attribution of these vases to a local manufacture.

The "deer-walking" scene drawn in the one side of PM.541 (the other side painted with simple abstract designs) is particularly interesting, since it proves that pictorialization - though in fact very rare¹ - was not unknown to the Achaeans potters.

18. **Ring-vases** *(Fig.48 pl.136-137)*

In the storeroom of the Patras museum, I was able to recognise seven ring-vases, found in tombs excavated by N. Kyparisses at Klaus-Anteia, Manesi³, and by E. Mastro Kostas at Kangadhi⁴. Another one said to be from near Patras has been described and illustrated in the P.V.C.

---

¹ It was observed in five other pots in Achaean: e.g. a four-handled storage jar with a friege of birds (PM.7), a spouted shallow cup with one high-swung handle, having its interior decorated with fish (PM.266) etc.

² They can be matched in number only by those found at Perati (eight examples), while in other areas the shape is represented usually by one (e.g. Kephallenia, Palace of Nestor) or two (e.g. Kos, Rhodes), rarely more (e.g. Mycenae) isolated examples.

³ They are illustrated in PAE (1930) 87f; fig.11 (lower row).

⁴ Cf. A.Delt. (1965) 223, pl.263.b (PM.675).
They are made of light brown (Baur, no.46) or pinkish clay (all the rest), and usually covered with a yellowish-buff slip. Red-brown paint, partially worn off in two pots (PM.46, 358).

Height including the handle varies between 0.05m. and 0.09m., and diameter between 0.07m. and 0.09m.

All these pots are in the form of a hollow ring with flattened base and they have a slanting tubular spout and usually a basket handle. One pot from Manesi (PM.705) is exceptional in being mounted on three small legs, two of which are missing. The spouts of two other specimens (PM.448, 675) are broken off, but all the rest are relatively well preserved.

According to the position of the handle two main varieties can be distinguished.

A. Basket handle spanning the ring: It extends either from the side below the spout (PM.46, 448, 705) or from the base of spout (PM.675) or from the rim of spout (PM.245, Baur no.46) to the opposite side of the circular tube (Fig.48:A).

B. Vertical loop-handle, rising either from rim (PM.358) or below the rim (PM.357) to the base of spout. (Fig.48:B ).

Decoration: They are lavishly ornamented, with rings around the base of spouts and inside rims; zigzags, (PM.245, 448, 675), cross-stripes (PM.358, Baur no.46), parallel chevrons (PM.705) or a simple straight line running down the middle (PM.357) on the handles.

1 P.V.C. Baur, Catalogue of the Rebecca Darlington Stoddard Collection of Greek and Italian Vases in Yale University, New Haven 1922 (Yale Oriental Series; Researches, Vol.VIII) p.43, fig.11, no.46.
2 Similar to that of stirrup-jars, narrow-necked jugs and flasks.
3 So far, only two monochrome ring-vases are recorded from two different Mycenaean sites (Perati and Kos). See, Perati B, p.250 and note 3.
FIG 48. Ring-uses, shapes and decorative patterns.
(Fig. 48:a-e); encircling bands along the edge and Granary Class or Close Style patterns in the superrmost reserved zone (Fig. 48:1-7).

Commentary

Though vases of this type (Furumark's Type 196) are not frequent in the Mycenaean repertory, they had, however, a wide distribution, occurring in several different countries and in different periods. As regards Mycenaean Greece, ring-vases are known from Mycenae, Thebes, Delphi, Rhodes, Kos, Attica, LefKandi, Pylos, Kephallenia and almost all are certainly confined to the LHIII:1 period.

In Achaea, as stated above, two main types of the

1 More or less similar to those used in the examples from Mycenae (Ch.T. 502, no. 9) and Perati (Perati B, p. 250, fig. 109.)

2 MP, pp. 68 and 617-618, fig. 20. They are discussed also by Evans, P.M. IV, p. 80; Wace, Ch.T. p. 186 and Takovides, Perati B, p. 250.


4 Cf. examples listed by Furumark, MP, p. 618, and E. French, BSA (1965) p. 175, for one fragmentary example from Mycenae (Terrace on the Atreus Ridge).

5 Cf. examples with basket handle listed by Takovides, Perati B, 250, notes 2-9. To this must be added three more specimens: one with vertical loop-handle from Vourvatsi (BSA, 1947) 53; one similar vessel from Rhodes (OVA, Copenhagen I, pl. 46, no. 9); and another one with three peculiar handles (one vertical and two horizontal) from Kos (Annuario, 1965-66, fig. 268, no. 223, Langada T. 55).

6 The only exception, so far known, being the ring-vase from Pylos (Palace of Nestor I, p. 329, fig. 348 no. 9), which is earlier belonging to the LHIII:2 period. Two other examples (Mycenae-Atreus Ridge, and Vourvatsi) may be also considered as earlier (LHIII:21) judging from the context for the former and the decoration (N-pattern type 1: IIIA1-IIIA2) for the latter.
shape occur, that consisting of the pots with a basket handle being apparently more popular than the other with a vertical loop-handle. Examples of the latter variety are hardly paralleled elsewhere.¹

The legged ring-vase PM.705 is unique in Achaea. Furumark illustrates no parallels nor have we found any from other sites.

As to the chronology, it appears on general considerations of context, style and fabric, that all the Achaean pots are IIIC:1e in date. None of them seems to be a foreign import, for both clay and paint show clearly that they were locally made.

Note on the use of ring-vases. Probably, they were intended to hold some liquid, that was used carefully and sparingly (either oil or unguents) or, they were used as lamps (see for the second explanation, Blegen, Palace of Nestor I 329, no.1148)

19. Hydriae /Fig.49 Pl.137/ There are seven hydriae in the Patras museum, coming exclusively from the two habitation-sites of Katarraktis (Drakotrypa) (a/a 734) and Paralimni (Teichos Dymaion) (PM.772, 781, 782, 783, 917, a/a 569).

All pots were found in a very bad state of preservation and some of them (e.g. PM.772) were restored from many sherds. They are of large size ranging from 0.25m. (PM.783) to 0.40m. (PM.781) in height.

The fabric is either brownish-grey (a/a 734) or buff-grey (PM.772) clay, covered by brown or red-brown or pale-grey burnished slip (PM.772). One vase is handmade (PM.781)

¹ Attica-Vourvatsi, (BSA 1947, pl.16 no.13); Pylos Palace of Nestor I, 329, fig.348 no.9. Takovides, (Op.Cit. p.250 and note 5) wrongly includes this pot in his list of ring-vases with basket handle, since both from the description and illustration of it, it is clear that this vase had a vertical loop-handle; and Vatoi-Rhodes (MP, p.618, Type 196 no.6). None at Mycenae and Perati.
FIG. 49. *Hydriae, shapes*  
(Scale not uniform)
and none of them is ornamented, but they are left quite plain.

Shape globular-conical (PM.781, 782, 783, 917, a/a 569) or ovoid (PM.772, a/a 734); high concave splaying neck with horizontal lip; one large vertical handle extends from the shoulder to the neck, while two opposite horizontal accessory ones, are set at the broadest part of the body; flat (PM.772, a/a 734) or low conical base.

Commentary

The hydria, like the amphora, is a form with an old Mainland tradition. Of the three known types, i.e. the tall domestic, the globular wide-necked and the globular narrow-necked, only the first (Furumark's Type 128) is represented in Achaea.

Hydrae of this type were common in Greece and the Aegean during LHIIIB-C:1 period. They have been found both in tombs and in habitation-sites and it is probably safe to conclude that the plain undecorated examples, similar to the Achaean ones, were provided for everyday domestic needs.

The Achaean hydriae, found solely in habitation sites,

1 Compare the vase from Vouratsi, BSA (1947) pl.15 no.4.
2 Cf. MP. 34 and note 3 (Eleusis, figs.71, 72; Eutresis, figs.232 no.1, 2; Korakou fig.32).
3 MP... p.604-605, form 33, Types 128, 129, 130.
4 Cf. examples listed by Furumark, MP, 604 (Type 128), and Iakovides, Perati B, 238, notes 4-14.
5 a. Tomb-sites: Asine, Salamis, Delphi, Kos, Naxos(?), Attica (Vourvatsi, Ligori, and Menidi), Berbati.
b. Habitation-sites: Mycenae, Korakou, Pylos (Palace of Nestor), Iolkos, in several different sites of Euboea and especially at Lefkandi, Athens (Acropolis) (See for references: MP, 604 and Perati B, 238).
6 There occur in other areas, however, hydriae with a hole underneath the base or provided with a short open horizontal spout, which were probably used for ritual purposes. See Iakovides Perati B 238 and notes 15, 16 (examples from Naxos (Aplomata and Kamini), Attica, (Kopreza and Vourvatsi), Nauplion, Prosymna, Rhodes (Ialysos), and Argos (Deiras)).
betray all the signs of local manufacture and none of them seems to be a foreign product.

20. Composite vessels (Fig. 50 Pls. 138-139)

Nine composite vessels have been found in Achaea so far. Height averages 0.04-0.08m. and including the handle 0.11-0.16m. The fabric is of pinkish or pale-buff clay covered usually with yellowish slip and red or red-brown paint.

They are made without a wheel and apart from three examples (PM. 366, 704, 876) which were more or less damaged, all the rest were found in a rather good state of preservation.

The Achaean composite vessels are of two kinds, viz.

a) double. Four examples (PM. 40, 704, 875, 876) and

b) triple. Four examples (PM. 365, 366, 877, 1051), thus belonging to Furumark's first category, which consist of vases of identical shape and size and joined together by connexions of clay.

They are made up of various small storage vessels of ordinary IIIB-C shapes, such as piriform jars (FS. 48, PM. 877) rounded alabastra (FS. 85-86, PM. 875, 365, 1051), square-sided alabastra (FS. 94, 96, PM. 40, 704) and amphoriskoi (FS. 59, PM. 876, 366) thus corresponding to Furumark's types 324, 327-328, 329-330 and 325 respectively.

One pot (PM. 860) may be considered as a composite vessel only from the very brief description of the Patras museum catalogue "Kernos, or multiple vase of unknown provenance", since no illustration or detailed description of it is available.

These vessels were fashioned according to the same principles. The component members are joined at their broadest part by means of connexions of clay - on the triple vessels these are made to meet centrally.

PM. 877 is exceptional in being composed of three complete and separate pots joined by three small clay rings

1 MP. 69.
2 Ibid. p. 641-642.
at the points of their connexion.

Both double and triple Achaean composite vessels have a high U-shaped common handle either standing on the central junction (PM.875, 876) or running from the necks of two of the jars to the rim of the third (PM.365, 1051 and probably 366), or curving from one rim to that of the other vessel (PM.40). The three component vessels of PM.365 have, in addition to the common handle, retained their three small loop handles, which are atrophied and useless. PM.877 forms again an exception in having a tripod-shaped handle rising above the cluster of the three vessels and ending on the top in a clay ring, the purpose of which may perhaps have been to allow the carrying of the vessel.

On the case of PM.704 we do not know which type of the above mentioned handles was used, but in all probability it had a U-shaped handle, similar to that of PM.1051 and 365.

The handles of most examples are flat or flattened, the only exceptions being that of PM.875, which is grooved, and that of PM.877 which is round.

The component vessels are decorated uniformly with the same pattern (PM.40, 875, 877, 704?, 876?) or with different designs (PM.365, 366, 1051). Both simple and elaborate ornaments are used. These are illustrated in Fig.50:1-40.

Their tall common handle is either painted solid 1 (PM.875, 877?) or ornamented with cross stripes (PM.40, 876, 1051) or chevrons (PM.365).

The rims of the joined vessels are usually painted with strokes (PM.40, 365, 876). In two cases (PM.875 and one of the three vessels of PM.365) neck and mouth are painted solid inside and out, while PM.366 has its neck likewise painted solid outside and with a round band inside the rim. The paint of rims is worn off in PM.877.

Underneath the base of two alabastron-shaped composite vessels (PM.365, 875) are painted red concentric circles.

---

1 The small loop-handles of the three component vessels of PM.365 are similarly painted solid.
FIG. 50 Composite vessels, shapes and decorative patterns.
(Scale not uniform)
Commentary

The shape has a long tradition in Crete, where it occurs in contexts of various dates. The Mycenaean composite vessels differ from the Minoan in being made up of pot-types that also occur isolatedly and, frequently, in having more than two members. It thus seems that the Mycenaean type, in spite of certain similarities, cannot be derived from the Cretan.

The component vessels of the Mycenaean type are mostly alabastron-shaped jars (round or square-sided) and amphoriskoi, less frequently pots of other shapes (piriform jars, handleless jars, cups).

As regards the Achaean composite vessels, it may be noted that the amphoriskos variety finds parallels in Perati, Khalkis, and Rhodes; the alabastron-shaped in Rhodes, Kalymnos, Kos, Naxos, Argos, Aigina, Athens (Acropolis),

---

1 According to Furumark's opinion (MP, p.69) it seems probable that the Minoan examples - or at least some of them - should be derived from a type of double vase in stone.

2 MP, 69, note 6 (EMI - LMIIIB:2?, from Palaikastro, Gournia etc.).

3 Ibid, p.70, note 1, where Furumark mentions one LMI specimen, from Gournia (Gournia, pl.7:34) which is composed of three vessels but one of these differs in shape from the other two and there are two handles. For discussion of this shape and its origin qf. also Perati B, 213 (six examples) and Nilsson MDR p.135ff.

4 Perati B, 212-213; I, pl.130a, 13b, 28, 76, 84b, 126a.

5 BSA (1952) 55, 77 and pl.23 no.495.


7 Ialyssos, Annuario VI-VII (1923-24) 175, 184, 197, figs. 99, 107; XIII-XIV (1930-31) p.272, 334, figs.18, 79, 83.

8 BM.1 A 1004.


10 PAR (1959) 185ff; pl.157b; (1960) pl.274y.

11 Delias, pp.73, 162, pl.IXXIII no.6.
Ligori, Alyki-Glyfados, Asine, Kephallenia, Elis, and Thebes. The piriform-shaped example (PM.877) appears to be unique not only in Achaea but even elsewhere in Greece. A few isolated examples recorded from the Peloponnese, Olympia, Kephallenia and Cyprus are similar in the shape of the component vessels, but none of them has the unusual tripod-shaped handle of the Achaean vase.

So far as concerns the decoration of these pots, it may be noted that they are all decorated with the usual patterns, the only exceptions being the ornaments of PM.876 and especially those of PM.1051. In this latter pot the local style is once more demonstrated in the fringed elaborated ovals used in one of the three component vessels.

Chronologically the Achaean composite vessels are confined to the LHIIIB:2–C:1e period and none of them seems to be earlier than LHIIIB. All vases were locally made.

As to the utility of these vessels, they appear from their form unlikely to have been used for everyday purposes, but, as has been rightly pointed out, they had a ritual.

---

1 BSA (1947), 43 and pl.11 no.3.
2 PAE (1955) pl.26b.
3 Asine, 298, fig.206 Nyc. Sanctuary (House C).
4 AE (1932) pls.7:58; 12:212 (Iakkitra); (1933) 87, Fig.54:F2 (Metaxata).
6 A.Delt. 3 (1917) p.192, fig.137 (Tomb 25 no.31).
7 Munich Cat., no.33.
8 BCH (1956) 575, fig.1 (Diasela. It has four vessels).
9 Kokkolata, Karvadias, p.371, fig.471; Metaxata, AE (1933) 89, pl.2:F4.
10 Enkome, BM.Cat: 428.
11 The earliest examples so far known is one composite vessel from Khalkis (BSA, 1952, pl.23 no.495. LH.I) and another one from Argos (Deiras, p.162, pl.LXXIII no.6 LHIIIA:2e).
12 Nilsson (MNR 1952) p.143 does not exclude the probability that these "salt and pepper bowls" were objects of the daily life.
13 MP, 70; Bosanquet, Palaikastro, p.91f; Evans, PM.I p.567f.
The fact that almost all these vases have been found in tombs may speak in favour of this view.

Until 1934 the shape was unknown in Acharn. It was discovered by S. Kapnistopoulos, who discovered the first two specimens (a/a732, and a/a794) at the habitation site of Akrotiri, near Naxartaki.1

Since then two more specimens (PM.734, a/a793) have been found at Vrachvou Lymeni - another settlement-site of L. Saitetorktas, while sherds from many other kraters were collected there (even forty, belonging to several sherds types).2

The Aigion region had produced no example until then, when during our excavation there, we were able to recognize two large krater-fragments (43.506, 653). All four examples from Akrotiri and Vrachvou Lymeni were found in a very bad state of preservation, but the sherds have been able to restore them from many pieces.

These vases vary considerably in size, ranging from 0.78 m. (PM.734) to 0.56 m. (a/a794) in height, while diameters of rim vary between 0.31 m. (PM.734) and 0.27 m. (a/a793). The fabric is usually pinkish red in one case (ysearkal a/a123) clay, mostly covered with yellowish or reddish and dark-brown or black (a/a733) paint.

According to their shape the Acharnian kraters fall into two main groups:

1. Stomata kraters (PM.8.3.2).3 In this example, but the type is represented by two large fragments from Aigion (43.506, 653).4

1 The only exception so far being that found at Asine (Mycenaean Sanctuary, House 6) and probably another one at Athens-Acropolis (B. Graef, Die Antiken Vases von der Akropolis zu Athen, Heft 1, pl.4, no.160.
II OPEN SHAPES

21 KRATERS

[Fig. 51 pl. 139]

Until 1958 the shape was unknown in Achaea. It was Ephor N. Zapheiropoulos, who discovered the first two kraters (a/a733, and a/a794) at the habitation site Drakotrypa, near Katarraktis.¹

Since then two more examples (PM.784, a/a787) have been found at Teichos Dymaion - another settlement-site - by E. Mastrokostas, while sherds from many other kraters were collected there (over forty, belonging to several krater-types).²

The Aigion region had produced no example until 1970, when during our excavation there, we were able to recognise two large krater-fragments (BE.606, 653).

All four examples from Drakotrypa and Teichos Dymaion were found in a very bad state of preservation, but the excavators have been able to restore them from many pieces.

These vases vary considerably in size, ranging from 0.22m. (PM.784) to 0.36m. (a/a794) in height, while diameters of rim vary between 0.31m. (PM.784) and 0.37m (a/a733).

The fabric is usually pinkish and in one case greenish (a/a733) clay, mostly covered with yellowish or reddish slip and dark-brown or black (a/a733) paint.

According to their shape the Achaean kraters fall into two main groups:

A. Stemmed kraters (FS.8-9).³ No whole example, but the type is represented by two large fragments from Aigion (BE.606, 653).⁴

¹ PAE (1958) 175f. (nos.2, 3) pl. 136a; Ergon (1958) 140f., fig. 147.
² PAE (1962) 132f; pl. 139a (PM.882); (1964) 64f; pl. 61y, 62²; 65f; pl. 64b, 65b; (1965) 130f; pl. 163y; 131f; pl. 167a, b; 168a, b, 133f; pl. 162B (PM.784); 134f; pl. 174b; Ergon (1962) 175f; (1966) 159f; fig. 186.
³ Stubbings's Type A.
⁴ These two large sherds belong to kraters because of their rim, thickness and the comparative smoothness of the inner surface.
B. Deep-bowl-shaped kraters (FS.281-282,^1287,294,298). Here belong all the restored whole specimens (PM.784, a/a733,a/a787,a/a794) and sherds from many others collected at Teichos Dymaion.

The distinctive features of Group A are a slightly ogival profile, a broad flaring lip, a strongly flanged base and broad ribbon handles with an almost standard loop design at the base. These features continue throughout LH.IIIA and into LH.IIIB.2

The exact shape of the base and lower body is not determinable in the two fragmentary Achaean examples, but it is possible that they may be nearer in profile to Furumark's types 8 (BE.606) and 9 (BE.653) than to 7.

As to the Group B, we can say that types 281-282 of Furumark, are represented by two whole (restored) examples (a/a733,787) and by a large number of fragments from Teichos Dymaion. These vases have the form of deep rounded bowls with relatively broad ring bases, two horizontal loop handles, usually placed above the greatest diameter of body and a spreading lip, which is typical of this shape.

The rare Furumark's Type 287 is probably3 represented by another whole krater (a/a794) with three symmetrically spaced tripartite handles from rim to body. PM.784, judging by its shape, may be assigned to the likewise rare Furumark's Type 294. It is of a simple semiglobular form with two opposite horizontal flat handles immediately below the lip; horizontal flat lip and ring base (partly missing).

Finally the LH.IIIC Type 298 of Furumark is represented

-----------------------------------------------
1 Stubbings's Type B.
2 Cf.MP. 586 (Types 6-9) and BSA(1964)248f; where E. French distinguishes kraters from Goblets by their diameter (a diameter varying between 0.25m. and 0.38m. is taken as a standard characteristic of kraters; all smaller vases are classed as Goblets).
3 The excavator fails to give any detailed description or any illustration of the pot (PAE,1958,p.175,no.2).
by one fragmentary (two large sherds) example (a/a802). Shape as FS.282; short bridged open horizontal spout at an angle of 90° with handles.

Decoration With the exception of the two kraters from Drakotrypa, one of which is painted inside and out with black paint (a/a733), while for the other (a/a794) no information about its decoration is available, all other specimens are painted red or red-brown in the inner surface and with bands on the rim and on the body below the handles. Thus they form a broad shoulder zone ornamented with several patterns.

These ornaments are varied but have a large percentage of panelled patterns (FM.75) occurring mainly in many krater-fragments from Teichos Dymaion. But as these sherds are very fragmentary it is not always possible to say accurately which type of panelled pattern they represent. It seems, however, that the most common type of Triglyph is a group of vertical lines, usually with a filling consisting of parallel (horizontal or vertical) wavy lines (e.g., PAE, 1964, pl. 64a, 8; 1965, pls. 167a, 168b). Spirals of several types (FM.46) occur in two instances: a/a787 is decorated with an unusual type of this pattern not illustrated by Furumark: spirals joined by diagonally crossed lines rather than a tangent. (Fig.51).

Spiral design executed in white on a broad zone of the dark-brown paint is found in a krater-fragment (FS.282?) from Teichos Dymaion.

One of the two large krater-sherds from Aigion (BE.653) is decorated with vertical circumcurrent whorl-shells (PM.23).

1 PAE(1965)pl.163y.
2 Cf. MP., 416.
3 For discussion on the use of white paint on LH.III pottery cf. BSA, (1947), p.11-12, where representative examples from Rhodes, Mycenae, Melos, Aigina, Delphi, Frosymna, Tiryne, South Italy and Cyprus (kraters) are quoted. Cf. also, Lakkithra, AE(1932)35ff. (two kraters nos. 161(1249) and 167(1250) and one jug, no. 172).

4 PAE(1964)pl.61y.
5 Cf. A. Delt. 20(1965) 143ff, pl. 5:1(Tiryns); BSA(1965)p.176, 179; fig.7:11(Mycenae, Terrace on the Atreus Ridge, III.A:21); (1969)p. 87 [Persia (W) Trench L, IIIIB:2]; Palace of Nestor 1, p. 401, figs. 387, 398 (no. 1090), IIIIB:2; Stubbings, Levant, pl. 178, no. 3[EMA 875; (GVA.BM 5, p.3.8)] Rhodes-Ialysos IIIB:2; Perati B, p. 256 (no. 402) IIIB:2.
FIG 51. Kraters, shapes and decorative patterns.

(Scale not uniform)
Patterns of the Close Style also occur in some other krater-sherds from Teichos Dymaion either in simple (PAE, 1965, pl. 174) or fringed (PAE, 1964, pl. 65) versions.

Pictorial decoration, consisting of birds (PM.7) of different kind in each pot, occur in two krater-sherds (PM. 882 and BE. 606). In both examples the "folded wing" variety of Furumark is used, in the latter vase together with fill ornaments (fringed semicircles?).

One krater (PM. 784) is simply decorated with two broad round bands at its greatest diameter. The shoulder zone is left undecorated.

Finally the decoration of the spouted krater a/a802 is too defaced for the pattern to be traceable.

Handles are usually painted on their backs (PM. 784) or along their edges (BE. 653).

Commentary

This shape was very common in Mycenaean Greece, the Aegean and the Middle East. It has been found mainly in settlements though is not uncommon in tombs. The fact that most of the known examples were found badly damaged with their decoration usually worn off, may be partly because of their relatively big size and partly because of their constant use for everyday domestic purposes, since the krater, like the deep-bowls, was a vessel not considered appropriate as grave furniture.

The development of the krater shape, which may perhaps be regarded as a cheap substitute for metal vessels, is still not clear and the Achaean group does not offer much help, owing to the fragmentary nature of much of the evidence presented above.

There are only three examples [two fragmentary (BE. 606, 653) and one whole krater (a/a794)] of Furumark's Types 8-9 and 287 respectively with vertical handles, while the variety with horizontal loop handles (FS. 281-282, 294 and 298) is better represented by three whole (restored) vases (a/a733, a/a802, a/a794).

1 MP. fig. 30 nos. 7-21.
2 Cf. BSA (1947) 37, 65.
Stemmed kraters with two ribbon handles (FS.8-9) are recorded from the Peloponnese, Aigina, Kephallenia, Eutresis, Rhodes, Cyprus, Askalon, Syria, Monemvasia, Tiryns, Mycenae, Salamis, Athens (Acropolis), Attica, Pylos, Olympia, South Italy. The type was certainly known from the end of LH.IIIA and throughout the succeeding LH.IIIB period. In Achaea, of the two specimens from Aigion one (BE.606), on consideration of the context and decoration, can be assigned to the LH.IIIA:21 period. The other (BE.653) is certainly of LH.IIIB:2 date, and to the same period could be assigned the krater from Drakotrypa (a/a794) with the three vertical tripartite handles (FS.287) on consideration of its context. The shape of this latter vase is very rare indeed, the only parallel so far known being one pot from Rhodes of LH.IIIC:1l date.

As to the deep-bowl-shaped variety, which was already in existence in LH.IIIB, (FS.281), but which came into general use in the next period (FS.282) examples are known from the Peloponnese, Delphi, Attica, Cyprus, Rhodes, 

1 Cf. examples cited by Purumark, MP.586 (Types 8-9).
2 Cf. examples listed by Iakovides, Perati B, 257 and notes 4-10.
3 Palace of Nestor, I, p. 400-402, figs. 387-388 nos. 596, 610, 826, 1090, 1157 ("pedestalled kraters"), and fig. 346 no. 1 (from Section C, Trench 1 of 1939).
5 Taylour, Mycenaean Pottery in Italy, 37, 85, 94, 96, 98; pls. 5:1; 6:1; 10:21; 13:4, 6; 15:7, 8.
6 See above notes 4-3.
7 Cf. BM. Cat. 412 (Klaudia-Cyprus) similar.
8 It comes from another tomb, the finds of which correspond to this date. Compare with the examples cited above, page 320 note 5, from Pylos, Tiryns, Mycenae [Perseia (W) Trench L], Perati, etc.
10 Cf. BSA (1965) 176f., where E. French referring to this shape (FS.281) does not exclude the possibility of an earlier than LH.IIIB appearance (LH.IIIA:21) of it, though she says that the shape was certainly not common before LH.IIIB.
Thessaly, Melos, \(^1\) Syria, Palestine, Sinda, Enkome, Naxos, Prosymna, Tiryns, Lerna, Kephallenia, Athens, Kea Lefkandi. \(^2\)

The Achaean vases, judging by the context and decoration, seem to be confined to the latter half of the LH.IIIB \((a/a733, 3 787, 794)\) and the LH.IIIC:1 periods (the vast majority of the krater-fragments from Teichos Dymaion). \(^4\)

To the latter period (IIIC:1e) seems to belong also the fragmentary example PM.784(FS.294) which appears to be unique in Achaea and hardly finds parallels elsewhere. \(^5\)

The spouted krater a/a802 (FS.298) may well also be dated IIIC:1e, \(^6\) judging by other parallels from Kephallenia and other areas. \(^8\)

The occurrence of the rare shapes FS.287,294, and 298 in the Achaean group is of interest and value, as all of them seem to be local products judging by the quality of clay.

Finally the presence of added white decoration and the pictorial motives, found in two krater-sherds, are of great significance, since these features are either very rare, \(^9\) or altogether unknown in Achaea so far.

C. One pot found at Teichos Dymaion (PM.905) and restored from many pieces, (Fig.51:C) is nearer in profile to short-stemmed kraters (FS.10) than to stemmed Goblets \(^10\) (FS.255).

---

1 Cf. examples cited by Furumark, \(MP\). 633(Types 281-282).
2 Cf. examples listed by Iakovides, \(Perati\) B,257 and notes 12-20 (but as regards Kephallenia, two examples from the earlier excavations of Kyparissës at Diakata, [A.Delt. 1919,p.102 and 106,figs.17,21] have been overlooked by him), and p.258, notes 1-3.
3 Cf. \(A\lin\), \(EM\), p.65.
4 The implication is then that this site (Teichos Dymaion) was destroyed and deserted before or during the Sub-Mycenaean times, a fact that seems to be confirmed by the results of the excavations (Cf. \(PAE\), 1962,132f.).
5 Compare Blegen, \(Korakou\), p.63 fig.88 (similar).
6 Though its context, according to the excavator, seems to be of a much earlier date (LH.IIIA lower strata) See \(PAE\)(1965)130f.
7 Cf. Diakata, A.Delt. (1919)104f;figs.19-20;Lakkithra, \(AE\)(1932)pls.4 nos.2,4,7,10,11;5 no.20;8 nos.108,109;10 nos.145,152,146a(?);11 no.145a.
8 e.g. Attica, \(BSA\)(1947)39f;pl.10 no.2(Vourvatsi);Athens, N.Slope, \(Hesperia\) 2,fig.42:a;Berbati and Delphi (IIIB).
9 See page 305 note 1 and \(AJA\)(1960)17.
10 Though its proportions agree with those given by E. French (BSA, 1964,p.249) for a goblet. (Height 0.158; diameter of rim 0.202).
Bell-shaped body on short, thick concave stem; horizontal lip; two vertical ribbon handles from rim to greatest diameter; disc base. Pinkish clay completely covered with a smooth coat of black paint of good quality. On consideration of the shape and context it may be assigned to LH.IIIC:1 (early or late?) period.

Another big krater-fragment coming from the same site and illustrated in PAE(1964)pl.64a, seems to belong to a krater with side handles and a high flaring foot, similar to some kraters found at Lakkitra (Kephallenia). The type is not illustrated by Furumark, but it is possible that these examples may be nearer in shape to Stemmed Bowls (FS.305) than to actual kraters. Reddish clay, black paint. Shoulder zone decorated with panelled patterns identical to those used in a similar pot from Lakkitra. This specimen belongs also to LH.IIIC:1 (early or late?) period and perhaps it was imported from Kephallenia, though there is nothing conclusively un-Achaean in the clay.

22. CONICAL KRATERS (KALATHOI) [Fig.52Pls.140-142]

Pots of this shape are not numerous in Achaea, but exhibit several variations in detail. There are eleven specimens, large and small, in the Patras museum, coming almost exclusively from tombs. The Aigion region, which until 1970 had produced no example, added one more vase (BE.638) found in a chamber tomb excavated by us.

They vary considerably in size, ranging from 0.04m. (PM.450) to 0.17m. in height. Rim diameters vary between 0.09m. (PM.450) and 0.33m. (PM.259).

The fabric is either pinkish (PM.259) or buff (PM.258) clay and the surface is well smoothed and covered usually with yellowish or pale slip and dark-brown or reddish paint. Most of them are relatively well preserved.

1 Compare, Blegen,Korakou 63-64,fig.91.
2 Cf.AE(1932)pl.s.5 no.12;11 nos.154,161.
3 Cf.AE(1932)pl.5, no.12 (Tomb A).
4 The only exceptions being so far three vases (PM.952, 953 and a/a305) recovered at the habitation-site of Teichos Dymaion.
According to their shape they fall into two different groups:

A. Narrow-based. Eight examples (PM.258, 441, 475?, 731, 450, 1072?, BE.638, a/a803). All these vases are in the form of a wide-mouthed bowl with an ogival profile.

But there are some minor variations in proportions and in details of rim, spout and handles, according to which they can be sub-divided into two types:

1. Type with round handles (FS.300). Two examples PM.258 and 1072?. Rim with flat edge turned slightly out, two horizontal loop handles; short open horizontal bridged spout at an angle of 90° with handles; narrow, slightly convex base.

2. Type with flat handles\(^1\) (FS.301). All the other examples. They are proportionately lower and broader than those of the preceding Type (FS.300) and those belonging to the Broad-based Group (B) (FS.291). Rim flat horizontal; short open horizontal unbridged spout set at right angles with handles; two opposite horizontal more or less angular, flat handles, placed just below rim; flat (PM.441) or slightly convex bottom.

B. Broad-based. Four examples (259, 628, 952?, 953?). Shape conical with concave sides, the profile more or less angular.

Relatively short lip; usually flat; two opposite round handles, horizontal (PM.628) or with an upward slant (PM.259); flat base.

They correspond to Furumark's type 291.

Decoration. Only one conical krater of the Group A (PM.731) is covered with a solid wash of dark-brown paint inside and out. The rest are ornamented according to two distinct decorative schemes: the first group (narrow-based) has longitudinal stripes on the handles, usually continued from the round band of rim (PM.450, BE.638), bands around the inside as well as the outside of the bowl\(^2\) and simple designs [five-angled ornaments and dots (PM.475); groups of strokes

---

1 Stubbings's Type E. (BSA, 1947, p.40, fig.16).
2 The only exception being PM.441, which has the inside painted all over.
Theopeutti are also painted here, the edges and handles with two rings (Fig. 24B). In many of the examples, the necks of the vases are painted red, the rest of the vase not painted.

All the vases belonging to the second group (variably colored) have the inside painted all over. The objects on the inside of the vase are usually painted all over except for a narrow section of the rim. The two vessels shown in Fig. 25A, B, C, D, E, and F, are typical examples of this group which are gathered together, as arranged to fit the set.

Generally speaking, the use of light colors on the surface of metal, while their shapes are quite uniform, is characteristic of the group of vases shown in Fig. 25A, B, C, D, E, and F.

Fig. 52. Conical crater shapes

SCALE NOT UNIFORM
(PM.1072); transverse zigzags\(^1\) (PM.258) on the rim. Two vases of FS.301 (PM.450, a/a803) have band inside as well as outside the rim, the top side being left undecorated. The rim of another pot, EE.638, is painted with a broad band covering the outer and top side of it, but not reaching the inner side which is left unpainted.

The spouts are also painted along the edges and outside with two rings (PM.258, 450). In one pot the spout is painted solid (PM.441). The base inside is painted with concentric circles in almost\(^2\) all these examples.

All the vases belonging to the second group (Broad-based) have the inside painted all over. The outside of the bowl is either painted all over except of a narrow reserved zone between handles (PM.628), or it has a broad band (PM.953) or two thinner ones (PM.952) half-way down the body. One pot forms an exception in having the lower half of its body painted solid dark-brown, while the upper part is left unpainted (PM.259). The rim of this pot, unlike all others of this group which are painted solid, is ornamented with joined hatched triangles.

Commentary

Conical kraters with or without a spout must be derived, like kraters, from metal originals\(^3\) and were produced from LH.IIIA \(^4\) onwards. The earliest metal vessels of this form were known in Crete since LM.1.B and the form seems to have been usual throughout the late Aegean times, always in bronze.\(^5\)

Generally spouted conical kraters were mostly made of metal, while their cheap clay substitutes are rare.\(^6\)

The Achaean spouted examples (Group A) find parallels

1 Compare, BSA(1967)151f; fig.2(no.52-211).
2 The only probable exception being PM.441, whose base seems to be painted solid.
4 Cf. examples listed by Furumark,(MP,p.635,Types 290,300, 301 IIIA:2) and from Mycenae,(Petasas's House),BSA(1965)172f. (IIIA:21). Also,PAR(1961)166f.pl.123a
5 Cf. examples listed by Furumark (MP,p.52,note6); Stubbings (BSA,1947,p.65) and Iakovides (Perati B, p.254,note 3).
6 Perati B,p.255. Also BSA(1947)65f. and Hesperia XXI(1952)106f,pl.26b.
in Mycenae, Rhodes, Kos, Athens, Vourvatsi, Dendra, Aigina, Alyki, Delphi, Eutresis, Berbati, Monemvasia and Elis.

One pot (PM.258) stands out sharply from almost all of the other spouted conical kraters found in Achaea, and there is a distinct resemblance between this pot and another one found at Mycenae (Nauplia Museum 10681) both in shape and decoration.

This Achaean vase might be an import from the Argolid.

As to the vases of the second Group (B) none of the shapes Furumark illustrates under Type 291 is exactly like the illustrated two Achaean specimens (PM.628,259) with a distinctly concave, almost cylindrical body, nor have we found any real parallel from other sites. Examples from elsewhere in Greece have a narrower base and more conical profile.

These two pots, which were locally made, lack the elegance usually noted in the best examples found in tombs and they probably represent an Achaean ceramic tradition.

As to the chronology of the Achaean Conical Kraters, the spouted examples (FS.300,301,Group A) seem to be earlier

1 Perati,B.p.255 notes 11-15. Iakovides mentions only those found at the House of the Oil Merchant from Mycenae (note 13). To those must be added two more examples from Petsas' house, Apotheke A (PAE,1950,222f;figs.10:208; 13:182, and BSA,1965,172.IIIA:21 and another one from the West House (MT,III,fig.55, and BSA,1967,166f. IIIB1).
2 Cf. MP.,p.637 (FS.301).
3 G. Särlund, Excavations at Berbati (1965) Tomb X, p.51,fig.35 no.11.
4 A.Delt.23(1968)179ff;pl.78B (nos.58,60).
6 Mrs. French discussing this shape (BSA,1967,p.170) says that "it is not clear what happens to this shape before it becomes so popular as a patterned type in LH.IIIC."
7 e.g. Kos-Langada (Annuario,1965-66,p.118-120,fig.100-101 no.45,T.14).
in date (IIIB1?)\(^1\) than the broad-based ones (IIIC:11?)\(^2\) by virtue of their context,\(^3\) shape\(^4\) and decoration.\(^5\) It is possible, however, that, as has been suggested\(^6\) pots of later types coincided with survivals of earlier ones.\(^7\) In any case, my opinion is that none of these vases antedates LH. IIIA:21.\(^8\)

G. One hesitates whether to class Type C (Fig. 52) as a "conical krater" or a "cup". Not that the actual name is material; but the size of these specimens and the vertical handle seem to relate them to the deep cups described later (p. 359 below).

These examples, however, have the shape and spout of the Conical Kraters, and they are decorated in the manner of other conical krater-types, which makes it convenient to discuss them here. Three examples of this shape were found in Achaea (PM.267,540,1050).\(^9\) Two of them (PM.540,1050) are of rather poor fabric and inferior workmanship and are decorated like the conical kraters PM.259 and 628 described above (p. 326). But the third one (PM.267) is of apparently better quality of clay and craftsmanship. The concave profile and the ribbon handle both seem reminiscent of metal prototypes, and this view is supported by the fact that this pot is coated all over with red shiny paint, which gives it a strongly metallic appearance.

The shape is not mentioned by Furumark, but some distant relatives may be recognized under his Types 251-252.\(^10\) It is

\(^1\) Compare, BSA(1966)223f.;(1967)p.151,166,170;fig.2 (nos. 52-211,52-212).
\(^2\) See Furumark MP.,p.635,Type 291, nos.1-9,11-26.
\(^3\) e.g. BE.638 was found in LH.IIIB tomb.
\(^4\) Compare with the examples mentioned above from Mycenae.
\(^5\) See above, note i.
\(^6\) Iakovides, Perati B,p.255. (Tombs:12,13,136 and 145).
\(^7\) This is the case for PM.258 (Narrow-based) and PM.259 (Broad-based) found together in a LH.IIIC chamber tomb at Klaus (PAB,1937,p.86 fig.5).
\(^8\) Compare,BSA(1965)172f. IIIA:21 (Mycenae, Petsas's House).
\(^9\) They are of small size and proportions: Height averages 0.07m. and rim diameters 0.11m. Two of them are of unknown provenance. (PM.267,1030) while PM.540 comes from Kangadhi.
\(^10\) MP.,p.627
extremely rare in the Mainland and the Aegean; in fact I have only come across a few - one from Momemvasia\(^1\) and one from Kos.\(^2\) From Rhodes\(^3\) and Kephallenia\(^4\) examples are more frequent.

Chronologically the two vases (PM.540 and 1030), on consideration of shape and decoration, could be assigned to the LH.IIIC period (late\(^5\) rather than early), thus being contemporary with Group B of Conical Kraters. The monochrome vase (PM.267) seems to be much earlier (either LH.IIIA:21 or IIIB:1) on consideration of the colour of paint\(^6\) and the more careful execution of the shape.

23. **DEEP BOWLS**

[Fig.53:A Pls.142-143]

Finds of such bowls in Achaea include thirteen examples, coming mainly\(^7\) from the settlement site at Teichos Dymaion.

The size is fairly standard with rim diameters generally between 0.11m. and 0.15m., where they can be ascertained,\(^8\) and average height of 0.09m.

The fabric is in general either a smoothed pinkish or buff clay. None of these pots was found intact, but it was possible to reconstruct most of them from many fragmentary pieces.

---

1. A.Delt.23(1968)179f.no.59,pl.786 (right). Miss Demakopoulou wrongly assigns this example to FS.300-301.


3. Similar but not identical to the Achaean vases: GVA, Danemark 2, pl.55 nos.14-16; Annuario(1923-24)pp.193 fig.113 (no.18); 126,fig.43 (no.61) Tombs XXXVIII and XVII.

4. AE(1932)pls. 6 nos.31,32;7 nos.91,31a,32a;12 no.205;(Lakkithra); (1933)p.86,pl.1 A:9 (Metaxata).

5. Judging by the pot PM.540 which was found together with some LH.IIIC:11 vases (e.g. duck-askoi) in a chamber tomb at Kangadhi. The other pot (PM.1030) is very similar to it.

6. Since it is of unknown provenance, a good criterion for its dating is the paint. See, MP.,p.427-428.

7. Only two large fragmentary pieces (PM.730, BE.667) have been found elsewhere. The former is of unknown provenance, the latter comes from Aigion (1970).

8. Because the diameter of rims of the two fragmentary pieces (PM.730, BE.667) as well as that of PM.949, which is not illustrated, is uncertain.
The variations in shape are slight according to which two main varieties can be distinguished:

1. The first (FS.284) has a semiglobular body with rounded profile, upright horizontal loop handles and ring base. It is the most frequent variety comprising eight examples (PM.773, 802, 913, 914, 915, 916, 964, a/a804).

2. The second (FS.285) has more or less the same form, but with a more taut profile (nearly a simple curve, not a double one), a flaring rim and upright horizontal loop handles. Here belong five specimens only (PM.730, 904, 907, 949?, BE.667).

The vases of variety 2 are of thin clay and bear no decoration, but they are covered with a solid wash of dark-brown (PM.907, 730, BE.667) or black (PM.904) paint inside and out. The vases of variety 1 merit a more detailed study, since their shape and decoration are similar to those of many others found elsewhere in Greece.

Both Group A and B known from Mycenae and Tiryns occur in Achaea. Group A or "Open style" is represented by seven whole examples (PM.773, 913, 914, 915, 916, 964, a/a804) one numbered fragmentary piece (PM.802) and sherds from many others.

They are decorated with fine lines inside and out, while their patterned zone between handles is simple and uncrowded. The rims are usually painted with a thin line and there is an extra band below the rim inside in two examples (PM.914, 916).

---

1 Stubbings's Type C (BSA, 1947, fig.16).
2 Mastrokostas says that "many deep bowls are painted all over with brown or red paint". (PAE, 1965, p.131).
3 The groups of Deep Bowls were first named Open and Filled Styles (BSA, 1957, 218 and A.Delt,120,1965A,139) but these terms proved confusing and difficult to translate so later the terms Group A and Group B were found more convenient.
4 Some of them are described and illustrated in PAE(1965)130ff; pls.163a,8,164,165,166 and 169a.
We cannot exclude the possibility that some sherds classed in Group B (see below p.333n.3) may well belong here. Compare BSA(1967)p.170.
They also have Circles\(^1\) (PM.915) or Spiral (PM.916,964)
patterns at the centre of the base inside. The handles are
mostly painted with three blobs, but at least one example
(PM.914) has its handles painted with a longitudinal stripe.\(^2\)

There is not even a single whole vase of Group B or
"Filled Style" in the museum at Patras, but this Group is
represented by some sherds collected from Teichos Dymaion.\(^3\)
They are monochrome inside and have a very deep band of paint
and elaborate designs on the patterned handle zone outside.
Here probably belong a few more sherds with dotted rims\(^4\) but
without preserved pattern.

Finally "Sea Anemone Deep Bowls"\(^5\) seem to be altogether
unknown, or very rare in the Achaean group. They are probably
represented by one fragmentary piece only (PAE,1965,pl.164\(^8\)).
The sole decoration of these bowls consists of a sea anemone
(not closely paralleled in Furumark's examples) on either side,
dotted rim and 5-6 splashes instead of the usual 3 on the
handles.\(^6\)

As to the decoration, one may note that circumcurrent
as well as panelled patterns are used in both Group A and Group
B's Achaean vases.

Circumcurrent patterns occur in five examples (PM.773,915,
915,916,964) (Fig.53a-e). They consist of Running Spirals of
different types (PM.46:58 and 59) in the two whole examples
PM.916 and 773. PM.915 is decorated with Isolated Spirals
(PM.52:1) a most unusual design. The fragmentary example
(PM.964) seems to be decorated with deep wavy lines of Cuttlefish
Type (PM.53:14-16) another unusual motif, while curved groups
of Multiple Stem and Tongue (PM.19) are used circumcurrently

---

1   See,PAE(1965)130f.
2   Compare Perati B,p.221 nos.25,335,841,1032.
3   See,PAE(1965)130f. and pls. (see p332n.4 above).
4   Ibid., and especially pl.163a (left).
5   For the use of this term see BSA(1969)p.77,87 and 89
   (E. French). "Rosette" Bowl though probably a better
   and easier descriptive term, does not correspond to the
   Furumark's motif (PM.27). See for the use of this latter
6   Cf.,BSA(1969)77f. and fig.4,pl.18c nos.12,13.
in the handle zone of PM.913. This last example is interesting and is presumably derived from a version of the Flower pattern.¹

Other circumcurrent patterns, such as simple horizontal wavy line, zigzag, quirk, horizontal chain of simple or double lozenges, N-pattern, isolated semicircles either in their simple or the connected type,² curved stemmed spirals simple or with centres which have been cross-hatched³ or treated somewhat similarly to Sea Anemone pattern (crossed or with a central dot), double wavy line which in one case has bivalve shell as fill ornament, multiple zigzag, and Tricurved arch with an elaborate chevron fill linking the arches⁴ occur on a number of fragmentary pieces belonging either to Group A or B.⁵

Panelled Patterns (FM.75) are, of course, the second most popular, occurring in two whole (restored) and one fragmentary examples and in a number of sherds. They consist of Triglyphs,⁶ which are used in various types. Thus, the two whole deep bowls PM.914 and a/a804 have a central Triglyph and narrow accessorials. The motif used for the narrow accessorials is a vertical zigzag between two vertical lines, while the fill-ups of the broad central ones vary (horizontal wavy lines; foliate design)⁷ (Fig.53f-g).

---

1 Of BSA(1966)225f.
2 On one sherd illustrated in PÆ(1965)pl.164b (centre). But this may well be a variety of Tricurved Arch (FM.62) similar to those used in Tiryns, fig.3:1.
3 Mrs. French has suggested that a cross-hatched circle is more commonly part of a Stemmed or Antithetic Spiral, BSA(1969)77f; note 19, fig.4:3, and this seems to be the case on PÆ(1965)pl.164a (Teichos Dymaion).
4 Compare BSA(1966)231f; fig.7:10. See also BSA(1967)171f; and Tiryns, figs.1:1, 2:3:1.
5 They are illustrated in PÆ(1965). See above, p.332, note 4.
6 Generally a Triglyph is accepted to mean a vertical element consisting of two or more vertical lines, sometimes elaborated with zigzag between them and pendent semicircles in a horizontal row on either side and its function is to divide the surface of the vase into a number of more or less symmetrical panels; these may contain further accessory ornament. It should be noted that there is a difference in usage between Greek and English terminology; in Greek these portions of the designs are termed metopes, and the panel in between, the triglyph. A Delt. 20(1965)A139 note 6.
7 Compare, BSA(1969)82f; fig.7:6,11,12 (but ours are without angular fringes).
The fragmentary pot PM.802 has circumcurrent Triglyphs of vertical zigzag between three vertical lines and Sea Anemone (PM.27:2) fill. (Fig.53.h).

Other variations of Triglyphs, such as vertical chevrons pendent from the rim, or vertical rows of linked lozenges\(^1\) and bivalve shells, or triglyph elaborated once by the addition of half-rosettes,\(^2\) or central triglyphs with a disintegrated form of the trefoil rock-work design fill are shown in PAE(1965) pls.165b and 169a (mostly fragmentary pieces of Group B).

Another interesting and most unusual type of triglyph is used in what seem to be two fragmentary pieces of one deep Bowl\(^3\) (Group A?). It consists of two triglyphs composed of four vertical lines each, separated by a badly drawn vertical zigzag. They terminate in arched tops which are filled with a cross-hatched design.

In a few cases antithetic spirals\(^4\) and tongue-shaped\(^5\) motifs are used, but these are too fragmentary for us to be certain of the nature of the motifs used to elaborate them.

Sea Anemone of the "wheel type" with two circles at the centre and fringe outside, which can be compared with PM.27:48 is used, as stated above,\(^6\) in a fragmentary piece [PAE(1965)pl.164b]. It probably belongs to a deep bowl with dotted rim, similar to those found at Mycenae [Perseia (W) Trench L].\(^7\)

---

1 For use of the term triglyph in a broader sense in these two cases (chevrons, linked lozenges) see BSA(1969)273f; note 29. Compare fig.6 nos.44-49 ibid.

2 It occurs on one fragmentary piece illustrated in PAE(1965)pl.165b. For the use of this pattern in the material from Mycenae see BSA(1966)233f; and (1969) p.275,fig.6:46 (IIIB:1) and p.81 fig.5:3 (IIIB:2).

3 PAE(1965)131f;pl.166b.

4 PAE(1965)pl.169a. Compare BSA(1969)79f;pl.19:1 (Group B). It was suggested (Tiryns 150) that the pattern might occur also on Stemmed Bowls, but Mrs. E. French has found little evidence on the mainland to support the suggestion.

5 PAE(1965)pl.164a (left upper corner).

6 See p.333

7 BSA(1969)77f;fig.4,pl.18c:12,13.
FIG. 53. Deep bowls, shapes and decorative patterns: deep bowls with two vertical handles and stemmed bowls, shapes.

(Scale not uniform)
Commentary

This is the most familiar kind of Mycenaean bowl. Because these vases, like kraters, were not considered appropriate as grave furniture, they are not common in Mycenaean graves. The shape is known elsewhere since LH.IIIA:26 and continues in a modified form even into the Geometric period.3

Furumark distinguishes two main types of deep bowls: FS.284, and 285. Examples of the former type, which is known from LH.IIIA:21 until the early phase of LH.IIIC, are recorded from the Greek mainland, the Aegean, Cyprus, Syria and the Middle East, while the latter type, which is confined to the latter half of the LH.IIIC period, is known from Greece, the Aegean, the Dodecanese and Kephallenia.4

In particular, deep bowls are recorded from Athens (Acropolis)5 and several sites of Attica,6 Kos, Naxos, Argos, Mycenae, Euboea and Kea.7

Apart from this, deep bowls from well-stratified habitation sites, such as from Mycenae (Houses south of the Tomb of Clytemnestra and Citadel House) (IIIB:1), Tiryns, Mycenae (Houses east of the Citadel and at the II strata at the Lion Gate), Palace of Nestor, Athens (N. slope of the Acropolis) (IIIB:2),8 Mycenae (Granary),

1 Stubbings (BSA,1947,p.39) suggests also that the scarcity of such bowls in tombs may be due to the fact that this shape belongs mainly to the latter end of LH.III, while most Mycenaean cemeteries are of earlier date.
2 Blegen, Prosymna,p.450.
3 Stubbings, BSA,op.cit. p.39.
4 MP.,p.49-51 and 634 (Types 284,285).
5 Hesperia,VIII(1939)p.362-370,figs.40-51.
6 BSA(1947)39f;pls.10 nos.10,11,4,5,6,7 (eleven specimens in all from Kopreza, Vourvatsi, Velalidea, Spata, Pikermi); See also Perati B,p.219-222 (seventy two examples in all from fifty tombs and three other different sites).
7 See Perati B,pp.221 notes 4-8;222 note 1 for references.
8 Blegen suggests that several deep bowls found at the Palace of Nestor might confidently be ascribed to LH.IIIC (instead of LH.IIIB:2) and some of them e.g. nos.593,594,677 and 862 (Fig.385) appear to belong not to the very earliest products of that (IIIC) period. See, Palace of Nestor I,p.421.
Athens (Fountain) and Lefkandi (IIIC) enable on the one hand any group of such bowls to be accurately dated, and on the other hand they form the basis for a closer definition of the shape sequence and development. The fabric and decoration are only partially indicative of date.

As regards the Achaean deep bowls, the range of both A and B Types from this group is somewhat parallel to those at Tiryns and Mycenae and the group was examined and sorted entirely on the divisions worked out for the deep bowls from these two sites.

The distinction between Group A and B has been already discussed, but since examples of the former group are still relatively few and the latter one is represented only by fragmentary pieces, much more work is clearly needed before all the details of the Achaean pots can be defined. For it will be important if further evidence, particularly from the habitation site of Teichos Dymaion can be shown to adhere to the same range of Tiryns and Mycenae.

Turning to the patterns we may note that deep bowls of the "Open Style" as well as of the "Filled Style" occur in Achaean. On present evidence the former variety is better represented by a few whole (restored) examples and fragments from many others, while, as has been stated above, the actual number of the specimens of the "Filled Style" is small and in most cases too fragmentary for a tracing of the pattern to be possible.

---

1 Perati-B. p.222, notes 3-12, where the LH.IIIB:1 group from within the Citadel at Mycenae (BSA(1969)p.273-275, fig.6, pl.62c) has been overlooked (note 3).

2 Especially from the Tiryns and Mycenae evidence it became clear that bowls of Group A started first and then continued alongside an ever-increasing, though not overwhelming proportion of bowls of Group B (BSA, 1969, p.75).

3 See BSA(1947)p.39.

4 It is surprising that no or very little evident similarity in shape and decoration, is observed between the Achaean and Kephallenian deep bowls (Lakkithra, AR, 1932, pls.4:5, 5a;5:143, 9:147; 12:185), if we consider the many common elements observed in some other shapes. (e.g. stirrup jars).
Little more need be said of the patterns represented in the Achaean group, except to call attention to the extensive use of quirks\(^1\) and the Spiral in its various versions (running, stemmed, antithetical). The fine example of circumcurrent isolated spirals (PM.52:1:IIIA:1)\(^2\) used in PM.915, is altogether unusual, probably an earlier survival of the motif, continued up to the end of LH.IIIB\(^3\) in Achaean.

Panelled patterns (Triglyphs) are also popular and compare with the examples from Tiryns and Mycenae.\(^4\) The individuality of the type of double Triglyph with apsidal cross-hatched tops found in a large fragmentary piece at Teichos Dymaion has been already mentioned.\(^5\)

It is disappointing that the evidence for "Sea Anemone" deep bowls is so scanty, represented by a fragmentary piece only.\(^6\) They should show together with examples of Group B, (i.e. with monochrome paint, inside and a very deep band of paint outside) which are likewise very fragmentary, a development which would lead to a better definition of the shape during LH.IIIB:2\(^7\) in Achaean.

The starting date for the shape in Achaean seems to be LH.IIIB:1, supposing that some fragmentary pieces decorated with simple triglyphs (i.e chevrons pendent from the rim, vertical rows of linked lozenges, or that ornamented with the tricurved arch pattern) belong to deep bowls ornamented in a similar manner to some contemporary examples from Mycenae.\(^8\)

But the majority of the recovered examples (Variety 1) on grounds of both fabric and design may be assigned to the LH.IIIB:2 period. The monochrome specimens (Variety 2)

\(^1\) See PAE(l965)pl.163a.
\(^2\) MB.,fig.65.
\(^3\) But in no case, can this bowl be dated to LH.IIIA, since it is so similar in shape to the other Achaean bowls found there and to many others from elsewhere in Greece.
\(^4\) Cf.A.Delt. 20 (1965)137ff. (Tiryns); BSA(1969)74ff. and 273f.
\(^5\) See p.335 and note 3
\(^6\) See p.333
\(^7\) Cf.BSA(1969)87f.
\(^8\) Cf.BSA(1966)290f;fig.7:7; (1967)171f;fig.12,pl.39c; (1969)275;fig.6 nos.44 and 47.
should be ascribed to the early phase of LH.III C:1 and this can be taken as the terminal date for the Achaean deep bowls.

24. **Deep Bowls with two vertical handles** [Fig. 53 C, Pl. 143 e-f]

Two examples of this hybrid shape have been recovered so far in Achaea: PM.912 comes from the habitation site of Teichos Dymaion; a/a763 is said to come from Kangadhi. Both vases are of about the same height (0.08 - 0.09 m.) and rim diameter (0.11 - 0.12 m.)

There is, however, a distinct difference in shape between these two vases. In profile the bowl from Kangadhi (a/a763) is almost identical with a Deep Bowl (FS.284/bis). There are two round vertical handles from rim to greatest diameter of body. The rims are slightly turned out; raised base. Orange-buff clay smoothed inside and out. Unpainted.

The body of the specimen from Teichos Dymaion (PM.912) is more sharply curved than in a Deep Bowl (FS289). There are two flattened vertical angular handles from rim to side; ring base. Red-buff clay smoothed and painted outside with red paint except for a reserved zone between handles which is left blank.

Neither of these two vases can be called common. They have variants, either with round or with more or less sharply curved body, from Rhodes, Mycenae, and Pylos but these, unlike the Achaean examples, all have vertical handles starting below the rim.

1. Cf. Lefkandi, p. 16, fig. 27. See also Palace of Nestor I, fig. 385 nos. 593, 594, 677 and 862, Perati B, p. 220 fig. 85:33 (Six pots in all).
2. The possibility, however, that some of the Achaean bowls (especially of the 2nd variety) belong to the LH.III C:1 cannot be excluded.
3. It is labelled "Kangadhi, Tomb C".
4. Cf. examples listed by Furumark for Type 289 (MP, p. 635. They come exclusively from Ialysos).
5. See BSA (1967) p. 163 and 170; fig. 12:51; p. 172, fig. 13:5 (Amphora small FS.677); (1969)p. 291, fig. 122-124, pl. 63a (all of LH.III B:1 date) for some earlier and more or less remote relatives of the two Achaean vases.
7. Some parallels can be found in Kephallenia: (Metaxata) AE (1933) p. 82, fig. 26: A3; (Lakkithra), AE (1932) pl.s. 4:1, 3; 5:18; 8:99.
To judge by the context and partially by the shape and paint, both these vases should be confidently assigned to LH.IIIA:1. The specimen from Kangadhi seems to be earlier than that from Teichos Dymaion, which on consideration of its system of paint,¹ (partly monochrome) must be ascribed to the last phase of this period.

25. **Stemmed Bowls**  
[Fig.53:B PIs.143g;144a]

There are two specimens in the Patras museum (PM.793, 909) coming from the habitation site of Teichos Dymaion and, like the examples of the preceding shape, they are of relatively small size and proportions (Height:0.09 – 0.10m; diameter of rim 0.10m.).² They were found in a very bad state of preservation and have been restored from many fragmentary pieces.

Both vases are of thin clay and bear no decoration, but they are coated with a solid wash of red-brown (PM.793) or black (PM.909) paint inside and out.³

They differ slightly in profile, the former pot corresponding to Furumark's Type 305, the latter one to Type 306. Bell-shaped bowl, short spreading lip, short narrow stem; two horizontal loop handles (upright in PM.793; curving outwards on PM.909); flat disc base with central hollow.⁴

The shape in its various Types is known elsewhere in Greece⁵ since LH.IIIA:1⁶ and continues until the very

---

¹ This has been already observed in some other LH.IIIIC:11 shapes in Achaea (e.g. amphoriskoi, conical kraters).
² See BSA(1965)p.177: "Stemmed Bowl is generally slightly larger than a kylix. The rim diameter is usually 0.18 – 0.20m."
³ Monochrome deep bowls of Type 305 are known since LH.IIIB:1 in Mycenae, (BSA(1966)223f;fig.2:23; (1967)170f) and continue throughout this period. Mrs. French suggests that there is no connection between these monochrome vases and the partially monochrome pottery of LH.IIIC (BSA,1967,p.170 and note 35).
⁴ The base of PM.793 is not preserved, but this kind of base is suggested on the basis of that of the other pot (PM.909).
⁵ Cf. examples listed by Furumark, (MP.,p.638,Types 304-306).
⁶ To the Furumark's example (Ch.T.518:18) add also sixteen fragments of Stemmed Bowl (FS.304) and eleven miscellaneous from Mycenae. (BSA,1964,p.250,fig.2:6).
end of the Mycenaean period.  
It is, however, surprising that no patterned example, either complete or restorable, has been identified in Achaea, in contrast e.g. with Argolid, where such patterned bowls occur frequently alongside with the monochrome examples. It is important that evidence should be sought on this point.

Chronologically the first specimen (PM.793) seems to be earlier (LH.IIIC:1a) than the other one (PM.909), which on grounds of both shape and paint may be assigned to the last phase of LH.IIIC:1.

26. Shallow Angular Bowls [Fig.55 Pl.144].

So far this shape is represented in Achaea by two specimens only, one of which (a/a736) was found in the settlement site of Katarraktis (Drakotrypa), and the other one at Aigion (1970, Tomb 4th, BE.643). Both are small in size (0.05 - 0.06m. high and diameter of rim 0.15m.) and very badly preserved, but the excavators were able to reconstruct them from many fragmentary pieces.

The former pot is of reddish, sometimes burned grey clay poorly smoothed inside and out. The latter is of yellowish-buff clay. Both vases are undecorated.

Conical bowl with carination, splaying just below carination; slight spreading lip, flat (BE.643) or raised (a/a736) base; two opposite horizontal angular flat handles placed immediately below the lip.

The shape corresponds to Purumark's Type 295 (variant b). Angular bowls are familiar and very common elsewhere in

---

1 Cf. examples cited by Furumark, Op.Cit. Type 306 (from Ialysos).
2 Cf. BSA(1966)222f. (Mycenae, Preh.Cemetery);(1969)276f. (Mycenae, within the Citadel House); ditto, 75f; fig.9:3 (Perseia Trench L).
3 Cf. MP.,p.638, Type 305 nos.5,6,9,10 (chiefly from Rhodes).
4 Ibid., Type 306 (from Ialysos) for the shape. Also Kephallenia, AE(1932)pl.5:14;11:156 (Lakkithra). For the paint see MP.,p.428.
5 PAE(1958)175f no.5, pl.136 γ.
FIG 54. Feeding bottle, shape.

FIG 55. Shallow angular bowls, shape.

FIG 56. Conical aryballos, shape.
Greece during LH.IIIB, although not unknown since LH.IIIA:1 and lasting well into LH.IIIIC.¹

The Achaean examples, judging by the context and shape should well be assigned to LH.IIIB:2-0:1e (a/a736)² and IIIB:1 (BE.643)³.

27. **One-handled Deep Bowls** [Fig.5 Pl.144].

We hesitated about whether to class one pot from Aigeira (no.30766)⁴ as a 'cup'⁵ or a 'deep bowl';⁶ but though it is decorated in the manner of the known cup-types, the size and the horizontal loop handle seem to relate it rather to the deep bowls than to the cups.

As this unique vase in the Achaean group is fully described by P.Astrom,⁷ it needs no further mention here.

---

1 Cf. examples listed by Furumark [MP.,p.52,54,636 (Type 295)] from the Argolid, Laconia, the Dodecanese and Thebes; and by Iakovides [Perati B,p.225 and notes 9-12; 226 and notes 1-6] from Palace of Nestor, Prosymna, Dendra, Asine, Argos, Mycenae (West House), Athens, Naxos, Perati Mycenae (Lion Gate; Granary). The shape (unpainted) is also present in the group from within the Citadel of Mycenae, see BSA(1969)290f.,fig.11 nos. 111-114 (IIIB:1). Mrs. French suggests that the use of linear decoration on this shape suddenly appeared in LH.IIIC:1e, and she uses this element as a good criterion to distinguish LH.IIIC pots from LH.IIIA and B ones, which were always unpainted: A.A.Heft 2 (1969)135f.,fig.11.

2 For it is closely paralleled to the examples from the Palace of Nestor, Palace of Nestor 1,figs.349-350, (IIIB:2).

3 Cf. BSA(1969)290f.,fig.11 no.111 (Mycenae, from within the Citadel).

4 It is now housed in the Ehem. Staatliche Museen in Berlin-Charlottenburg.


6 See Perati B,p.222-224 (Iakovides).

7 In Op.Ath.V (1965)99f. "Semiglobular cup with one horizontal handle, height 0.075m., diameter of rim 0.18m., diameter of ring-base 0.06m. Cf.MP.,type 242, p.625. Almost straight upper body giving a slightly carinated contour. Decorated with encircling lines inside and out."
The semiglobular variant of the shape was known throughout the Aegean. Examples are recorded from Minor Asia, Syria, Cyprus, the Dodecanese, Thebes, Athens, the Peloponnese, Ugarit, Rhodes, Kos, Prosymna, Argos, Mycenae, Tiryns, Attica, Salamis, Voula, Perati, Lefkandi. They mostly belong to LH.IIIB, the only exception being the specimen from Lefkandi, which was found among the pottery of phase II (LH.IIIC).

The Achaean vase, on considerations of both shape (FS.242) and decoration - the context is unknown - may well be assigned to the LH.IIIB: period.

28. **Kylikes** [Fig.57 Pl.145].

The kylix is a relatively rare shape in Achaea. There are thirteen specimens in fairly complete condition in the Patras museum and one more in that of Aigion. They come mainly from the settlement site of Teichos Dymaion. One whole example (BE.637) and numerous sherds either from our excavations at Aigion or from Kylikes that I was able to recognise in the storeroom of the Patras museum come, however, from excavated tombs there.

All examples are of a fair size, varying considerably in height (0.084 - 0.195m.). The rim diameter also varies between 0.078m. and 0.18m. with an average of 0.12 - 0.15m. The fabric is in general either a pinkish-buff or buff or brownish clay, usually with a very fine, smooth finish.

1. MP.,p.625-626, Types 242,244. Stubbings says that the shape is extremely rare in the Peloponnese and mentions only two examples, one from Tiryns and one from Mycenae (BSA,1947,p.35,fig.140).

2. Cf. Perati B,p.223 and notes 2-11 for references, where the example from Mycenae (West House) has been overlooked, BSA(1967) pp.166-167 and 171.

3. It comes close to the example from Thebes (K.T.1:5) which belongs to the LH.IIIB period.

4. Compare the numerous examples found in the Argolid, the Dodecanese and Kephallenia.

5. Vermeule's reference [AJA(1960)10f.] "thirteen kylikes and deep stemmed bowls" is not entirely clear, while Desborough (LMTS pp.98,105) knows only one example from Achaea.
The kylikes fall into three different main groups according to the shape of their bowl.

A. With rounded bowl (FS.254?, 263, 271?, 274, 265)
All these kylikes have a rounded bowl, but they differ in the number of handles according to which two sub-varieties may be distinguished: 1. One-handled. PM.189, BE.418, 564.

2. Two-handled. PM.356, BE.396, 637.

Of the one-handled examples PM.189 with a deep closing semiglobular bowl and broad spreading lip, tapering and growing into with the short stem, the ribbon handle curving from rim to side and low conical base, may be assigned to FS.263. The other two, BE.418, 564, though no illustration of them is available, from the description of the Patras museum catalogue clearly belong to the Kylix-Type with a high-swung handle (FS.271?).

As to the two-handled specimens, we may note that PM.356 has no exact parallel in MP., but it seems to belong rather to FS.274 than to 265, because of its rounded-conical bowl, relatively short stem and slightly convex base. It has two round handles extending from rim to just below the shoulder. This pot was made very carelessly. The remaining two examples BE.396 and BE.637 are similar but not identical in profile (FS.265). Both vases have a bowl with a deep conical lower part, sides of upper part more vertical, neat moulded rim; two vertical flattened handles, from rim to just below shoulder, rise very slightly above the rim on the latter pot. (It is interesting to note that this moulded rim and the method

---

1 One pot (AM.28) is doubtful, since no illustration or drawing is available and the description of the Aigion museum catalogue is very brief and insufficient for one to be able to assign it to any of the groups discussed below.

2 Compare Blegen, Palace of Nestor I, p.369, figs.361, 362, no.588 (Shape 29c) and figs.325, 328 (Rooms 19,20), and Zygouries, Potter's Shop, figs.141:1,2; 142:1,2.

3 Stubbings's Types F1,F2. (BSA,1947,p.30-31,fig.10).
of attaching the lower end of the handles suggest imitation of metal work); in BE.637 the high narrow stem is straight-sided, while on BE.396 it tapers downwards and grows into the lower part of the bowl. The flat disc base, hollowed by a small cavity, corresponds to the diameter of the stem.

To this Group also belongs a variety with low and usually fairly thick stem and with two handles. It is a near relative to the Ephyraean goblet and is represented in Achaea by some fragmentary pieces found in the dromoi of the recently excavated tombs at Aigion (1970). Several bases and stems are preserved (e.g. BE.666, 663, 678) but in no case the rim or the handles, factors which would have helped in the identification of this kylix-type. They are often decorated with a red-brown paint applied in horizontal bands, or covering the whole vessel.

B. With angular bowl (FS.267): Only one pot of this form has been found so far (PM.789). Deep conical bowl with carination, everted rim, slight lip, short stem, slightly concave base. One vertical flattened handle from rim to just below carination.

C. With conical bowl (FS.275, 276). Six specimens coming exclusively from Teichos Dymaion. (PM.790, 791, 881, 902, 903,

---

1 See below, p.350
2 Stubbings's Type a, (Op.cit.p.31,fig.12).
3 The chief characteristics of this class of pottery were first recognized by Blegen (Korakou,pp.54-57).
4 Compare Athens, Acropolis-Fountain Hesperia VIII(1939) 375.,fig.57 a-d.
5 Stubbings's Type H. (Op.cit.pp.31-32,fig.10). Stubbings assigns this shape to the second half of LH.III, but he notes that it may be traced back to much earlier types in metal, e.g. the electrum cup from Shaft Grave IV at Mycenae, Karo, Schachtgräber,pl.CXII. The shape occurs at nearly all the Attic sites (Perati being a surprising exception) and so also in the Argolid (cf. examples listed by Furumark, MP.,p.631,Type 267) though in both these areas it had not gained much popularity. In the Western Peloponnese it is extremely rare - I have only come across a few examples from the Palace of Nestor, figs.331, 334, 336, 340, 343, 359 (shape 27) - while the form is entirely unknown in Kephallenia.
FIG. 57. Kylikes, shapes

(Scale not uniform)
Almost all belong to Furumark's Type 275.1 Relatively shallow conical bowl without lip; two opposing relatively small handles from rim to side, flattened or round; straight-sided stem, sometimes (PM.903,928) tapering downwards; base disc slightly conical. At least one example (PM.902) has a ribbed stem and a disc concave base (FS.276).2

None of the Achaean kylikes is decorated. They are either coated with a solid wash of red or red-brown paint inside and out (BE.396,418) which is partially worn off, or they are painted all over both inside and out with reserved zone on the bowl; their lower body and stem are painted either solid brown or red-brown (PM.790,881,903,928)3 or with thin successive thin bands of brown (PM.791) or red-brown (PM.902) colour.

One kylix (PM.189) has a matt surface covered with black paint inside and four other pots are wholly unpainted (PM.356,789,BE.564,637).

Commentary

The kylix seems to owe its origin to Mainland Greece,4 where it may indeed be traced back to M.H. 'Minyan' goblets.

1 Cf. examples listed by Furumark, MP.,pp63,632 [Mycenae (Granary), Tiryns, Korakou, Tragana, Ialyssos] and by Lakovides, Perati B,p.224, and notes 4-5; p.225 and notes 1-6 (Kos-Langada, Kephallenia, Aetolia, Mycenae-House of Sphinxes, Asine-House H, Zygouries Potter's Shop, Athens- Fountain, Kea, Euboea and Lefkandi). This shape was found in abundance in the Kephallenian cemeteries.

2 Similar vessels have been found in Kephallenia, Ithaka, Cyprus and Asine in contexts of Sub-mycenaean date, see MP.,p.63 notes 2,3,p.632 (Type 276); Hesperia VIII(1939)p.377 note 73; Thessaly (Hexalophos) AAA 1(1968)289ff; A.Delt.(1968)Bii,263ff.

3 Cf. Kephallenia-Lakkithra (AE,1932,pl.6); Rhodes (Annuario VI-VII,190,fig.113 second shelf,right); Athens-Acropolis (Hesperia VIII,1939,fig.57 e-g).

4 For a detailed discussion of the origin of this shape cf. MP.,pp56-59. See also Korakou,p.41; Wace,Ch.T. p.182; M.Mackeprang 'Late Mycenaean Vases' AJA 42 (1938)538ff; Stubbings, The Mycenaean pottery of Attica, BSA(1947)27f. Evans and Fordsyke have, however, suggested that the Mycenaean kylikes are descended from Crete (P.M.IV,pp.363-371;EN.Cat.,1:1, p.152).
Kylikes are rare in Crete and none seems to antedate LM.Ib, when they may have been introduced from Greece, where they are almost as common a type as the stirrup jar. The LH.II kylix which was the prototype of the LH.III type clearly owed its shape to metal originals. The most common clay type of this period is the "Ephyraean" and as it has been fully described by Blegen (Korakou, pp.54-57) it needs no further discussion here.

As regards the LH.III kylix the most familiar Type is that with a 'champagne-glass' appearance. Kylikes of LH.III date must be copied from later and different metal types. Actual metal kylikes of this period are extremely rare in Greece and I have only come across four silver examples from Dendra, while Stubbings mentions further examples from Crete.

The evolution from the LH.II 'Ephyraean' goblet to the LH.III kylix can be traced fairly continuously in the Argolid and less so in Achaea. In the latter area this transition is illustrated by the kylix-fragments from Aigion mentioned above and probably by the two kylikes with high-swung handle (FS.271?) and the one-handled example PM.189 (FS.263).

This last specimen (PM.189), which is unique in Achaea, from its metallic form, particularly of the lip and ribbon handle, seems likely to be a conscious imitation of metal.

2 See above[note 4.], especially Evans, PM.IV,359ff; Mackeprang,p.538; MP.,p.57; Wace Ch.T.p.158; Stubbings, BSA (1947) pp.27 and 62-63.
3 Cf. Stubbings, BSA(1947)27f.
4 Ibid.,p.63.
5 See A. W. Persson, New Tombs at Dendra near Midea, 135-137 and fig.117.
6 Op.cit.p.63 [one of silver from the Royal Tomb at Isopata near Knossos (LM.II) and another of bronze from the 'Tomb of the Tripod Hearth' at Zafer Papoura. See A. J. Evans, The prehistoric tombs of Knossos, p.135,fig.139, and pl.LXXXIXN.].
7 See p.347
cup and on grounds of both fabric and paint may be one of the earliest in the Achaean group. Of significance is also the presence of the high-swung and 'Ephyraean' types, since on the one hand these types of kylix were entirely unknown until recently to the Achaean repertory and on the other hand taken together with PM.189 they show the typological and chronological development of the kylix shape in this area.

This shape had, then, a long tradition in Achaea starting in LH.IIB and lasting until the very end or even the sub-mycenaean period, as the evidence from Aigion and Teichos Dymaion makes clear. Between these two extremes fall all the rest of the Achaean Kylix-Types (Groups A and B); they are found on other sites as well, and cover the LH.IIIA21 and IIIB4 periods. On present evidence, it seems, however, that the shape was never really popular in Achaea.

At this point it is necessary to mention that kylikes of the Conical Type (Group C) are much commoner in Kephallenia and a large quantity was found in the cemeteries of Lakkitdra and Metaxata, a good many of which are almost identical to those found at Teichos Dymaion. A link between Achaea and Kephallenia is therefore possibly to be observed in this very late Mycenaean type. Perhaps these Achaean

1 Especially the high-swung kylikes show the connection with Minyan and other MH. wares, see Wace, Ch. T. p. 182.
2 All the Conical Kylikes (Group C) belong here. See above, p. 347, 349, n. 1.
3 It is probably represented by one example, BE.396 (FS.265).
4 The early phase of this period is represented by one example (BE.637, FS.265) while the late by two pots (PM.356:FS.274; PM.789:FS.267).
5 In contrast e.g. with Kephallenia and Argolid where kylikes were found in abundance in tombs.
6 Cf. AE(1932)pl.6,12 (Lakkitdra);(1933)figs.21,23,26,32 (Metaxata).
7 Less probably with Euboea, where some similar both in shape and paint kylikes were found in the strata of Phase I and II at Lefkandi (Lefkandi.p.16,19,22, figs.26,49,50) and also with Attica, where only a few isolated examples are recorded from the cemetery of Perati, Perati B, p. 224-225, fig.87:435

* (only three)
specimens were imported from there, though there is little conclusively un-Achaean in the clay.

The differences in the range of Kylix-Types exhibited in Attica and Achaea come partly, in my opinion, from the difference between the tomb and settlement pottery, and partly from regional differences in usage. But, as has been observed, it is never safe to claim that a certain shape is totally absent from a given area. It may have been less popular or used in different ways and is thus less widely found. There are, of course, still serious gaps in the kylix sequence in Achaea, in particular as no complete or restorable decorated examples have even been identified there, and the shape is represented by some wholly unpainted or monochrome specimens.

The fact, however, that kylikes were found not only at the habitation site of Teichos Dymaion but also in tombs, is of interest and value. For, it shows that though undecorated kylikes were probably used, as elsewhere, for everyday domestic needs, they were considered suitable for funerary purposes as well.

1 E. French, BSA(1965)196f.
2 See above, p.349. Furumark notes (MP.,p.427) that monochrome kylikes, though generally identical in shape with the unpainted ones, are, however, less common than these. So far as Mycenae is concerned, Mrs. E. French has suggested (BSA,1969,P.87) that the total absence of painted kylikes is a purely negative feature but a very decisive one for defining the LH.IIIB:2 period there. This, of course, does not necessarily apply to other areas.
3 Cf. e.g. Zygouries Potter's Shop, Palace of Nestor etc.
4 O. Broneer says (Hesperia VIII,1939,p.377) that these vessels were probably used as lamps, held in the hands of the water-carriers and not as drinking cups, in the case of the fountain on the Athenian Acropolis.
5 The unique example from one tomb at Diakata (A.Delt. 1919,p.100) where one kylix was found placed among the teeth of the dead clearly demonstrates this use of the vessel.
29. Shallow cups [Fig.58 PIs.145-149].

Twenty five examples of this shape are so far known from Achaea and almost all of them come from the tombs excavated by Kyparissis at several sites. Almost all these pots were preserved in a relatively complete condition.

The size is fairly standard with rim diameter averaging 0.07 - 0.10m. and a maximum of 0.16m. (PM.266). They are made of well-levigated pinkish or red-buff clay, usually covered with a smooth slip. One cup, PM.872, which is hand-made and of a coarse dirty-looking clay forms an exception.

All the Achaean vases without exception have a cup-handle which rises above the rim and a more or less semi-globular bowl. According to the shape of this handle and the presence or absence of a spout two Types may be distinguished:

A. With ring handle (FS.237-238). The most frequent Type, comprising over half of the total number (sixteen examples: PM.41,43,44,48,50,187,268,359,360,649 (FS.237);451,188,361,715,716, BE.553 (FS.238)). Shape shallow semiglobular (e.g. PM.41) or more or less conical (e.g. PM.715,451) sometimes with convex-concave profile (e.g. PM.716); flat horizontal lip; flat ring-handle both ends of which usually join at the lip, or with lower end joining the lip and the side of the vessel (e.g. PM.359). Raised or narrow ring-base.

B. With raised handle

1. Without spout (FS.220?). Three examples only: PM.186, 1070, AM.29. They are similar in profile to FS.220 (variant a), except for the handle which is flattened and rises above the lip in an upright (PM.186) or oblique (PM.1070, AM.29) high loop; narrow high ringed base.

1 The only exceptions being two pots from the region of Aigion (AM.29,30) and three more found in tombs excavated by N. Yialouris (a/a724) and E. Mastrokostas (PM.872, BE.553).

2 With the exception of seven specimens (PM.266,354,359,872,1070,a/a724 and BE.553) found at Klauss, Pournari, Patras (Gerokomeion) and Aigion (Psila Alonia), all the other vases are of unknown provenance.
2. Spouted (PS, 253). This type is represented by six examples (PM, 42, 49, 266(?), a/a, 724, AM, 30). Semiglobular shape, open horizontal unbridged spout at an angle of 90° with high-swung handle. Ringed base. These cups present minor variations in the shape of bowl, handle and base but common to them all is the spout. Thus the bowl of PM, 42 stands on a short-stemmed base which gives it a rather low-stemmed kylix appearance; PM, 49, 872 and a/a, 724 are close to Stubbings's Type B. It is doubtful whether PM, 266 ever had a spout, but in profile it suits the idea of assigning it here.

It is somewhat surprising that only a few shallow cups are ornamented (PM, 44, 188, 266, a/a, 724). All the other vases are painted all over both inside and out with black or red-brown paint except for the lip, which in five examples (PM, 41, 44, 361, 1070, AM, 29) is decorated with radiate bars.

Of the ornamented specimens, two (PM, 44 and 188) are monochrome inside, while outside they are painted with encircling bands. Another rather carelessly made cup from Aigion (AM, 30) is covered likewise with a solid wash inside, which continues over the lip to below the rim, forming a fairly wide round band. The rest of the outer surface is left unpainted.

The spouted cup a/a, 724 is painted simply with a round band below the rim outside, while the linear decoration on the inner surface is too worn to be traceable.

Lastly the fine example PM, 266 is unique in being painted inside with pictorial designs, consisting of three

1 The nearest analogies to this very unusual shape, to which there is no good parallel, are a spouted cup from Olympia (Taylour, MPI, p. 179, pl. 16:10) and another one from Kameiros, Rhodes (CR VI-VII, fig. 157, p. 137).
2 BSA (1947) 34f; fig. 13.
3 After its partial restoration no spout is visible. Cf. Ch. T, 530: 12; BSA (1947), pl. 8:11.
4 Cf. Prosymna, figs. 455 no. 155; 127 no. 264; Berbati, Tomb X, fig. 33 no. 3; Nonemvasia, A. Delt., 23 (1963) pl. 72a-γ. Stubbings (BSA, 1947, p. 63) has suggested that these oblique strokes on the lip represent the chased decoration of their metal prototypes.
Fig 58. Shallow cups, shapes and decorative patterns; one-handled deep bowls, shape. (Scale not uniform)
fish, two forming a circle head to head, while one smaller is drawn between. These fish are painted solid black with open jaws and sharp teeth, while reserved circles with large central dots are used to indicate their eyes. The outside is painted with pendant solid rock-pattern below the rim and with two broad bands enclosing four thin ones on the lower body. Another band is painted round the ring of the base. Its handle is decorated, unlike all other Achaean cups, with an edging line and zigzag pattern.

The handles of the two cups from Aigion (AM.29,30) are painted with a broad stripe along their back, while those of all the other Achaean specimens are painted all over.

Commentary

The shallow cup either with a flat rim and a ring-handle or with a more normal lip and a cup-handle which does not rise above the rim is a common pottery-shape in the LH.I and LH.II periods. For the former variety there can be no doubt that the clay type was formally dependent upon metallic forms, since examples are known in silver, gold and bronze. But the latter variety, which is usual in

1 Cf. MP. fig.28, motif 20:4 (BM 671 from Cyprus and Levant pl.XVI from Ugarit (similar but not identical) fish used either as main or accessorial motif are known since LH.IIIA:1 in the Mycenaean repertory with an increasing popularity during the LH.IIB and LH.IIC periods. Examples are found in pots of several shapes both from the Aegean and the mainland Greece. (see examples listed by Furumark and by Iakovidès, (fifteen examples from the cemetery of Perati) Perati B,p.140,fig.21;p.142 note 1 (from Kos, Naxos, MonemVasia, Pylos, South Italy, Salamis and Athens).None of these types is, however, exactly similar to the Achaean one.

2 The design (FM.32:5), I believe, is confined to kylikes and, more often, to spouted cups with high-swung handle (FS.253). Compare Mycenae, Ch.T.530:12; Attica, BSA(1947)pl.8:11; South Italy, Taylour, MP, p.31, pl.4:18. Taylour has suggested (op.cit.) that the range in period of the latter shape is from LH.I to LH.IIB with no noticeable variation in the pattern (Op.cit. note 2, examples from Asine, Prosymna and AR(1910)pl.5:12).

3 For the metallic origin of this shape Cf. Evans, P.M.II 2 p.637; Stubbings, BSA(1947)p.63; MP, pp.52,56; A. W. Persson, New Tombs at DendrA, near Midea, (Lund 1942)p.135.
Attica,\(^1\) does not suggest a metallic origin.

Both these types of shallow cup persist throughout the LH.III period in the Argolid; but in Achaea the second of the two types is, on present evidence, entirely unknown.

It is the first type which predominates in the Achaeian repertory (PS.237-238) and, as stated above,\(^2\) almost all of them are painted monochrome inside and out. The colour of paint\(^3\) taken in conjunction with the shape is a good - but not the safest - criterion for the date of these cups, since the context in most cases is unknown to us. It seems, therefore, probable that the range in period of all these ring-handled monochrome cups is from LH.I to LH.IIIA:2e,\(^4\) those with a semiglobular or convex-concave shape being probably earlier (LH.I-III A) than the others with the conical profile (LH.IIIA:2e).\(^5\)

The other two varieties of shallow cup mentioned above (Types B1 and B2)\(^6\) are less common in Achaea and the examples belonging to them are of a later date (either early of late IIIB) than those of the preceding ring-handled variety.

The fine shallow cup PM.266 from Klaus\(^7\) merits special mention here: not that its shape is unknown from other sites,\(^8\) but the three rather fierce fish painted inside and the manner in which they have been drawn makes

\(^1\) Stubbings's type A (BSA, 1947, p. 63, fig. 13A).
\(^2\) See p. 354.
\(^3\) See MP., p. 428.
\(^4\) Cf. examples listed by Furumark, p. 625 (LH.I-III A:1). See also some more examples similar in shape from Attica, Op. cit., p. 34, pl. 8:8; Khalkis BSA(1952)pl. 19: 473A, 447B (PS.296) but of a later date (IIIB)?.
\(^5\) They find close parallels in Argos, Deiras pl. LXXIII:1-5 (III A:2e).
\(^6\) See p. 353-4.
\(^7\) FAE(1937)87f. (no. 70); figs. 6-7. It has been described by E. Vermeule, AIA(1960)11f., pl. 4, fig. 28.
\(^8\) Cf. examples listed by Furumark from Mycenae, Asine, Aigina, Thebes, Rhodes (Ialysos, Apollakia) and Attica. The closest parallels to our example are: Mycenae Ch. T.530:12; Koprea (two examples). One is illustrated in BSA(1947) pl. 8:11; Asine T.1:38.
it unique and unparalleled\(^1\) elsewhere. Mainland Greece is poor\(^2\) in these pictorial designs and even so Achaea, where pictorialization is a very rare feature, occurring in a very few isolated pots.\(^3\) As this cup is clearly a local product,\(^4\) it shows that the Achaean potter could produce a naturalistic design.\(^5\)

Another cup (PM.186) with high-swung handle and narrow high ring-base presents a problem. It is made of the same reddish clay similar to that of the one-handled kylix PM.189 and very probably both these pots come from the same site (Leontion?). It is painted, like the kylix, monochrome both inside and out with red-brown dull paint and though its shape is closer to PM.266 than to the other types of cups mentioned above, its fabric is of inferior quality. One is tempted to suggest that this pot and the hand-made PM.872,\(^6\) which is a clumsy, amateurish attempt at pot-making rather than a consciously modelled type, should be classed among the last survivals of their type.

As to the use of these shallow cups, we may be fairly safe in following Stubbings's suggestion\(^7\) that the spouted examples were used for pouring libations. But for the ring-handled cups, though they very probably served a

\(^{1}\) The closest parallels come from the Dodecanese (Kalymnos, GB:293; Kos, Annuario (1965-66)79f., fig.54 (Eleona Tomb 21), and p.192 fig.196a (Langada, Tomb 39); Cyprus BMW no.671 (from Klavdia) and Syria (Ugarit) Levant pl.XVI no.3. One is bound to wonder whether any connection between Achaea and these areas is possible.

\(^{2}\) See above, p.356 and note 1 examples cited by Iakovides from Perati, Athens, Monemvasia and Pylos (Palace of Nestor).

\(^{3}\) See pp.142,143,305306 two four-handled storage jars (PM.7,8a) one duck-askos PM.541; and in two krater-fragments (PM.882 and BE.606)].

\(^{4}\) The clay and paint show that it is of local manufacture.

\(^{5}\) Cf. LMTS, p.99.

\(^{6}\) In clay and careless modelling it resembles Kephallenian examples of different shapes, see AE(1932)pl.13 nos. 261-276 and (1933)87f., fig.34.

\(^{7}\) See BSA(1947)34f.
similar purpose, the idea of their occasional use as lamps\(^1\) must not be excluded. In fact the blackening in the interior of at least two such vases (PM.48,50) betrays such a use of the shallow cups in Achaea.

30. **Deep Cups** [Fig.59 Pls.149-151]

There are fourteen deep cups in the Patras museum and three more in that of Aigion. With the exception of only three examples (PM.786,787,788) found at the habitation site of Teichos Dymaion, all the other vases come from excavated tombs in Achaea, but the exact provenance is not always known.\(^2\)

They vary in size, ranging from 0.03m. to 0.09m. in height, while the diameter of the rim varies between 0.03m. and 0.08m.

The fabric of these vases is either of pinkish (e.g. PM.363) or pinkish-buff (e.g. PM.714) clay and the surface is sometimes well smoothed and covered with a yellowish slip (e.g. PM.199).

According to the shape of their bowl, base and the presence or absence of a spout they fall into the following Types:

A. **Bell-shaped**\(^3\) (FS.230-231). The most frequent Type comprising seven examples in all (PM.363,364,386,686,714, AM.31,32). They have a more or less conical-concave profile, ribbon handle level with rim (PM.363,686,AM.32) or slightly rising above it. Usually raised (e.g. PM.386) or high-ringed (e.g. AM.31) base.

B. **Spouted**\(^4\) (FS.248-249). The second most popular Type in Achaea. Here belong four specimens (PM.687,701,1071, BE.9). Shape closing semiglobular with short spreading lip; ribbon handle from rim to side; short open (PM.687,1071, BE.9) or bridged (PM.701) horizontal spout at an angle of 90°

---

1 See *Hesperia* VIII(1939)p.377 and note 74 for the clay lamps in Mycenaean times.
2 The three pots from Aigion as well as PM.685,686,687, 701,714 are of unknown provenance.
4 Stubbings's Type F (*op.cit.*fig.14).
with the handle; raised (PM.687) or usually ring-base.

PM.687 has a different profile from all the others, somewhat similar to FS.248, but with a spout similar to all the other vases assignable to FS.249. (Fig.59B:2, Pl.150b).

C. Bowl-shaped 1 (FS.214-215). This Type is represented by two cups found at Teichos Dymaion (PM.786, 787 2 ). Both vases have a deep semiglobular bowl, but that of the latter pot is somewhat weighed down (FS.214, variant 8 ), while that of the former one is more straight-sided (FS.215). Flattened handle from rim to side; ring-base. It must be mentioned here that PM.786 is hand-made and partially restored with plaster.

D. Cylindrical (FS.227, 229). Here belong three cups: (PM.685, AM.33, PM.199). Minor variations in proportions, shape of base, lip and handle but shape of bowl essentially the same. Thus, PM.685 has a concave and tapering cylindrical shape, handle from rim to side and slightly convex base (FS.227) (Fig.59D:1); AM.33 corresponds to FS.229 in having a broad cylindrical shape, slightly concave with the top part splaying, handle from rim to bottom and low ring-base (Fig.59D:2); PM.199 is unique and not illustrated in Furumark's shapes, but judging from its broad, slightly concave cylindrical lipless bowl it comes close to his Type 229, though it has a convex base instead of the usual low-ring one. Flattened handle from rim to lower side of body (Fig.59D:3)

E. Angular 3 (FS.240). One example (PM.788) only, from Teichos Dymaion. It is virtually a kylix of angular profile (FS.267) cut off at the base of the bowl. This pot appears to be of Furumark's Type 240 (with one raised handle) though the handle is missing.

With the exception of a few decorated examples, (PM.199, 786, 363, 386, 1071, BE.9) all the other Achaean deep cups have been coated all over, both inside and out, usually

1 Stubbings's Type D. BSA (1947) fig.14.
2 No illustration of this pot is available, but the detailed description of the Patras museum Catalogue permits identification of the shape.
3 Stubbings's Type H? (op.cit.fig.14).
FIG 59. Deep cups, shapes and decorative patterns

FIG 60. Mugs and lids, shapes
with a dull or glossy (PM.788) paint, red or dark-brown in colour. This paint is sometimes partially (e.g. PM.685, AM.32) or wholly worn off.

In two of the decorated specimens (PM.199, 786) the decoration outside is limited to one broad band of paint round the middle of the bowl (in the former) or along the rim (in the latter). Underneath the base of PM.199 there are painted concentric circles, while its inner surface is painted dark-brown monochrome. The interior of PM.786 is left unpainted except for a circle drawn at the centre of the base inside. The handles in both cases are simply decorated with a rather broad stripe along their edge.

As to the other ornamented examples, one may note that there is generally a painted stripe round the lip, one round the foot and another one level with the base of the handle. A zone on the bowl is thus marked off which is occupied by a repeated simple pattern. These patterns are few; less than a half-sheet of notepaper would suffice for a complete pattern book (Cf. Fig.59). The following have been recognized: vertical dashes (PM.1071, BE.9); foliate band, PM.64:27-28 (PM.363); tongue-shaped pattern, PM.19:34 (PM.386). It must be mentioned here that the base of PM.1071 is painted inside with a circle. For another pot, PM.364, we know nothing about its decoration, since no illustration is available and the description of the Patras Museum catalogue is very brief and vague.

Commentary

It has long been recognized that deep cups of all the types present in Achaea owe their form to metal originals. This view is supported on the one hand by

1 Cf. BSA (1947) 36ff., fig.15:7, pl.9:4 (Vourvatsi).
2 Ibid., pl.9:11 (Vourvatsi).
3 With the exception of the examples of Type C, which seem to be related to clay originals.
the strong metallic appearance of their shape and on the other hand by the complete coating of paint, observed in many examples recorded from different sites,¹ which often imitates a metallic surface.

In particular the clay bell-shaped cup, which is the commonest type in Achaea, may be copied from earlier metal types represented in the Shaft Graves.² They have a raised base, which seems in a ceramic technique. Nevertheless there are some with a flat³ or high-ringed base like the painted one from Aigion (AM.31).

The frequency of this Type in the Achaean repertory is of interest and value, since this is a shape not very common elsewhere. Examples are recorded from the Argolid, Thebes, Rhodes, Cyprus, Aigina,⁴ Attica,⁵ Khalkis,⁶ Kos,⁷ Elis⁸ ranging in date from LH.IIIA:2e to IIIIB:1.

The spouted deep cup, which is the second most common Type after the bell-shaped ones in Achaea, also betrays its metallic origin both by shape and paint, though no actual metal spouted cup is known to me. The variant with the spout placed at an angle of 90° with the handle, similar to the Achaean ones, was current from the LH.IIIA:2 till the LH.IIIC:1e⁹ period both in the Aegean and the mainland Greece. Examples with such a spout are known

---

¹ e.g. Attica, Khalkis, Kos.
² G. Karo, Die Schachtgräber von Mykenae, pls.CVIII,442; CX313;CXXVII, no.518 (gold cups).
³ Cf. BSA(1947)pl.8:6 (Kopreza).
⁴ MP.,p.624, Types 230-231.
⁵ BSA(1947)p.35,pls.8:7 (Pikermi);8:6 (Kopreza).
⁶ BSA(1952)p.74,pl.19 no.473B (FS.231?).
⁷ Annuario (1965-1966)p.80,fig.53 (Eleona,T.21).
⁸ A.Delt.19(1964)pl.187a (Trypes).
⁹ MP.,p.626-627 Type 249 (nos.1,4,9); G. Mylonas, Agios Kosmas,p.56,fig.138; lakovides,Perati B, p.218; Stubbings, BSA(1947)p.72.
from Aigina, Thebes, Rhodes, Attica, Kos, Mycenae, Argos.

Bowl-shaped deep cups, similar to the Achaean ones, have been recovered from Eleusis, Cyprus, Mycenae (Granary), Korakou, Athens (Acropolis), Thebes, Eutresis (House V), Kalymnos, Rhodes, Kos, Euboea, Athens (Fountain), Kopreza, Perati. They appear at the end of LH.IIIA:2, but predominate during LH.IIIC:1e.

Of the three cylindrical cups, PM.685 and AM.33, though uncommon, find parallels elsewhere; but PM.199 with the convex base is a shape that appears to be peculiar to Achaea. No exact parallel from other sites is known to me.

Finally the angular specimen is so far unique in Achaea; a few, more or less good parallels known from

1 MP., p.627 Type 249 (nos.1,4,9)
2 BSA(1947)37f.,pl.9:4,6 (three from Vourvatsi and one from Ayios kosmas, see also Προσμνα, Ελευσίς fig.112, no.393).
4 BSA(1965)pp.164,176,figs.1:18; 7:24 (Dromos of Tomb 505; Terrace of the Atreus Ridge).
5 Prosymna, p.92,fig.192.
6 Deiras,pl.XLVIII no.6.
7 MP., pp.620–621,Types 214 (nos.3,5),215.
8 Annuario, op.cit.,pp.32,42,44,49,53,62,80,83,117,167, 227; Figs.4,13,14,20,22,30,53,80,96,170 (figs.53,98, Type 214).
9 M. Popham, BSA(1966)104f., fig.26 nos.32,37.
10 Broneer, Hesperia VIII(1939)p.381–382,figs.596, 64a–d.
11 BSA(1947)35f. (Athens N.M.3805).
12 Perati B,p.213–217,fig.83A,B (64 examples in all).
13 Cf. MP., op.cit. Type 214 (nos.3,5).
14 Ibid. Type 215. Especially those examples from the Granary (Mycenae, BSA,1921–23,pl.XI f,g,i,j) and Lefkandi, p.16,fig.25 (Phase I).
15 Cf. examples listed by Furumark, MP., p.623 (Type 227) from Aigina, and Ialysos. We must add two more from Kos,Annuario, op.cit.,pp.157,181; figs.153,191; (Type 229) from Cyprus (Enkome).
Asine, Korakou, and Athens are all confined to LH.IIIC:1 period.

As regards the decorative patterns found on the Achaean cups, one may note that they are not new and there is nothing more imaginative than the foliate band and the tongue-shaped designs observed in two examples (PM.363, 386).

The range in period of the Achaean specimens, is from LH.IIIA:2e to LH.IIIC:1e. Bell-shaped cups of Type 230, the one bowl-shaped example of Type 214 and all the spouted (FS.249) may well have come first, on grounds both of shape and decoration (LH.IIIA:2e - IIIA:2l); Bell-shaped examples of Type 231, and all the cylindrical (FS.227-229) ones can be placed next (LH.IIIB:1-2) while the LH.IIIC:1e period is represented by the angular cup PM.788 (FS.240) and the hand-made bowl-shaped one PM.786 (FS.215). But as the context of most of these pots is not certain, we must not suppose a deliberate development. All these types must overlap.

As to the use of these pots, it seems almost certain that, like their metal prototypes, they were used primarily as drinking vessels, and only secondarily and occasionally, especially when found in tombs, for funeral purposes.

---

1 Cf. MP., p.625, Type 240 (nos.3-5).
2 BSA(1947)37f. Stubbings says that the shape appears to be peculiar to Athens and mentions examples from the Acropolis pottery (A.Delt.1, Pars, 37 fig.6, no.2) and from the north slope of the Acropolis.
3 Except probably for the foliate band (PM.363) all others are known, used either as filling ornaments or as chief decorative motifs, from the pottery of the Tell-el-Amarna period (cf. Petrie, Tell-el-Amarna, pls.XXIX,99,109;XXX,128,136,137) and from Attica (op.cit.p.56;pl.9:3,11 both from Vourvatsi).
4 The date of this pot (PM.787) cannot be determined with accuracy, since no illustration of it is available; but judging from its detailed description in the Patras Museum catalogue, it may be assigned to LH.IIIA:21 (FS.214, variant 8).
5 Compare Mycenae (BSA,1965,pp164,fig.1:18;176,fig.7:24).
2a BSA (1971) 338, n. 8, Fig. 3: 5, 6 (= An Italian origin of the shape is suggested). Cf. also BSA (1921-23) fig.12a (Mycenae)
31. Mug (Tankard) \[FIG. 60 PL. 151\]

So far only one whole mug has been found in Achaea, (PM.198) and this comes from a tomb excavated by N. Kyparissses at Vrisarion (Kato Goumenitsa). It is of small size, its rim diameter being almost equal to its height (0.07m.). Buff clay, decoration almost entirely worn off.

Uneven bottom; incurving side, rim slightly flaring; one relatively small flattened handle making smallish oval loop attached vertically to side at minimum diameter of body.

The shape (Furumark's Cylindrical Cup) which is almost certainly copied from metalwork has been found on most Late Helladic sites, but never in large numbers. It was especially widespread during LH.IIIA and IIIB, when its cylindrical body was divided into two zones, first by a ridge at the waist and then by a painted band around its middle. In LH.IIIIC this ridge disappears.

---

1 PAE(1925)44f., fig.1.
2 MP., pp.56,623, Type 226. It is referred to as a "mug" (Wace, E. French), but it is perhaps better described as a "tankard" (Broneer, Stubbings, Hankey, Iakovides).
3 See MP., p.56; Broneer, Hesperia VIII(1939)pp.374-375; Stubbings, BSA(1947)p.64; Iakovides, Perati B,p.227.
4 Cf. examples listed by Furumark, MP., op.cit. (Syria, Dodecanese, Argolid, Aigina, Attica).
5 Especially at Mycenae, BSA(1956)p.121; (1954)pl.49d; (1921-22, 1922-23, pl.XIV.h,i).
6 Annuario(1965-66)p.38,284,figs.10,324 (Kos); Palace of Nestor I,pp.374-5,pl.365,366,shape 33; BSA(1954) 239f.,pls.51c,50; (1955)227ff;pls.44d,45f,51; (1956)121f.,pls.29a,30,52; (1957)213f.,pl.41d; PAE(1961)166f.,pl.123a; (1962)80f.,pl.87b (Mycenae); A.Delt.20 (1965)148f. (Tiryns); Prosymna, p.431,fig.100, 109,141,254; BSA(1947)35f.,pl.8:10,12,13; PAE(1955) 83f.,pl.28 (Attica); Hesperia VIII(1939)372ff., fig.55 (Acropolis-Fountain).
7 Mrs. E. French has suggested that "the chief difference between PS.225 and 226 is the central rib which occurs only on the former". See BSA(1965)176f. note 75.
and mugs are decorated with several designs\(^1\) or they are painted monochrome both inside and out.\(^2\)

The Achaean specimen belongs to this last type without grooving and might well be assigned to the LH.IIIC period, but its context\(^3\) and some scanty traces of its paint\(^4\) suggest an earlier date, probably LH.IIIA:21.

32. **Conical Rhyton** [Fig.56 Pl.151]

There is only one rhyton (PM.1029) of narrow conical form in the Patras Museum and this comes from a chamber tomb excavated by N. Kyparisses at Vrisarion (Kato Goumenitsa).\(^5\)

The vase was found in a very good state of preservation and is well described and illustrated by E. Vermeule.\(^6\) Of this description we may here repeat the outline: Height including the handle 0.314m., diameter of rim 0.119m. The fabric is of a well levigated clay of red-buff colour, which is polished inside and out.

Shape elongated conical, straight sided with open lower end; protruding horizontal lip with rounded edge; vertical flattened handle rising above rim and forming an oval loop with both ends joining at the lip; one rounded moulding somewhat below the rim.

Decoration slightly worn off. It consists of successive round stripes and lines of clear red paint. They are drawn in a "Tell el Amarna" style, i.e. one broad stripe alternating with four thin lines. Rim painted with strokes, lower part of body coated in solid colour. Handle decorated with a straight line running along its back.

The conical rhyton (PS. 199), sometimes called a "filler"\(^7\)

---

1 Cf. e.g. Perati B, p.226, fig.90 (no.410).
3 It was found in a LH.IIIA:21 chamber tomb.
4 Of dark brown colour (LH.IIIA:21) see MP., p.428.
5 PAE(1925)44f., fig.1.
7 e.g. by E. Vermeule, *op.cit.* and Blegen, *Prosymna*, pp.405-406.
or a "funnel"\(^1\) is a clay shape which must be derived from stone and metal originals.\(^2\) Furumark considers it a Minoan luxury vase\(^3\) and has already pointed out that none of the known specimens antedates MM.III.\(^4\) He also has suggested an oriental origin of the shape. In fact vases of this type are more frequent in the Levant\(^5\) and Crete\(^6\) than in mainland Greece.\(^7\)

---

1 e.g. by F. Stubbings, \textit{BSA} (1947) 55f.
3 \textit{Ibid.}, Cf. also Evans, \textit{PM.}, II, figs. 498-500; pl.12 and fig.443, where is said that in Minoan representations the conical rhyta are pictured as being offered to a female personage, apparently a goddess; see also the analogous representation on the Tiryns signet-ring, \textit{PM.} IV, fig. 385.
4 See, Evans, \textit{PM.} II, suppl. pl.24, and cf. Karo, \textit{Minioische Rhyta} (= Jahrb. 26, p.265 and fig.15.
5 Cf. examples listed by Furumark (\textit{MP.}, p.618) from Rhodes, Cyprus, Delos, Syria, Asia Minor. Cf. also, Stubbings, \textit{Levant}, pp.61,63, 66, 70,75,81, figs. 16,26, pls.XV no.1; XVI no.14 (from Ras Shamra, Askalon, Minet el Beida, Tell Abu Hawam).
6 A whole series of splendid conical rhyta belonging to LM.Ib came from Palaikastro (Bosanquet, \textit{Unpublished Objects from the Palaikastro excavations}, pp.49ff., pls.XIX, XX, XXI), and other sites have yielded several specimens (e.g. Seager, \textit{Pseira}, p.25, fig.8; p.29, fig.10.)
7 To the examples recorded by Furumark (\textit{MP.}, op.cit.) from Argolid, Attica, Phocis, Aigina, some more must be added from: Messenia, \textit{Ergon} (1960) p.146, fig.159 (Gouvalari:Tombs 1, 2), Mycenae \textit{BSA} (1964) p.250 fig.2:11 (Atreus Bothros); (1965) p.176, pl.51 (d)4 (The Terrace on the Atreus ridge); p.186 (The Terrace below the house of shields); (1969) p.276, fig.7:74,77 and pl.62d:3 (From within the Citadel at Mycenae); Argos, \textit{Deiras}, p.162; \textit{Prosymna}, p.405-406, fig.671 no.1002 and Athens (Acropolis - Fountain) \textit{Hesperia} VII (1939) p.387, fig.671, m. The shape is altogether unknown to the pottery from the West, cf. Taylour, \textit{Mycenaean pottery from Italy}, p.94.
These ritual vessels are, however, nowhere very common in LH.III and the presence of one example in Achaea is part of the evidence for the practice there of Minoan-Mycenaean funeral rites. Mrs. Vermeule mentions an almost identical pot to the Achaea one from Olympia and suggests that our example is an import from there. Without denying the possibility that Mrs. Vermeule may be right, my opinion is that a local manufacture of this pot must not be altogether excluded, since there is nothing conclusively against an Achaea origin.

The Mycenaean conical rhyton was known since LH.I, became widespread and popular during LH.IIIA and survived into the LH.IIIB period.

1 Furumark states that "it (the conical rhyton) was originally and principally a libation vessel, even if it may sometimes have been used for drinking purposes" (MP, p.71) and his suggestion has been generally accepted. [See, e.g., Stubbings, BSA(1947) p.55-56; Blegen, Prosymna, op.cit., J, the only exception being so far Martín Nilsson who believes the opposite. (See MMR, p.154). A suggestion as to how these vessels were actually used is given by the find in the Myc. Sanctuary at Asine of a jug (FS.106:2) with the lower part broken away, placed in an inverted position on the altar ledge (cf. Nilsson MMR, p.113).

2 See, Stubbings, Levant, p.70.

3 Cf. Mylonas, Mycenae and the Mycenaean Age, I78ff.

4 AJA(1960)11f.

5 Mycenae, Aigisthos Th.T.pl.47c; Prosymna, fig.671 no.1002.

6 Minet el Beida, Syria 13, pl.4:2; Nilsson, MMR, fig.113; Mycenae, BSA(1964)250f; fig.2:11 (IIIA:1); Ialysos,N.T.1:2;4:4-1 468:1; Kameiros, FMLV 11:71(?) (IIIA:2e); Attica, BSA(1947)55ff., fig.25A, pl.18:1,5; Ialysos, O.T.20:GB 287:12-BMA 839; ditto,N.T.6:1-1 468:2; ditto N.T.50:9; Kameiros T. 46:1; Enkome, O.T.,69:1094-BMC 603; ditto O.T. 70:1115; Mycenae, BSA(1965)176f; pl.51(d)4 and p.186 (IIIA:21).

7 Leivadiela, FMLV, 19:134; Ras Shamra, above vault 13: fig.8:A; Ras Shamra, Syria 17, pl.19:2; Enkome O.T. 53:fig.6-GB 18:8-BMC 602; Kourion, O.T.28:2-GB 19:11-BMC 601; Athens, Acropolis-Fountain, p.387, fig.671,m; Mycenae, BSA(1968)276f; fig.7:74,77 and pl.62d:3.
Judging by the context, shape and decoration we are probably on safe ground in placing the Achaean example in the second half of the LH.IIIA:2 period.

33. Lids [Fig.60 Pls.132d;151g]

Only two lids have been found in Achaea so far and they are of different fabric, size and shape.

The first one (a/a727), which was found covering the mouth of the strutted amphoriskos from the cemetery of Klaus (PM.265), is of semiglobular shape with its lower part vertical (PS.334); no handles; well smoothed buff clay, black paint; decoration consisting of round thin stripes and concentric circles. A round hole is pierced in the centre of its convex top. Diameter 0.09m.

Similar lids have been found on several sites and are associated with pottery of all Mycenaean periods.

The other example (PM.739) found at Drakotrypa is of inferior clay and craftsmanship. Diameter 0.132m. Pinkish coarse ware. It is painted inside and out with brown paint. Conical shape (PS.335) with a vertical loop handle on top and imprints of dots round the rim as sole

1 It was found among other finds from a LH.IIIA:2 chamber tomb.

2 According to Purumark (MP.,p.71-72) the chief difference between the LH.IIIA:2 examples and the earlier ones is primarily the shape and the placing of the handle and only secondarily the shape of the lip. Our example has a LH.IIIA:2 handle (=both ends joining at the lip).

3 See above, p.367 ("Tell el Amarna" style:LH.IIIA:2; see Levant,p.90).

4 Mrs. Vermeule appears, therefore, to be wrong in dating it LH.IIIA:1, AJA,op.cit.

5 MP.,p.78,642,Type 334 (Ialysos, Asine, Vourvatsi); Kos, Anuario(1965-66)p.272,293,figs.310,325; Crete, BSA(1960)19f.,pl.7a; Naxos, PAE(1959)pl.157b; Argos - Deiras,p.162,pl.LX,6; Mycenae, BSA(1964)250f; fig.2 nos.14,15; Aigina, Hesperia VIII (1939)385f; Kopreza, BSA(1947)47f.,pl.13:8(?) Perati B,p.261-2.

6 The earliest example being that from Mycenae (Atreus Bothros) BSA(1964)250f. (IIIA:1) and the latest one that from Kerameikos, Kerameikos I,p.70,pl.21 (S.M.).
decoration. Judging from its shape, size and handle, it seems probable that it belongs to a large cooking vessel\(^1\) (tripod cauldron?).

Chronologically the example from Klauss may be assigned to the LH.IIIC:1e period, while that from Drakotrypa to an earlier date (LH.IIIB:1?).

34. **Pithoi** [Fig 62 Pl. 152]

There are two whole pithoi in the Patras Museum (PM.1049, a/a814). They come from Teichos Dymaion and Kangadhi respectively. The first one was found crushed in situ at the altar unearthed at Teichos Dymaion, while that from Kangadhi is said to have been found in a destroyed chamber tomb.

The settlement site at Teichos Dymaion has yielded two more examples (a/a809,810) similarly found crushed in situ and fragments of some others (a/a807,808,811,812). The other settlement site at Drakotrypa (Katarraktis) has produced a specimen crushed in situ at the E-H corner of the Mycenaean house (a/a813).

The two whole examples (reconstructed from many fragmentary pieces) differ considerably in size, that from Kangadhi being bigger (1.20m.) than the pithos from Teichos Dymaion (0.60m.). A difference in quality and colour of the clay is also observable. Both specimens are made of gritty, coarse clay, which is either of dark brown (a/a814) or pinkish (PM.1049) colour.

They are of tall ovoid shape with neck and very narrow flat (PM.1049) or pointed (a/a814) base; thick horizontal lip; no handles. They correspond more or less to Furumark's Type 13.

With the exception of PM.1049, which has moulded clay ropes round the body,\(^2\) all other examples are left undecorated.

The pithoi found in Mycenaean contexts are quite different from the Minoan types and only a relatively

---


2. This is a feature found also in EH. and MH. pithoi, see *Zygouries*, fig. 113, *Korakou*, p. 31.
few such specimens are recorded in excavation reports, but Furumark is evidently right in considering much of the "coarse ware" found in settlements as fragments of such pithoi. Ovoid pithoi existed since EH, continued throughout the MH. period and according to Mylonas the Late Helladic pithos represents a later stage in the development of the early "two-storied" type of pithos (Eleusis, p.58, n.3).

The Achaean pithoi on consideration of their context (and decoration, PM.1049) may be placed in the second half of LH.IIIB, the only probable exception being the pithos from Kangadhi (a/a814) which appears to be later in date (LH.IIIC:1e or l?).

35. Alabaster Pyxis [Fig. 33 Pl. 152]

From the rich Mycenaean cemetery at Klauss comes an alabaster pyxis, now housed in the Patras Museum (PM.1052). Its flat base, part of the body and lid had been damaged by the dampness, but it was restored with plaster, though not successfully in all the missing parts.

As this pot has been already well described and illustrated by both the excavator and Mrs. E. Vermeule, little need be said here by us.

Restored height 0.094m., diameter 0.11m. It is made of dull alabaster.

Cylindrical body, with three horizontal pierced lugs, one of which is missing. Flat lid, probably tied on through the lugs.

1 Cf. examples listed by Furumark, MP., p.586-7 (Mycenae, Korakou, Asine, Berbati, Thebes, Delphi, Menelaion, Malthi, Argos, Menidi Th.T.; Tsaritsane).
2 Cf. Zygouries, figs.111,112.
3 Goldman, Eutresis, p.34, figs.35,41; Persson, Bull., Lund, 1924-25, p.71 and pl.30:1.
4 Cf. for close parallels, Korakou, House L, figs. 106,107 (IIIB or later).
5 All the material from Kangadhi is dated LH.IIIC:1e or l.
6 Mrs. E. Vermeule appears to be right in observing that it has been restored too short.
7 PAE(1937)90 (no.96), fig.10.
8 AJA(1960)12ff. (no.47), pl.5 fig.34.
It is richly and nicely decorated, both on lid and the cylindrical body with relief designs curved on the soft alabaster. They consist of argonauts set in two rows\(^1\) and moving right with a ridge dividing the friezes. On the lid three large argonauts in each row are followed by a smaller one; on the body there are four argonauts of equal size between each lug. With the exception of the two small argonauts on the lid which have one tentacle, all others have triple tentacle-sprays. (Pl.152).

The argonaut design can be traced back to LM.1 - LH.IIA prototypes (FM.22:4-14).\(^2\) Mrs. Vermeule mentions one close parallel to our example — though it is made of ivory and the argonaut design is more carefully executed — from the Acropolis at Athens.\(^3\) She also suggests a strong stylistic link between Mycenae and Achaea in view of the presence of the ivory argonaut plaque from the former area,\(^4\) which much resembles the design of the Achaeian pyxis.

This alabaster pyxis appears to be unique not only in Achaea, but elsewhere in Mycenaean Greece. Pots made of alabaster are extremely rare, and I have only come across one alabaster piriform jar from Crete.\(^5\)

Without denying the possibility that the Achaean example was locally made, I should be inclined, on consideration of the alabaster material and the technique of curving designs, to think that it is rather a foreign product imported in Achaea from the Argolid where the technique of such curving designs was better known.\(^6\)

On grounds of both context and design it may be one of the latest in the LH.IIIB material from the Klauss cemetery (LH.IIIB:2-C:1e?).

\(^1\) Only the tentacles of the lower row on the body are visible.
\(^2\) MP., pp.147, 192, 306-308, fig.50.
\(^3\) Hesperia IX(1940)289f., fig.31.
\(^4\) BSA(1954)pl.39a (House of Sphinxes).
\(^5\) Evans, FN.IV.figs.875a,b.
\(^6\) See Vermeule, Greece in the Bronze Age, p.218-221.
This is no ordinary tomb-furniture, though it might perhaps be placed in the grave of some person, such as a rich woman, and was probably intended to hold some of her valuable belongings.

35.a. Uncertain Shapes

The exact shape of seven vases described in the Patras Museum catalogue (PM.460,938,138,139,140,141,525) and that of another one (a/a732) from Drakotrypa (PAE, 1958,175) remains uncertain, since no drawing or photograph of them is available.

36. III TERRACOTTA FIGURINES

Apart from the pottery the Achaean tombs and settlements yielded a number of objects of terracotta, (twenty three in all) made of the same clays and painted with the same glazes as the vases. Chief among these are the female figurines and figures of animals, so well known from all Mycenaean sites elsewhere.

The Achaean terracottas can be divided into three main groups:

A. Human Figurines [Fig.61 Pls.152-5]. To this group belong one male (PM.925), one child (PM.891) and ten

---

1 W. Taylour says (Mycenaean Pottery in Italy, p.73) that the cylindrical pyxis first appeared in the Thapsos period (Thapsos, MA VI, fig.4:2,p.98; fig.25:1, p.117) and remained rare throughout the LH. period in Greece. Cf. for parallels in shape, (not in material) Prosymna, figs.724:462;405:334-5;MP.,46, 586, Form 5,Type 12 (Mycenae, Ialysos, unknown provenance); Perati B,p.261; Kephallenia, Lakkithra no.262 (AE.1932,pl.13).

2 It is a handmade pot.


4 I have been unable to find these two figurines in the Patras Museum, but from the description of the catalogue, the child figurine appears to belong to a female figurine. In fact, such female figurines, holding a child at their breasts are not infrequent and have been found in several tombs, see, Fur.CMP,p.87,note 1 (from Dendra, Mycenae, Aigina).
female (PM.608, 1087, a/a725, a/a764, AM.59, 63, Berlin no.30773, BE.634, 648, 671) figurines. Of the female figurines three are of the Phi (Φ) Type (a/a725, 764, Berlin 30773), six of the ordinary Psi (Ψ) Type (PM.608, 1087, AM.59, BE.634, 648, 671) while another one from the region of Aigion (AM.63) has an individual shape, and so cannot be assigned to any of the known Types of female figurines. It seems to me that it was originally sitting in a chair, for its body, unlike all the other examples, has a slightly crouched shape, and cannot stand in an upright position. (Pl.153b-c)

The example from Aigeira (Berlin 30773) appears to be unique (Pl.153d-e). It has been recently well described by Mrs E. French, who classifies it with her Naturalistic Group of Female Figurines and mentions one similar - not identical - example from a private collection in Germany (Lullies, 1955, no.108).  

Most of the paint of the two Phi (Φ) examples (a/a725, a/a764) is effaced, but some simple decorative straight bands on the lower part of the body are still traceable.

The figurine from Aigeira (Berlin 30773) has preserved its paint, which consists of vertical and horizontal carelessly drawn wavy lines, both on the front and the back. The eyes are indicated by central dots and the breasts are painted solid.  

The painted decoration in all Ψ Type specimens is well preserved and its details are very similar to those known from other examples recovered elsewhere, i.e. the eyes are in all instances indicated by painted dots, the upper garment is marked by fine parallel wavy lines; they occupy the whole of the crescent even to the tips. The stem, or the "skirt" has only a few broad straight stripes. The neck and the waist are also marked by similar round horizontal bands, the waist line being low, exactly at the junction of the body and the stem; the "hat" is painted

1 The last three examples come from our excavation at Aigion (1970).
2 BSA (1971) 111, 178, 185.
FIG. 61. Terracotta figurines.

FIG. 62. Pithoi
with a cross design, while the braid of hair hanging down the back is shown, at least in one example (BE.648), by a sharp longitudinal edge painted with small horizontal strokes.

The crouched example from Aigion (AM.63) is decorated simply with two horizontal lines; one at the base of neck continuing on to the shoulders and another one around the waist. Scanty traces of vertical straight parallel stripes along its feet are still visible, while the "hat" is painted solid.

In all examples mentioned above the paint is either of red or red-brown colour.

B. Animal Figurines [Fig.61 Pl.153]. They are represented by some crudely made fragmentary examples belonging either to horse-shaped\(^1\) (PM.890,893,926) or ox-shaped (PM.803,804, 805,900)\(^2\) Types.

A turtle-figurine in the Aigion Museum (AM.70) appears to be unique and unparalleled elsewhere in Greece. In the Patras Museum catalogue two bird-shaped\(^3\) figurines (PM.765, 766) are mentioned, but I have been unable to find them.

The paint in all animal figurines is too defaced for the designs to be traceable.

C. Chair From a chamber tomb at Aigion (Tomb B) excavated by E. Mastrokostas in 1967 comes a small perfectly preserved three-legged chair (BE.386). Height 0.06m., breadth across the arms 0.072m. Grey-buff clay, brown paint.

The chair stands in tripod fashion, on three legs, two at the front, one at the rear, which correspond to three vertical supports for two horizontal curved bands of clay making the back and the arms of the chair. The

---


3 Bird figurines are extremely rare and only a few examples are so far known, from Mycenae, Laconia, Aigina, Trachones, Krisa, Asine (House G) and Perati. See *Perati B*, p.271 and notes 1,2,3.
seat is slightly hollowed out to a comfortable shape. The decoration, except for a stripe around the seat, is confined to vertical stripes and rows of dashes on the legs and the horizontal supports.

Objects of this or a similar kind are certainly not common, but they are occasionally found in Mycenaean tombs.

Close to our example come some chairs from chamber tombs at Nauplia, Thebes and Dendra. Judging from the context and from parallels found elsewhere, we can place the Achaean chair in the LH.IIIB period, late rather than early.

As regards the chronology of the other Achaean terracottas, on grounds of both context — whenever it is known — and shape, we may place first the Phi-Type of the female figurines (IIIA:2e or 1?), while all the examples of Phi-Type may be dated to the LH.IIIB period.

For the other specimens (male, child, animals, birds) no definite date can be given at present, partly because of their very fragmentary state of preservation and partly because of the absence of any detailed description, drawing or illustration of them.

Lastly the crouched female figurine (AM.63) and the turtle figurine (AM.70), although their provenance remains unknown to us, appear to be the latest examples of terracottas in Achaea (IIIB:2-3).


2 Cf. Stais, Collection mycénienne du Musée National, p.150, no.3554.

3 A. Delt. III(1917)190f., fig.135 (K.T.25, nos.1,2).

4 A. Persson, The Royal Tombs at Dendra, near Midea, p.88, fig.61.

5 Cf. Furumark, CME, p.89; Taylour, The Mycenaeans, p.70; Vermeule, Greece in the Bronze Age, p.222 where she says that "though they are especially common in the LH.IIIB empire, it is not clear whether their dates should be strictly limited to the thirteenth century".
SUMMARY AND CONCLUSIONS

In the description of the Mycenaean pottery of Achaea, the main characteristics have been pointed out with special emphasis on the local peculiarities, as recognisable in individual shapes and decorative patterns. The relationship of our material to the pottery from other areas has been also briefly discussed wherever we judged it to be helpful to draw useful conclusions for the history of this district.

It must be regretfully admitted, however, that an attempt to date the individual types and to summarise the development of the Late Helladic pottery as a whole has proved not to be an easy work, since there is not always sufficient evidence to show what types are contemporary. Nevertheless the examination of this evidence has not been wholly unproductive. There are, of course, many gaps that at this stage cannot and perhaps may never be filled, which prevent us from an absolute and accurate dating of the Achaean pottery. So, my conclusions embodied in this chapter are to some extent merely tentative and especially those concerning the chronology of the pots are a good deal more tentative than others.

Before dealing with the analysis of the local features, it is worth stressing that the Achaean pottery, as was noted in the introduction, is by no means inferior in technique and draughtsmanship to that of other better known Late Helladic districts, and there is no sense of dependence in any central region.

Turning now to a more detailed discussion of the material the peculiar features of the local style deserve special notice and may be summed up as follows:

A. SHAPES The Achaean repertory, which has only recently begun to be known, though generally similar to that of the Argolid displays many minor differences and

1 This part of the chapter is not fully annotated, as references for most of the statements will be found elsewhere in this chapter.

variations, perhaps local peculiarities. It has often been pointed out that almost all ancient vases were shaped and finished separately as individual items and not turned out mechanically on an endless assembly line. Some little diversities due in part to the idiosyncrasies of the particular potters must therefore be expected, and there are consequently no exact duplicates. Other divergencies may have arisen from local customs and preferences. A few shapes or types of vessels, not hitherto known in Argolid have been noted in Achaea, such as the "four-handled storage jars". On the other hand "deep bowls" which occur in great profusion in Argolid, Corinthia and eastern Greece are extremely scanty in western Peloponnese.

Among the pottery collected from several Achaean sites only thirteen deep bowls and fragments of a score or more have been recognised as compared with hundreds at Tiryus and Mycenae. A difference of this kind, if it is not merely the result of chance, may reflect different habits and local peculiarities in the widespread provinces and regions of the Mycenaean world.

Generally the distribution list of shapes in Achaea, as it is shown in the chart appended to this chapter, is individual and differs from that found elsewhere.

Open shapes are less popular than closed ones, but not to such an extent as most of the previous researchers have suggested for some of them. Moreover the presence of some new both open and closed shapes supposed to be entirely unknown to Achaea, shows that it is never safe to conclude that a certain shape is totally absent from a given area.

Especially with regard to the closed shapes, stirrup jars are indeed the most popular shape and would seem to comprise nearly a good third of the total (37.5 per cent). For the rest the alabastra (both rounded and square-sided) are fairly popular and so are the amphoriskoi and the small e.g. Legged pots seem to be much more common here than in the Eastern Peloponnese and Attica (e.g. Perati).

Cf. e.g. Palace of Nestor I, p.354.

Perhaps because open shapes were considered less suitable for funerary purposes by the Achaeans, or this may be due to lack of settlement excavations in Achaea.
globular one-handled jugs. Less frequent are the piriform jars, the four-handled storage jars, the small handleless jars and the narrow necked jugs. There occur also some more closed shapes such as two-handled storage jars, squat jars, askoi (usual and duck-askoi) ring vases, hydriae, composite vessels, globular flasks, averaging between seven and eight in number with a maximum of fifteen. Mention may finally be made of the two globular wide-necked jugs, the three small handmade miniature jugs and the one feeding bottle.

Of the open shapes the shallow cups outnumber all the others, while conical Kraters are the second most common shape and the deep-bowls are equalled in number by the Kylikes. Deep cups are reasonably common, while five Kraters are known in all. Bowls of different form and proportions than the usual deep bowls are extremely rare, while Mugs and Rhyta are represented each by a single example.

All the above mentioned both closed and open shapes as well as the unique specimen of the alabaster pyxis from Klauss, a number of terracotta figurines and a few oddments, more or less make up the tally. Handmade pots are found in Achaea\(^1\), though very rarely, and they comprise thirteen\(^2\) examples in all, e.g. one large Hydria, three small miniature jugs, one shallow cup, one deep cup, etc.

The analysis may be taken a step further on the basis of new shapes and decorative motives, which appear to be peculiar to this area.

As it was stated above, though the Achaean pottery is in the Mycenaen tradition, there are a number of peculiarities distinguishing it from that of other areas. They are referred mainly to the individuality of some Types of pots and the frequency of some others considered to be either unknown or less popular elsewhere.

On our present evidence much of what Mrs. Vermeule and Mr. Desborough say concerning the local elements seems to be reasonable. Thus,

---

1 Desborough's (LMTE, p.101) opinion must, therefore, be modified.
2 See above, p.126.
1. Large storage jars either four, or two-handled are the most distinctive Achaean shapes, the latter less common here than the former, but certainly uncommon elsewhere. These with the duck-askoi, which are of an advanced shape and have no exact parallel in other areas, may be said to be peculiar to Achaea and must be regarded as local products.

2. Some originality is also shown in the more or less successful effort of the local potters to create new shapes by combining traditional shapes with each other in a new fashion (e.g. PM.151). (Pl.93a-c. Stirrup-jar.)

3. A further remarkable speciality of the district is the tendency of the Achaeans to mount their pots on struts of different shape, a characteristic known too in some other areas (e.g. Kephallenia, Attica) but less popular. Apart from these three main characteristics, there are some more instances where elements of the local style can be easily traced. They are as follows:

4. The presence of some rare, unique and unparalleled shapes, such as those mentioned elsewhere in this chapter. A brief reference to the concerned shapes may be permitted here.

   a) Three stirrup jars (BE.636, 697, PM.898) appear to be unique in Achaea on consideration either of their shape or size, while the advanced piriform and cylindrical types are relatively more frequent here than in other areas.

   b) Handleless alabastra, mostly of the rounded Type, appear to be peculiar to Achaea, though not unknown from other areas. They have warts in the place of the atrophied handles. It is worthy of mention here that the Achaean potters liked to make pots having warts instead of handles, as is clear from the occurrence of such warts on some other Achaean shapes as well (e.g. two-handled storage jars, one square-sided alabastron, amphoriskoi). The individuality of the shape of two other alabastra (PM.892 and a/a 730) has been already pointed out.

---

1 Cf. also AJA (1960) 17f; LMTS, pp.98-99.
2 It must be said, however, that some of them, especially mos. d, g, h, i, k, may simply reflect one potter's personal preference.
Legged square-sided alabastra are on the whole more numerous in Achaea than elsewhere. The relative frequency of pots of FS.96 is also very striking. Another pot from Telchos Dynaion (PM.785) with its unique and hybrid shape stands between the round and square-sided alabastra.

d) Individuality in the form is observed in three narrow-necked jugs (a/a 762, PM.697, 908).

e) The wide-based variety of amphoriskoi remains unparalleled elsewhere and it must certainly regarded as a local feature. Four more amphoriskoi appear to be unique in Achaea (B.33a, PM.1032, 265, 320).

f) Another local peculiarity can probably be seen in the position of the basket handle in all Achaean askoi, which is different and distinguishes them from all others found elsewhere. The cock-shaped example (AM.61) and two others (AM.26, 27) from Aigion seem to be peculiar to Achaea.

g) One legged ring-vase (PM.705) is unique not only in Achaea but in the whole of Greece.

h) The piriform-shaped composite vessel with the tripod-like common handle (PM.877) is apparently peculiar to Achaea and unparalleled elsewhere.

i) The presence of the rare Krater-types FS.287, 294, 298 is not without significance since all of them were locally made.

j) A local peculiarity may be seen in the frequency of the bell-shaped deep cups, which are less common elsewhere.

k) The unique alabaster pyxis from Klaus still remains unparalleled in other areas.

l) Finally the almost total absence of an air-hole on the shoulder of stirrup jars is certainly an important local feature, while the relative frequency of rope-twisted handles (especially in the four- and two-handled jars) probably betrays a local idiosyncracy.

B. PATTERNS Decoration, in Achaea remains hand-drawn throughout the Late Helladic period. On matters of detail one might note that:

1 As well as the ridged form of handles of three stirrup jars, see above, p. 278.
1. The great majority of the Achaean pottery consists of ornate vases, and only a small number of pots (20 in all: 2.08 per cent) are left unpainted.

2. Linear decoration only, is found rather frequently and vases decorated in such a manner comprise 5.2 per cent of the total.

3. A rather startling and important fact is the relatively large number of monochrome vases amounting to 12 per cent of the whole.

4. Pictorial decoration is extremely rare, being observed only on a handful of vases (six in all) of different shape, while it is altogether absent from the Achaean stirrup jars. Of local manufacture as these pictorial pots are, there is good reason to believe that the Achaean potters could produce naturalistic designs, though for some of them we cannot exclude the possibility that their source of inspiration lies outside Achaea.

5. Relief decoration is observed in four vases, while added White occurs only once.

6. As regards the distribution of the decorative motives it should be observed that,

(a) There is a greater tendency in this district than elsewhere to use dotted or fringed patterns - mainly concentric semicircles and triangles - not only on the shoulders of stirrup jars, but as ornaments for other shapes as well.

(b) Other popular motives are, the wavy line, the parallel chevrons, the diaper net, the triangle and the foliate

---

1 Compare with those found at Perati, Kos, Dodecanese, Cyprus. (See Catling, Cypriot Bronze Work in the Mycenaean World, pp. 41-43 and notes, for a discussion of the pictorial style).

2 e.g. PM. 7, where the imagination of the painter had led him to transform the fringed semicircles into birds.

3 e.g. the fish drawn in the inner surface of one shallow cup (PM.266) have a Levantine look.

4 Fringed parallel chevrons (PM.210), fringed elaborate oval (PM.1051) also occur.

5 e.g. four- and two-handled storage jars, rounded alabastra, square-sided alabastra, narrow-necked jugs, etc.
(c) Apart from these, zigzags, joining semicircles, rock pattern I, lozenge, quirk and multiple stem and tongue pattern are fairly common, while
(d) Panelled patterns, elaborate triangle, running spirals, concentric arcs, "sea anemone", flower, and "bivalve shell" are less frequently found.
(e) Other rectilinear and curvilinear designs, such as N-pattern, Antithetic spiral pattern, circles etc. are only occasionally used.
(f) Mention may finally be made of some unusual designs observed in nineteen examples and which may be explained as original inventions (e.g. PM.372 piriform jar) or as new variants of established patterns (e.g. PM.210 stirrup jar: vertical parallel chevrons the outermost chevron being fringed). Here we must refer also to the groups of parallel lines and dashes so often found on the shoulder of the stirrup jars, the former being clearly of a local peculiarity.

7. Knowledge of both the Close Style and the Granary Class is clearly demonstrable, though the instances given are not so many one could wish. Thus the former can be observed on some four-handled storage jars, stirrup jars, legged square-sided alabastra, duck askoi, ring vases, Kraters and deep bowls.

Mrs. Vermeule sees the influence of the latter style in the wavy line on the belly of a four-handled storage jar (PM.10) and in the transformation of the semicircles into a dark blob on the shoulder of a rounded alabastron (PM.153). But if these two examples do not clearly demonstrate such an influence, we have, however, some better examples occurring on the shoulder of one more four-handled storage jar (PM.549), on two-handled storage jars (PM.203, 272) on

---

1 I thank Mr. Desborough for drawing my attention to this feature.
2 Mr. Desborough speaks about "absence of any trace of the Granary Class in the Achaean series", but he wisely avoided definite conclusions about this, by saying that "so far as is known" IMTS, p.12.
3 Desborough is not convinced about it (IIMTS, p.100).
the body and shoulder zones of some stirrup jars (e.g. PM.87, 410) on some amphoriskoi (e.g. PM.144, 27, a/a 780, a/a 781), one ring-vase (PM.357) on the monochrome deep bowls and deep cups.

The evidence provided by these instances seem to be convincing and my opinion is that there is no need for further argument.

8. Before finishing with the decorative motives, a few words must be said about the decoration of the most popular shape, i.e. the stirrup jars. We shall not repeat the observations made elsewhere in this chapter, except for one only, i.e. that the system of covering much of the body of these jars with equally placed narrow bands is a characteristic of this area, though not unknown elsewhere. On the other hand stirrup jars retaining the alteration of thick and thin bands are much more numerous than it had been suggested before. Subsidiary zones of decoration below the shoulder are a rather rare feature on these pots, occurring in twenty nine examples only, out of a total number of 359. It may be advisable now to divide the above observations into the three main periods LHIIIA, B, and C in order to provide a clearer picture of the local variations. It must, however, always be remembered that the state of our evidence is not yet full (the context of most of the vases remains unknown to us), so our divisions are liable to error and not definite.

1. A start may be made with the peculiarities in the shape of the Achaean vases. Thus, apart from the presence of some shallow-cups of the bell-shaped variety (FS.230) and the stirrup jars of advanced piriform type (FS.166), attributed to LHIIIA, peculiarities in the shape are confined to the LHIIIB and C periods.

In particular the local variations attributable to the

---

1 See e.g. Kephallenia, Argolid (especially cemetery of Deiras) etc.
3 It comes to confirm the already expressed supposition of Mr. Desborough who says that such subsidiary decorative zones occur "just occasionally" Op.cit. p.99.
4 It occurs also on some four-handled storage jars (p.135), amphoriskoi (p.286) and one globular flask (p.288).
IIIB may be seen in the occurrence of (1) two of the three individual stirrup jars (BE.636, 697) all the heavy-piriform ones (FS.167) and two of the cylindrical type (FS.184); (2) two rounded-alabastra (PM.892, a/a 730) and another one of a hybrid shape (PM.785); (3) most (three out of four) of the wide-based amphoriskoi and two others of an individual shape (PM.1032, BE.33); (4) some askoi with basket handle; (5) one Krater of a rare type (FS.287, a/a 794); (6) shallow cups of the bell-shaped variety (FS.231) and (7) the unique alabaster pyxis (PM.1052). All these features first appeared during the IIIB period, the only probable exception being the heavy-piriform stirrup jars and bell-shaped shallow cups, which may be considered as surviving elements of the preceding IIIA period.

As to the IIIC period, one may note that local variations in shape are more frequent than in the IIIA and IIIB. They can be seen in the presence of (1) the unique stirrup jar from Teichos Dymaion (PM.898); (2) the handleless alabastra; (3) the rare types FS.96, 99 of the square-sided alabastra; (4) one wide-based amphoriskos (PM.15) and two others of a unique type (PM.266, 320); (5) some askoi with basket handle; (6) the legged vases (stirrup jar, square-sided alabastra, duck-askoi and ring-vase (PM.705); (7) the unique composite vessel (PM.877); (8) the rare types FS.284, 298 of Kraters and (9) the four-handed storage jars and some two-handled ones with warts on the shoulder.

Some of these peculiarities (nos. 4 and 5) can be explained as survivals of the preceding IIIB period, but all the others appear to be IIIC innovations.

The almost total absence of an airhole on the stirrup jars is a local peculiarity which persists throughout the LHIII in Achaea.

2. As regards peculiarities in decoration one might perhaps say that (1) both monochrome vases and vases decorated with lines only occur in all the three periods of the LHIII. (2) Pictorial decoration, though rare, is found in the whole LHIII. It is more common in the IIIC period (four examples out of six) but the earlier IIIA and B periods are also represented, each of them by one example (BE.606; PM.266); (3) Relief decoration occurs mainly in the LHIIIB (three examples, PM.739, 1049, 1052), but at least one example of
LHIIIA period is found (BE.673); (4) of the unusual Achaean motives the parallel lines are found on LHIIIC shapes only (seven stirrup jars, two duck-askoi and one composite vessel). The same also applies to the most popular and characteristic Achaean ornaments, i.e. the dotted and fringed triangles and concentric semicircles.

Other popular patterns, such as wavy line, diaper net etc. occur on several shapes during the whole LHIII period. (5) Finally the techniques of decorating the stirrup jars with equally-spaced bands down to the base, which starts early in LHIIIC in other areas (e.g. Argolid, Kephallenia), could well come earlier in the Achaean LHIII series (LHIII:A:21 or IIIB) and have originated in this area.

C. EXTERNAL CONNEXIONS. A brief survey of the Late Helladic pottery which has been found in considerable quantities in chamber tombs in the Elis and at Olympia as well as in Kephallenia reveals many characteristics similar to or identical with those that are observable in the material from Achaea.

With Kephallenia there seems no reason to doubt strong continuing links during the latter half of the LHIII period, as they appear best in (1) the common shapes (stirrup jars, See above, p.218 note 6.

There occur some stirrup jars decorated in such a manner and dated LHIIIA:21 (PM.317, 218, 120, 305) or IIIB (PM.256).

Cf. for (a) Elis, A.Delt. (1964) 177, pl.185-187 (Trypes "a lot of vases, over seventy five"); (1964-62) pl.118 (Strefi); (b) for Olympia, A.Delt. (1963) Chr.103, pls.137a-c; 138a-y (Kladeos "great number of vases"), PAE (1954) 295, fig.9-13; ΑΝΑ (1954) 235 (Bambes-Makrysia "each tomb contained a great many vases of LHIII").
amphoriskoi, Kylikes etc.) and decorative motives⁴ (semicircles, triangles etc.) especially of LHIIIC² date, and
(2) the parallel in detail of tomb construction during the LHIIIB-C periods between these two areas, as noted elsewhere (p.86, chapter of tombs). This does not mean necessarily that the pottery of Kephallenia in Mycenaean times came from Achaea, but more likely that the potters of Kephallenia often followed Achaean fashions in shape and pattern. The almost total absence of cemeteries of chamber tombs of earlier than LHIIIB-C³ date in the island, while the Achaean ones go back to LHIIIB, is in favour of such a hypothesis.

Especially the influence of the Achaean potters on those working in Kephallenia may be traced (1) in the occurrence of some shapes in the Kephallenian repertory, which are relatively common in Achaea, such as four- and two-handled storage jars and piriform jars. As they occur only exceptionally in Kephallenia and are of inferior quality in comparison with the better Achaean examples, they must be considered either as bad imitations or as experimental efforts in making such vases there at the end of the LHIII period. (2) in the frequency of some particular shapes, such as stirrup jars with sloping shoulders, amphoriskoi, square-sided alabastra and small globular jugs which are popular in both areas. This if it is not a matter of simple coincidence, may reflect similar

But in the latter area there are no birds, fish or anything of this nature, such as found occasionally on the Achaean vases.

Though these links (Achaea-Kephallenia) are almost entirely confined to LHIIIC, a few Kephallenian shapes and patterns of earlier than LHIIIC date, known from: Prokopata-Razata, A.Delt. (1919) 114, fig.29 (stirrup-jar and piriform-jar, IIIA:2e-B); Metaxata, AE (1933) pl.1:B2 (rounded alabastron); pl.2:14 (composite vessel) (IIIB); Mazarakata-Kokolata Kavvadias, Περιηγητική Αρχαιολογία, 355ff; figs.445 (square-sided alabastron); 443, 471 (composite vessels); 465 (stirrup jar) (IIIB), which have much in common with contemporary Achaean ones, suggest earlier than IIIC connexions between these two areas.

trends in pot-making by the Achaean and Kephallenian potters. If this is the case, there is good reason confidently to believe that Kephallenia followed Achaea rather than vice versa. This probability is strengthened by the fact that the Kephallenian vases are evidently inferior and cruder in comparison with their contemporary Achaean specimens; (3) in the almost total absence of stirrup jars with an airhole. This shape in its several forms occurs much earlier in Achaea (IIIA:1) than in Kephallenia (IIIB-C). It is reasonable, therefore, to suppose, as in both these areas such an airhole is found only exceptionally, in contrast with other areas where this is a rather common feature during the LHIIIC period (e.g. Perati), that the Kephallenians imitated and in this particular point their Achaean fellow-potters; (4) in the same system of decoration of many stirrup-jars and amphoriskoi (monochrome with a narrow reserved decorated zone on the shoulder of stirrup-jars and between the handles of the amphoriskoi). As both these two shapes appear earlier in Achaea (LHIIIA, IIIB:2) than in Kephallenia (IIIC) it may be said that the latter followed again the former district; (5) in the presence of some decorative patterns, namely triangles and concentric semicircles, so frequently occurring in both areas, but which in Kephallenia remain throughout the whole LHIIIC period simple, carelessly made and their use is restricted on one or two pot-shapes (stirrup-jars, amphoriskoi). In Achaea the same designs are more carefully executed and are more elaborate (dotted, fringed) and are found not only on stirrup-jars and amphoriskoi, but in many other shapes as well (four- and two-handled storage jars, piriform jars, round- and square-sided alabastra, duck askoi, composite vessels), some of which (e.g. alabastra) have an unbroken tradition throughout the LH period there; (6) in the absence of pictorial motives on the stirrup jars of both districts. We may be

1 A great many of them are handmade, see above, p.272 note 5.
2 Only once, see above p.159 note 5.
3 Cf. AE (1932) 36.
fairly safe in thinking that in this case the Kephallenians followed the Achaeans in using abstract designs only for the decoration of this shape.

The possibility, however, that the Achaean potters were for some features \( \text{e.g.} \) the Kylikes with ribbed stem (FS.276), the squat jars with one vertical handle (FS.87, high variant), the spouted conical Kraters (Type C), and the spouted Kraters (FS.298) indebted to Kephallenia must not be excluded\(^1\), since the persistence of close inter-communication between these two areas at least during the LHIIIC period is clearly\(^2\) demonstrated by the evidence of their pottery.

Connexions with Olympia and Elis have already been indicated in the presence of some common shapes (\( \text{e.g.} \) large piriform jars, square-sided alabastra, one piriform-shaped composite vessel, one mug, one conical rhyton etc.)\(^3\).

It is obviously of great importance, for the general picture of our knowledge of events at the Late Helladic period in Achaea, to be able to determine whether further links with other districts to the North, with Argolid and Attica and finally with the Aegean and South Italy can be traced through the evidence provided by the pottery.

Links are possibly to be found with Aetolia, Phocis and South Thessaly\(^4\), as they are demonstrated by the presence of some very similar squat jars with one vertical handle (FS.87, medium variety) (Aetolia), a two-handled storage jar with warts (S.Thessaly) and a four-handled storage jar (Phocis). At this point it is necessary to stress that these links are one-way\(^5\), i.e. from Achaea.

---

1 Cf. Marinatos, AE (1932) 46.
2 Cf. AJA (1960) 20 "Certainly the Mycenaean pottery of Kephallenia is the closest of any in the Greek world to that of Achaia".
3 Compare also the material from Palace of Nestor, which resembles in some respects (\( \text{e.g.} \) large storage jars, Kylikes) that from Achaea. It looks as a distinctive West Peloponnesian provincial style of Late Mycenaean ceramics had been developed there, forming a miniature Mycenaean Koine during the LH period.
4 See above, p.274 note 1 (Aetolia); p.144 note 5 (Phocis); p.152 note 4 (S.Thessaly).
5 Since, with the exception of the squat jars (FS.87) found also elsewhere, the four- and two-handled storage jars are practically exclusive to Achaea.
to Aetolia (?) - Phocis - South Thessaly.

There are *probable* connexions with Attica, while they are relatively frequent with the Argolid. Indeed in the entire collection of pottery from Achaea some pieces stand out as if they might have come from foreign factories, perhaps in the Argolid. They comprise one or two stirrup-jars of moderate size, one conical Krater, probably some piriform jars and alabastra, all of which bear patterns admirably executed in fine lines, in a style comparable with the best of the Late Helladic period at Mycenae, Prosymna, Argos (Deiras) and Berbati. But it is by no means impossible that fine ware of this kind was produced also in workshops at Achaea itself, since it seems quite possible that the potters of the two areas were working on similar lines, based probably on the Argolid tradition.

As to the relations with the Dodecanese one may note that a large piriform jar with relief decoration and sherds from some others recently found at Aigion are very similar, if not identical to the type found more frequently at Rhodes (Talysos). The evidence is at present very poor and one can only surmise that N.E. Achaea and especially Aigion had some contacts with the Dodecanese, but to what extent and for how long they were maintained we do not know.

The presence of the duck-askoi, the closest parallels to which come from Cyprus, as well as the frequency of the fringed designs and the presence of concentric semi-circles and triangles with solid central filling in some stirrup jars (e.g. PM.396, 86) might lead one to wonder whether any connexion is possible between Achaea and this island. Irrespective of this, all that need be said at

1 "The occasional similarities between some of the vases and those of Attic Protogeometric may be only coincidental" (LMTS, 14).
2 One stirrup jar (Deiras, DV.89, pl.LX no.8-9) may be however, an import from Achaea, since it is different from almost all of the others found there, and very similar, almost identical, to those found in Achaea.
3 Cf. LMTS, p.6 "little or no ceramic connexion".
4 See above p.304 and notes .
5 LMTS, p.24, note 5 (chamber tomb at Idalion).
6 See above p.304 note 7 .
this point about the Achaean pottery is that it displays a limited fusion of Argive and Aegean elements and all the regions mentioned above can in greater or lesser measure, directly or indirectly be connected with the Achaean.

Finally one is tempted to suggest that four-handled storage jars found both in Achaean and South Italy betray connexions between these two areas. Rather poor evidence.  

From the above observations no definite deductions can be drawn. Nevertheless, on the basis of the present evidence available, I am inclined to think that North-Eastern Achaean (Aigion region) was more closely linked with the Argolid and the Aegean islands, but South-Western Achaean with its adjacent areas Elis and Messenia and the Ionian islands, especially with Kephalenia.

D. CHRONOLOGY

There remains the problem of relative chronology. It is not infrequently stated that the Achaean pottery is almost all late. Since this view depends largely on negative evidence — the greater part of the material had never been illustrated — and on the uncritical assumption that because Achaean sites produce a great quantity of Mycenaean pottery dating from the end of LHIIIB and later, the makers of that pottery must have fled from other areas, especially from the Argolid, I hope to show that this is to some extent mistaken.

For, I would suggest on the basis of the available material — the picture is no doubt clearer now than ever before — that the totality of this evidence leads to the conclusion that in Achaean, in any case, we have virtually no gap in the sequence and from this to the conclusion that

1 See, e.g. above p. 358 note 1 (shallow cup with pictorial design). The term "Aegean" is used by me as a collective name for the Bronze Age civilization of the Aegean islands only. (See however MP, p. 9 for a different use of it by Furumark.)

2 W. Taylour, MPF, 75, note 12.

3 A distinct local style is clearly observable there, distinguishing it from the rest of Achaean (no two- and four-handled jars, no fringed or dotted designs).


5 My chronology of the Achaean vase is based mainly on Furumark's classification system and this particularly applies to LHIIIC. I have also taken into account for the subdividing of LHIII the surveys of Stubbs and Takзораде (Athos), E. French (Kythnna) and others.
the opinion of most of the previous researchers about the isolation of this district from the rest of the Mycenaean world cannot be accepted unreservedly.

Indeed the present study of the Achaean pottery provided us with good evidence to show that the Mycenaean pottery had a long and uninterrupted tradition from the LHI down to and including Sub-mycenaean period there.

The whole material may perhaps be divided into the following four phases:

I. The first phase is restricted to the periods, LHI and LHII, both of which are poorly represented in Achaea.

a. To the former period (LHI) may be assigned one wide-necked jug (FS.109) from Katarraktis (Drakotrypa) and some monochrome shallow cups of the ring-handled variety (FS.237).

b. The latter period (LHII) is better represented, mainly by the material recently found at Aigion (1967, 1970). It comprises one cylindrical piriform jar (FS.33), two rounded alabastra (FS.82), one square-sided alabastron (FS.92), five squat jars with a vertical handle (FS.87), and probably three Kylikes of the high-swung handle (FS.271?) and the one-handled (FS.263) varieties. For six shallow cups (FS.238) we cannot say with certainty if they belong here or to a later period (IIIA:1-2?)

II. The second phase begins with the appearance of LHIIIA. This phase is much better represented in Achaea than the first. It includes much of the pottery from the region of Aigion and a good deal from the west coast cemeteries (Vrachneika, Klauss etc.) amounting to nearly one third of the total number (over 300 pots). In particular the periods belonging to this phase are represented as follows:

1 Styrenius, Submycenaean studies 125-6. He assigns three vases (two four-handled storage jars and one stirrup jar) only to this period. It may be added that Mrs. E. Vermeule in a diagram in her book on the Greek Bronze Age represents Achaea among the districts, where the Submycenaean period is proved. ("Greece in the Bronze Age", p.324.)
### a. LH.IIIA:1

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piriform jars (FS.44)</td>
<td>11</td>
</tr>
<tr>
<td>Small Handleless jars (FS.77)</td>
<td>30</td>
</tr>
<tr>
<td>Rounded alabastra (FS.82-84)</td>
<td>3</td>
</tr>
<tr>
<td>Square-sided alabastra (FS.93)</td>
<td>12</td>
</tr>
<tr>
<td>Globular wide-necked jugs (FS.109)</td>
<td>1</td>
</tr>
<tr>
<td>Squat jars (FS.87)</td>
<td>3</td>
</tr>
<tr>
<td>Askoi (FS.194)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>61 (6.3%)</strong></td>
</tr>
</tbody>
</table>

### b. LH.IIIA:2e-l

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stirrup-jars (FS.171, 174, 178, 166)</td>
<td>56</td>
</tr>
<tr>
<td>Piriform jars (FS.34, 45, 47)</td>
<td>15</td>
</tr>
<tr>
<td>Small handleless jars (FS.77)</td>
<td>1</td>
</tr>
<tr>
<td>Rounded alabastra (FS.85)</td>
<td>38</td>
</tr>
<tr>
<td>Square-sided alabastra (FS.94)</td>
<td>25</td>
</tr>
<tr>
<td>Narrow-necked jugs (Oinochoea)</td>
<td>3</td>
</tr>
<tr>
<td>Small globular jugs (FS.112-114)</td>
<td>24</td>
</tr>
<tr>
<td>Handmade miniature jugs (FS.126)</td>
<td>1</td>
</tr>
<tr>
<td>Globular flasks (FS.189-190)</td>
<td>3</td>
</tr>
<tr>
<td>Feeding bottle (FS.160)</td>
<td>1</td>
</tr>
<tr>
<td>Askoi (FS.194?)</td>
<td>1</td>
</tr>
<tr>
<td>Kraters (FS.8-9)</td>
<td>?</td>
</tr>
<tr>
<td>Kylikes (FS.265)</td>
<td>1</td>
</tr>
<tr>
<td>Shallow Cups (FS.238)</td>
<td>6</td>
</tr>
<tr>
<td>Deep-cups (FS.214, 230, 249)</td>
<td>9</td>
</tr>
<tr>
<td>Mugs (FS.226)</td>
<td>1</td>
</tr>
<tr>
<td>Conical Rhyton (FS.199)</td>
<td>1</td>
</tr>
<tr>
<td>Terracotta Figurines (Human)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>189 (19.6%)</strong></td>
</tr>
</tbody>
</table>

### c. LH.IIIIB:1

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stirrup-jars (FS.167, 179-180, 182)</td>
<td>21</td>
</tr>
<tr>
<td>Piriform jars (FS.45, 47?)</td>
<td>4</td>
</tr>
<tr>
<td>(FS.45: PM.569)</td>
<td></td>
</tr>
<tr>
<td>Small handleless jars (FS.77)</td>
<td>1</td>
</tr>
<tr>
<td>Rounded alabastra (FS.85)</td>
<td>8</td>
</tr>
<tr>
<td>Square-sided alabastra (FS.94)</td>
<td>?</td>
</tr>
<tr>
<td>Small globular jugs (FS.114)</td>
<td>4</td>
</tr>
<tr>
<td>Globular flasks (FS.189-190)</td>
<td>2</td>
</tr>
<tr>
<td>Conical Kraters (Kalathoi) (FS.300-301, 251-252?)</td>
<td>9</td>
</tr>
<tr>
<td>Deep Bowls (FS.284)</td>
<td>?</td>
</tr>
</tbody>
</table>
III. The third phase begins with the latter half of the LHIIIB and continues until the very end of the succeeding LHIIIC period. Though the period of time covered by this phase is probably longer than the others, coinciding with the great upheaval which destroyed the power of the Mycenaeans, its length cannot, however, accurately be determined. A continuation of the tendencies of the second phase is shown in the persistence of the stirrup jar and piriform jar shapes, but more new types than in the second phase are introduced (e.g. amphoriskoi, ring-vases etc.) Not all the new shapes would arise at once—the deep bowl was probably introduced earlier than the amphoriskos—and changes in the older shapes (e.g. piriform jugs) must have been gradual.

Most of the pottery recovered in the cemeteries of Central and Southwestern Achaea (Kallithea, Klauss, Chalandriáta, Katarraktis, Mikros Pondias, Leontion, Drosia, Kertezi, Kangadhi, the settlement site of Paralimni (Teichos Dymaion) can be included here, while fifty six vases out of a total number of 172 from the region of Aigion should be assigned to it.

a. LH.IIIIB:2 The evidence for this period is too scanty and fragmentary, but enough to show clearly the break from the earlier periods. It is represented by:

- Stirrup-jars (FS.173, 164, 184) 11
- Piriform jars (FS.47?) 2
- Rounded alabastra (FS.86) 6
- Square-sided alabastra (FS.96) 24
- Narrow-necked jugs (Oinochoai) (FS.120-3) 9

1 Amin EMF, 68.
<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphoriskoi (FS.59-60)</td>
<td>6</td>
</tr>
<tr>
<td>Askoi (FS.195)</td>
<td>6</td>
</tr>
<tr>
<td>Hydriae (FS.128)</td>
<td>7</td>
</tr>
<tr>
<td>Composite vessel (FS.324, 327, 329)</td>
<td>4</td>
</tr>
<tr>
<td>Kraters (FS.281-282)</td>
<td>3</td>
</tr>
<tr>
<td>Deep Bowls (284)</td>
<td>8</td>
</tr>
<tr>
<td>Shallow angular bowls (FS.295)</td>
<td>1</td>
</tr>
<tr>
<td>Kylikes (FS.274, 267)</td>
<td>2</td>
</tr>
<tr>
<td>Shallow cups (220?, 253)</td>
<td>5</td>
</tr>
<tr>
<td>Deep cups (FS.231)</td>
<td>3</td>
</tr>
<tr>
<td>Pithoi (FS.13?)</td>
<td>8</td>
</tr>
<tr>
<td>Alabaster Pyxis (FS.?)</td>
<td>1</td>
</tr>
<tr>
<td>Terracotta Figurines (Animal)</td>
<td>1</td>
</tr>
<tr>
<td>Terracotta Figurines (Human)</td>
<td>1</td>
</tr>
<tr>
<td>Chair</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>107 (11.1%)</strong></td>
</tr>
</tbody>
</table>

b. LH.IIIIC:1e

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four-handed storage jars (FS.58?)</td>
<td>17</td>
</tr>
<tr>
<td>Two-handed storage jars (FS.58?)</td>
<td>6</td>
</tr>
<tr>
<td>Stirrup-jars (FS.176, 181, 184)</td>
<td>53</td>
</tr>
<tr>
<td>Piriform jars (FS.35, 49)</td>
<td>2</td>
</tr>
<tr>
<td>Rounded alabastra (handleless; FS.85-86)</td>
<td>13</td>
</tr>
<tr>
<td>Square-sided alabastra (FS.97)</td>
<td>2</td>
</tr>
<tr>
<td>Narrow-necked jugs (Oinochoe) (FS.120-3, 118, 137?)</td>
<td>16</td>
</tr>
<tr>
<td>Small globular jugs (FS.115)</td>
<td>6</td>
</tr>
<tr>
<td>Handmade miniature jugs (FS.126)</td>
<td>2</td>
</tr>
<tr>
<td>Amphoriskoi (FS.59-60)</td>
<td>39</td>
</tr>
<tr>
<td>Askoi (FS.195)</td>
<td>?</td>
</tr>
<tr>
<td>Ring-vases (FS.196)</td>
<td>8</td>
</tr>
<tr>
<td>Hydriae (FS.128)</td>
<td>?</td>
</tr>
<tr>
<td>Composite vessels (FS.325, 328, 330)</td>
<td>5</td>
</tr>
<tr>
<td>Kraters (FS.298)</td>
<td>1</td>
</tr>
<tr>
<td>Deep Bowls (FS.285)</td>
<td>5</td>
</tr>
<tr>
<td>Deep Bowls with two vertical handles (FS.?)</td>
<td>1</td>
</tr>
<tr>
<td>Stemmed Bowls (305)</td>
<td>1</td>
</tr>
<tr>
<td>Shallow angular Bowl (FS.295)</td>
<td>?</td>
</tr>
<tr>
<td>Shallow cups (FS.220?, 253)</td>
<td>2</td>
</tr>
<tr>
<td>Deep cups (FS.215, 240)</td>
<td>2</td>
</tr>
<tr>
<td>Lids (FS.334)</td>
<td>1</td>
</tr>
<tr>
<td>Pithoi (FS.13?)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>183 (19.04%)</strong></td>
</tr>
</tbody>
</table>
c. LH.IIIC:11  
Four-handed storage jars (FS.58?) 13  
Two-handed storage jars (FS.58?) 4  
Stirrup jars (FS.175) 93  
Square-sided alabastra (FS.98-99) 6  
Narrow-necked jugs (Oinochoe) (FS.137) ?  
Small globular jugs (FS.112) 1  
Amphoriskoi (FS.60) 9  
Duck-askoi (FS.195?) 7  
Kraters (FS.10) 1  
Conical Kraters (Kalathoi) (FS.291) 6  
Deep bowls (FS.285) ?  
Deep bowls with two vertical handles (FS.?) 1  
Stemmed bowls (FS.306) 1  
Kylikes (FS.275) 5  
Total 147 (15.2%)  

IV. In the final phase all the Submycenaean pots from Achaea are included, i.e.  
Four-handed storage jars (FS.58?) 5  
Two-handed storage jars (FS.58?) 1  
Stirrup-jars (FS.177) 22  
Narrow-necked jugs (FS.137) 1  
Kylikes (FS.276) 1  
Total 30 (3.1%)  

There remains a number of pots (over 150 in all) for which we have no detailed description, illustration or drawing, so their dating cannot be ascertained.  

Summing up the above discussion a new picture is obtained about the Mycenaeans in Achaea. Though the pottery evidence does not contradict the hypothesis of troubles at the transition from LHIIIIB-C and does not argue against an influx theory⁷ - an increase of the material is clearly notable during the latter half of the Late Helladic period, which may be explained as the result of an increase in the population of the district - at the same time it prevents us from accepting as valid the surmise that Achaea was an

---

⁷ Vermeule, *Greece in the Bronze Age*, 270; Desborough, *LMTS* 100.
isolated area\(^1\). On the contrary, the presence of a great deal of earlier material than LHIIIB–C, comes to strengthen our supposition that there was no break in occupation and that the Mycenaeans maintained themselves throughout the Late Helladic period there (c.1550\(^2\)-1050 or even 1000\(^3\) B.C.)

**PROTOGEOMETRIC POTTERY**

Apart from twelve vases found in a burial pithos at Dherveni in 1951\(^4\) (PM. nos.486a-495) nothing new has been recorded from this district since then.

Mrs. E. Vermeule\(^5\) has already described and illustrated some of these vases and V. Desborough\(^6\) briefly commented on the pottery and the manner of burial.

It is not my intention to describe and discuss in detail these P.G. finds, since so far as the Protogeometric material is concerned, Achaea has recently admirably been dealt with by Coldstream.\(^7\)

Here I shall give only a general conclusion permissible from Coldstream's analysis of the Achaean group.

Thus, it is clear that, although so little material has come to light in Achaea, both open and closed shapes are represented, the former by seven Kantharoi both of a tall and a broad variety (PM.487, 488, 489, 490, 491, 486b, a/a 12) one skyphos (PM.495) and one pedestalled skyphos (PM.492)\(^8\), the latter by two oinochoai (PM.493\(^9\), 494) and

---

1. Aín, EMF, 68; Desborough, LMTS, 14; Vermeule, AJA (1960) 18.
2. Furumark, CMP 115.
4. Cf. BSA (1952) 222.
5. AJA (1960) 16ff; pl.5, figs.38-40.
6. LMTS, 22n.3, 39, 101. He finds interesting contemporary parallels to this manner of burial, i.e. inhumation in a pithos, in Elis (PalaioPyrgo) and Messenia (Nichoria).
9. Op.cit. pl.48j. One Kantharos (tall) as pl.48c, but with plain reserved handle zone as well as one oinochoe (PM.494) and the jug (PM.486a) are not illustrated in GGP.
one one-handled handmade jug (IM.486a).

More or less close parallels to the Achaean Kantharoi are quoted from Attica, Olympia, Aetolia, the group in Mainz and Ithaka. The closed shapes are less individual in shape.

As to decoration it has also been clearly pointed out that three of the most typical motives of West Greek P.G. are found on an Achaean oinochoe (IM.493): (i) cross-hatched interlocking triangles or wolftooth; (ii) steep zigzag in a vertical panel; and (iii) a fringed triangular motive, while fringes added to vertical bars are used on a broad Kantharos (IM.490). Examples decorated with these decorative motives are cited from Ithaka (Aetos), Elis (Salmone) and eastern Messenia (Kaphirio).

With Ithaka and Laconia some connexions have been noted by Desborough and Coldstream, especially in the common practice of enclosing cross-hatched triangles in metope panels.

Finally the problem of their precise relative chronology is still unresolved (Late Protogeometric?).

This is all the earliest, post-Mycenaean ceramic evidence available from Achaea. Though continuity from IIII into Protogeometric in this area is an attractive theory our material does not show it, and proper excavations of a settlement site is alone likely to provide an answer.

1 GGP., 221f and notes. Coldstream does not exclude the possibility that the group in Mainz, whose provenance is unknown, may well come from Achaea itself.
3 Cf. GGP, 222f, pl.48b.
5 LMTS, 101, 234.
6 GGP, 222f. "Amyclaean" F.G. of Laconia.
7 Cf. GGP 222-3; Vermeule says (AJA, op.cit.) that this group "may be dated as early as ca. 900 B.C." and Desborough places it in the late F.G.
8 Cf. LMTS p.22 note 3 "Neither the pithos manner of burial nor the pottery has any connexion with the preceding Mycenaean", and p.101 "after the abandonment of the Mycenaean cemeteries there was apparently a complete break."
<table>
<thead>
<tr>
<th>Shape Description</th>
<th>Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four-handled storage jar: shoulder</td>
<td></td>
</tr>
<tr>
<td>Two-handled storage jar</td>
<td></td>
</tr>
<tr>
<td>Stirrup-jar: shoulder</td>
<td></td>
</tr>
<tr>
<td>Piriform jar</td>
<td></td>
</tr>
<tr>
<td>Small handleless jar (FS 77)</td>
<td></td>
</tr>
<tr>
<td>Rounded alabaster</td>
<td></td>
</tr>
<tr>
<td>Square-sided alabaster: shoulder</td>
<td></td>
</tr>
<tr>
<td>Narrow-necked jug</td>
<td></td>
</tr>
<tr>
<td>Small globular jug</td>
<td></td>
</tr>
<tr>
<td>Globular wide-necked jug (FS 107)</td>
<td></td>
</tr>
<tr>
<td>Equat jar (FS 87)</td>
<td></td>
</tr>
<tr>
<td>Handmade jug (FS 125)</td>
<td></td>
</tr>
<tr>
<td>Amphoriskos</td>
<td></td>
</tr>
<tr>
<td>Globular flask</td>
<td></td>
</tr>
<tr>
<td>Feeding bottle</td>
<td></td>
</tr>
<tr>
<td>Askos</td>
<td></td>
</tr>
<tr>
<td>Duck-askos</td>
<td></td>
</tr>
<tr>
<td>Ring-vase</td>
<td></td>
</tr>
<tr>
<td>Hydria</td>
<td></td>
</tr>
<tr>
<td>Composite vessel</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL CLOSED SHAPES**

<table>
<thead>
<tr>
<th>Shape Description</th>
<th>Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Krater</td>
<td></td>
</tr>
<tr>
<td>Conical krater</td>
<td></td>
</tr>
<tr>
<td>Deep bowl</td>
<td></td>
</tr>
<tr>
<td>Deep bowl with two vertical handles</td>
<td></td>
</tr>
<tr>
<td>Stemmed bowl</td>
<td></td>
</tr>
<tr>
<td>Shallow angular bowl</td>
<td></td>
</tr>
<tr>
<td>One-handed deep bowl (FS 202)</td>
<td></td>
</tr>
<tr>
<td>Kylix</td>
<td></td>
</tr>
<tr>
<td>Shallow cup</td>
<td></td>
</tr>
<tr>
<td>Deep cup</td>
<td></td>
</tr>
<tr>
<td>Mug</td>
<td></td>
</tr>
<tr>
<td>Conical rhyton</td>
<td></td>
</tr>
<tr>
<td>Lid</td>
<td></td>
</tr>
<tr>
<td>Pitcher</td>
<td></td>
</tr>
<tr>
<td>Alabaster pyxis</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL OPEN SHAPES**

<table>
<thead>
<tr>
<th>Shape Description</th>
<th>Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncertain shapes</td>
<td></td>
</tr>
<tr>
<td>Terracotta figurines (Hunan)</td>
<td></td>
</tr>
<tr>
<td>Terracotta figurines (Animal)</td>
<td></td>
</tr>
<tr>
<td>Chair</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL PATTERNS**


<table>
<thead>
<tr>
<th>Shape Type</th>
<th>Shoulder</th>
<th>Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four-handled storage jar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two-handled storage Jar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stirrup Jar: shoulder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoulder: body</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piriform Jar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small handleless Jar (FS 77)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rounded Alabastron</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Square-sided Alabastron: shoulder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoulder: body</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narrow-necked Jug</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small globular Jug</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Globular wide-necked Jug (FS 409)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squat Jar (FS 87)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handmade Jug (FS 126)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amphoriskos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Globular Flask</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeding bottle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Askos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duck-Askos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>King Vase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite Vessel</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL CLOSED SHAPES**

<table>
<thead>
<tr>
<th>Shape Type</th>
<th>Shoulder</th>
<th>Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Krater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conical Krater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deep Bowl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deep Bowl with two vert. handles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stemmed Bowl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shallow angular Bowl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One-handled deep Bowl (FS 242)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kylix</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shallow Cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deep Cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mug</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conical Rhyton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pithos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alabaster Pyxis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL OPEN SHAPES**

<table>
<thead>
<tr>
<th>Shape Type</th>
<th>Shoulder</th>
<th>Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncertain Shapes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terracotta Figurines (Human)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terracotta Figurines (Animal)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chair</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL PATTERNS**
<table>
<thead>
<tr>
<th>Four-handled storage Jar: shoulder</th>
<th>body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-handled storage Jar</td>
<td></td>
</tr>
<tr>
<td>Stirrup-Jar: shoulder</td>
<td>body</td>
</tr>
<tr>
<td>Piriform Jar</td>
<td></td>
</tr>
<tr>
<td>Small handleless Jar (FS 77)</td>
<td></td>
</tr>
<tr>
<td>Rounded Alabastron</td>
<td></td>
</tr>
<tr>
<td>Square-sided Alabastron: shoulder</td>
<td>body</td>
</tr>
<tr>
<td>Narrow-necked Jug</td>
<td></td>
</tr>
<tr>
<td>Small globular Jug</td>
<td></td>
</tr>
<tr>
<td>Globular wide-necked Jug (FS 109)</td>
<td></td>
</tr>
<tr>
<td>Squat Jar (FS 27)</td>
<td></td>
</tr>
<tr>
<td>Handmade Jug (FS 126)</td>
<td></td>
</tr>
<tr>
<td>Amphoriskos</td>
<td></td>
</tr>
<tr>
<td>Globular Flask</td>
<td></td>
</tr>
<tr>
<td>Feeding Bottle</td>
<td></td>
</tr>
<tr>
<td>Askos</td>
<td></td>
</tr>
<tr>
<td>Duck-askos</td>
<td></td>
</tr>
<tr>
<td>Ring Vase</td>
<td></td>
</tr>
<tr>
<td>Hydria</td>
<td></td>
</tr>
<tr>
<td>Composite Vessel</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL CLOSED SHAPES**

| Krater               |      |
| Conical Krater       |      |
| Deep Bowl            |      |
| Deep Bowl with two vertical handles |      |
| Stemmed Bowl         |      |
| Shallow angular Bowl |      |
| One-handled deep Bowl (FS 247) |      |
| Kylix                |      |
| Shallow Cup          |      |
| Deep Cup             |      |
| Mug                  |      |
| Conical Hydron       |      |
| Lid                  |      |
| Pithos               |      |
| Alabaster Pyxis      |      |

**TOTAL OPEN SHAPE**

| Uncertain Shapes     |      |
| Terracotta Figurines (Muran) |      |
| Terracotta Figurines (Animal) |      |
| Chair                |      |

**TOTAL PATTERNS**
Apart from the vases and terracotta figurines there are both in the Patras and Aigion museums a small variety of other Mycenaean artefacts, which have survived in recognizable condition.

Although it is not always possible to assign these objects to a precise group, we have ventured to distinguish the following general categories:

I Objects of personal use or decoration
II Household utensils
III Tools and implements
IV Armour and weapons
V Miscellaneous objects
VI Unidentified objects

I Objects of personal use or decoration

Under this heading we shall include all objects of purely individual use, such as rings, mirrors etc., as well as all those classifiable as ornaments and dress accessories.

Fibulae [Pl.166a]: Until 1956 no fibula was known from Achaea. Since then three bronze fibulae have been found there. With the exception of one example recovered at the settlement site of Paralimni (a/a 3)\(^1\) the other two specimens (a/a 2 and BE.413) come from chamber tombs excavated by N. Verdelis\(^2\) and E. Mastrokostas\(^3\) in the Northeastern region (Aigion) of the district.

The pin, spring and the catchplate of the fibula from Dherveni are lost and its dimensions are unknown to us. The other two examples from Aigion and Paralimni are 0.083 and 0.117 m. long respectively and were found in a very good state of preservation.

---

1 Ergon(1966)163, fig.192.
2 AE(1956), Chronika, 12.
All three examples belong to the violin-bow\(^1\) type, the arched type being so far entirely unknown to Achaea.\(^2\)

On a matter of detail and so far as the available illustrations, drawings or descriptions of these examples permit identification, only Furumark's "Advanced"\(^3\) subtype is represented, the "simple" being up to now absent.

Again of the "Advanced" subtype only the "flat-bow" and "buttons" varieties\(^4\) are represented, the former by the two fibulae from the region of Aigion (a/a 2, BE.413), the latter by that found at Paralimni (a/a 3). The "asymmetrical" and "loops" varieties,\(^5\) known from other areas,\(^6\) remain unknown here.

The two "flat bow" Achaean fibulae (a/a 2, BE.413) have a leaf-shaped bow with incised decoration,\(^7\) while that from Paralimni (a/a 3) has a bow with two knobs or "buttons"\(^8\) (Pl.166a).

The fibulae found in Greece are fully described and discussed by Blinkenberg,\(^9\) Furumark,\(^10\) Lorimer,\(^11\) Desborough\(^12\) and Lakovides,\(^13\) but there is as yet no definite solution to the question of their origin, though an "outside and northern origin" suggested by Desborough\(^14\) for at least the violin-bow type seems to be rather firmly based and convincing.

1 Desborough, *IMTS.*, 56.
2 Like at Mycenae, see *op.cit.* p.55.
3 CMP., 91, fig.3. The "advanced" types are found more frequently than the simpler ones, especially in the Mainland and Crete, as it is shown by the distribution lists given both by Blinkenberg (*Fibules*, 49-53, 54) and Desborough (*IMTS.*, 56-57).
4 Blinkenberg's "type mycenien" (I:8 and I:5-6) or fiddle-bow.
5 Furumark's types I:10, 13b.
6 e.g. Cyprus (Enkomi O.T. 74); Attica (Perati T.155); Kephallenia (Diakata, T.A:?):
7 Cf. *IMTS.*, 55 and *Perati B*, 275-6, fig.121 (M.108; M.109).
8 Cf. for parallels Blinkenberg, *Fibules*, 49-50 (Type I:5a-d; I:6a?).
9 *Fibules grecques et orientales*, 45-78.
10 CMP., 91-93, fig.3.
11 Monuments, pp.336-358; 369.
12 *IMTS.*, 54-58.
13 *Perati B*, 274-277.
As to the date of these dress accessories it is generally accepted that the violin-bow fibula is the earlier of the two typologically, making its first appearance in the Mycenaean world not later than the end of LHIIIB. It became fashionable during the succeeding LHIIIC period and had almost disappeared by the beginning of the Proto-Geometric times.

The arched fibulae and their variations which apparently are an improvement on the violin-bow types and appears later (around the middle of LHIIIC) lasting well into the historical era, may well have been developed locally, though the possibility of an outside origin for them also cannot be altogether discarded.

The Achaean evidence adds no new elements and is of little help in the study of the origin and development of the fibula, for this district has not yet produced any of the typologically later "arched-type" forms nor any of the earliest "simple" violin-bow types. It is worth noting, however, that the Achaean fibulae, judging by their context, correspond chronologically to the known examples from other areas, ranging in date from LHIIIB (a/a 2, BE.413?) to the end of the LHIIIC (a/a 3). Furthermore there is no reason to believe that they are foreign products, though the possibility to be imports either from the adjacent Ionian islands or Italy must not be excluded.

1 Fur. CMP., 92-93; Desborough, LMTS., 56; Iakovides, Perati B, 276.
2 Fur. CMP., 93; Desborough, LMTS, 55; Iakovides, Perati B, 276.
3 Perati B op.cit., and S. Marinatos, Archeologia Homerica, A, p.56.
4 Desborough, op.cit. p.58.
5 The chamber tomb at Dherveni is dated LHIIIB by Alin (EMF, 61) and Simpson (GAMS, p.37) but LHIIIC? by Desborough (LMTS. 56 and 86); that at Aigion though no detailed description is available to us, seems more likely to be of LHIIIB than IIIC.
6 Both the context and the form of this fibula speak in favour of a LHIIIC date.
7 Cf. Taylour, Mycenaean Pottery in Italy, 186, note 4.
Finally, as regards the use of the fibulae, we may be fairly safe in following Lorimer's suggestion that these objects were used to fasten shawls, like that worn by the figures of the ivory group from Mycenae. In no case, however, must the fibula be regarded as a characteristic Mycenaean dress accessory; this is certainly, as has been rightly observed, a non-Mycenaean feature.

Buttons (Spindle whorls) [Pls. 154a; 155; 156a; 158b]:

Buttons or spindle whorls have been found both in tombs and inhabited sites of the Late Helladic period in Achaea, by all excavators. Although from the original descriptions of the tombs and from the catalogues in the Patras and Aigion museums their exact number and context is not always discernible, we were able to count over 127 examples.

They are made of different materials. Thus, fifty-nine are of steatite; thirty-six of clay; eighteen of various kinds of stone; two of glass paste; and one of bone. For ten more examples we cannot say how many are of steatite or clay, since they are summarily listed in the original report, while the material of two others is unknown to us.

Of the predominant varieties, those of terracotta are made sometimes of coarse clay, roughly finished, sometimes of finer clay with a smooth slip. Some of them are of relatively large size. Those of steatite are made

1 Lorimer, Monuments, p. 369; Desborough, LMTS., 56; Iakovides, Perati B, 275; Deshayes, Deiras, 207.
2 Wace, Mycenae, 83 ff.; figs. 101, 102c, d, 103. Cf. also E. French, The development of Mycenaean Terracotta Figurines (MS) p. 61, 62, 65; Marinatos, Archaeologia Homerica, A, p. 43; and Iakovides, Perati B, p. 279.
3 Desborough, LMTS., p. 56.
4 Some of them are perhaps made of serpentine, but I am unable at present to identify the material, so until a re-examination of them will be possible, we had better follow the description "steatite" given in the Inventories of the two Achaean museums. For distinction between serpentine and steatite materials, cf. P. Warren, Minoan Stone Vases, 138-141.
5 PAE(1928)119 (Chalandritsa-Ayios Vasilios): "Ten buttons of terracotta and steatite."
of many different varieties of this material, some mottled and striated, others clear, and ranging in colour from black through purple to red and on to a pale green and occasionally a tan. The workmanship varies considerably, some examples being carefully finished and others crudely cut with their perforations off-centre.

In respect to shape the Achaean buttons are biconical, semiglobular, conical or conoid, or shanked, with several variants depending on whether they have a plain or ringed top, a straight or concave profile and flat or hollow bases.

As is shown in the appended catalogue, the conical-shaped constitute the majority comprising more than half of the total number (fifty-seven examples), the other types being represented as follows: sixteen biconical; one semiglobular and four shanked. The shape of some more examples is not known to us.¹

It is unfortunate that the buttons from Achaea, in most cases, have no clear and datable context, since the work of most of the earlier excavators was not sufficiently exact, and their record lacked completeness.²

In view of this, one has to rely on the well documented evidence from other areas, namely that noted by Wace, Blegen, Iakovides at Mycenae, Prosymna and Perati³ respectively, as well as on that of Furumark,⁴ in order to be able to demonstrate the typological and chronological development of these objects. According to this the clay specimens can be considered to belong to LHII-III, the steatite ones to LHIII. We may also be safe in believing that, like elsewhere, they have evolved from conical to shanked type through many intermediate forms. This gradual process was very well exemplified first by Persson, based on the evidence of T.1 at Asine,⁵ and Wace, Blegen, Furumark and

¹ They are either referred to as "buttons of various shape", or no information about the shape is written in the catalogues of the two museums.
² Especially those of Kyparisses and Nerantzoulis.
³ Cf. Chamber Tombs, 219; Prosymna, 313; Perati B, 280-281.
⁴ Fur. CNT., 89-91.
⁵ Which was in use from LHIIIB until LHIIIC:1, cf. Asine, 126, fig.76; Bull.Lund(1924-25)84, pl.XXXVI.
Iakovides agree with him. But since this process was already completed by LHIIIIB and some Achaean tombs, where such buttons were found scattered over the floor of their chambers, are later in date, it is reasonable to suppose that in Achaea, as in the tombs of Perati, all types of buttons appear concurrently.

Finally as regards the use of these objects, Tsountas's explanation that they were used as buttons was accepted by Stais, Wace, Blegen, Furumark, Mylonas and Desborough as the most probable. But recently doubt has been raised as to the validity of this explanation: E. Bielefeld claims that they were clothing ornaments, J. Deshayes suggests that they were spindle whorls or beads of pendants, Marinatos does not accept any of these theories, while Iakovides proposes that they were probably weights fastened to the hem of the dress, in the manner familiar from later times. In spite of these arguments there is still good reason to believe that these objects were used as buttons, but we have no clear evidence yet for the type of clothing they fastened.

Razors [Pls. 161a-c; 166b; 167b]: Twelve razors have been recovered in Achaea so far (PMX.55, 77, 136, 306, 313, 321, 325, 330, 331, Berlin nos. 30747, 30748, a/a 45), coming exclusively from tombs of Late Helladic date.

They are made of bronze and with the exception of two specimens (PMX.77, 136) which were found broken and badly damaged, all the others were more or less well preserved. They are of small size, averaging in length 0.16-0.19 m., while the width of their blade varies between 0.013 and 0.065 with a maximum of 0.0693 (Berlin 30747).

---

1 Cf. Prosymna, 314.
2 MM, 66.
3 AE(1888)198; Ch.T. 217-218; Prosymna, 256-257 and 313; CMR. 89; Ancient Mycenae, 78; IMTS., 50.
5 Cf. Deiras, 212. Also, BSA(1958-59)246.IV.2.
7 Perati B, 279.
They differ in shape of blade and tang according to which three main varieties can be distinguished:

A. Leaf-shaped: Six examples (PMX.321, 325, 330, 331, 55, a/a 45). [Pls.161a,c; 166b]. There are some minor variations, but all these razors are short, relatively broad and thin. The handle in four specimens (PMX.330, 331, 55, a/a 45) was fastened by means of three rivets in a line across the hilt, while in PMX.321 in addition to these three rivets a fourth one was centred some distance farther back. If a fourth rivet had been also used to clamp together the back of the handle of the three mentioned examples all traces of it had vanished. The handle of PMX.325 had been secured by three rivets set in a symmetrical triangular formation with the central stud behind the others. The cutting edges in all examples have been eaten away by corrosion.

B. Broad-bladed (Evans's "triangular type"):

One example only (Berlin 30747).2 It is 0.185 m. long with a maximum width of blade of 0.0693. The end is practically straight forming a right angle with the slightly curved and flanged back. The flange on the back continues from the tang all the way to the end. The thin cutting edge has been eaten away by corrosion and its original curve can no longer be determined. Part of the slightly curved handle, both edges of which are flanged, is missing, but three rivet-holes in it are visible. It has the closest approximation of "cleaver" in the Achaean group and belongs to the most frequent type of razors known from Mycenae,3 Prosymna,4 Crete,5 Perati,6 Kos7 and elsewhere.

1 In the Patras Inventory they are described as "two-edged knives".
2 It has already been briefly described by P. Aström, Op.Ath.(1965)98.
3 Tsountas, AE(1888)144, 171, pl.9, no.18 and EM, pl.7, no.10.
5 P.T.60, fig.63; BSA(1958-59)235, fig.33,18; X4; V1; pl.59d.
6 Perati B, 281-2, fig.124 (M.17).
C. Narrow-bladed: The examples assignable to this type are almost equal in number to those of the leaf-shaped variety (Five examples: PMX.77, 136, 306, 313, Berlin 30748).

They have a narrower and more curved blade than those of the two preceding types and a more or less curved tang with (e.g. PMX.313, Berlin 30748) or without (PMX.306) rivet-holes. They appear in a number of variants shown in Pls.161a-b, 167b. A common feature to the B and C varieties is the single cutting edge.

Commentary. The precise purpose and use of these bronze objects, first called razors by Tsountas, is still controversial. The shape varies a great deal, so that those of a clearly crescent shape (our Type C) bear a certain resemblance to a modern razor and can be quite reasonably interpreted as razors.

But opinions differ greatly as to the probable use of the two other types, i.e. the leaf-shaped and the broad-bladed (our types A and B).

Thus, razors of the leaf-shaped variety have sometimes been called daggers; it is of course possible that they may have been used as such, since it is true that they are similar in the manner of securing the handle to an earlier family of weapons. The thinness, however, and the shape of blade do not indicate that they were made for thrusting. The explanation, therefore, given first by Keramopoulos, that they were razors seems more justifiable and well documented and has been accepted by many scholars as the most plausible.

1 AE(1888)171-2 and MIII, p.60.
2 By Blegen, see Prosymna, 332-34; G. Säflund, Bérbati, 66-67, fig.48:1.
3 Cf. examples listed by Blegen (op.cit. 333) from Zygouries (Zygouries p.182, pl.XX, no.25, E) and Prosymna (Grave IV, fig.603, M.H.)
4 A.Delt.(1917)140-1. It was found together with a whetstone (fig.103); cf. also New Tombs at Dendra, 45, where Persson inclines to accept them as razors on the ground that to judge from the monuments, as Evans pointed out, the people of the Mainland shared the moustache after the Shaft-grave period.
5 Evans, P.T., 117; Hood, BSA(1952)262; Sanders, BSA (1958-59)235; Desborough, LMTS., 59.
As to the broad-bladed variety, some scholars think that, since some of them are heavy and unwieldy, they must have been cleavers. Others believe that they were employed for shaving and haircutting and they have good evidence to support this idea.

Without excluding the possibility that the Achaean example is a cleaver, I should be inclined, on consideration of the shape, to call it razor.

As regards the chronology of these objects there is no doubt that the leaf-shaped Type comes first, ranging in date from LHI to LHIIIA, when they may have been replaced by the other two varieties. Of these two latter types the broad-bladed variety, for which an Egyptian origin has been suggested, remained in use throughout the LHIIIB and was certainly still used in LHIIIC concurrently with the narrow-bladed type, which is more frequently found in LHIIIC.1

1 Blegen, Prosymna, 347; Persson, R.T., 97; Thompson, Hesperia(1948)157; Catling, Cypr.Br.MW., 107; Deshayes, Les outils de Bronze etc., 337.

2 Tsountas, AE(1888)171-2 and MMT, 60; Sandars, BSA(1956-59) 235; Hood, BSA(1956)96-97; Iakovides, Perati B, 281.


4 At Perati e.g. two such razors were accompanied by tweezers, and this as well as the fact that they were neither large nor weighty enough to serve for chopping, shows that they were indeed razors. (Perati B, 281)

5 Cf. Sandars BSA(1956-59)235, fig.33, I8, X4. The slightly curved back of our example is a characteristic feature of the razors, in contrast to that of the cleavers which is more or less straight (see Perati B, 281).

6 Cf. Sandars, op.cit. p.235. "The leaf razor does not appear to survive LM and LHIIIA"; and Desborough LMTS., 59 "leaf-shaped, is not found after LHIIIA".

7 See Sandars, op.cit., p.235; Hood, BSA(1956)96-97; Desborough, LMTS., 59; Iakovides, op.cit.

8 By Evans, P.T. 117; Blegen, Prosymna, 347; Sandars, op.cit. Presumably like Petrie, Tools and Weapons, 49, pls.XX nos.25-26, LXI. For a detailed discussion of this type of razor cf. Sandars, op.cit., p.235; Catling, Cypr.Br.W, 106-107 (cleavers); Blegen, Prosymna, 347; Iakovides, Perati B, 281.

9 Cf. Desborough, LMTS., 59 and note 10 (examples from Achaean); Sandars, op.cit., p.235; Iakovides, Perati B, 281-283 fig.124 (M.112, 157, 151. LHIIIC:1) and notes 2, 3.

10 Cf. examples listed by Iakovides, op.cit.
contexts. Neither, however, of these latter survive into
the post-Mycenaean times. 1

In Achaea the leaf-shaped razors were certainly still
in use in LHIIIA:2 2 while the other two types were current
during the LHIIIB and IIIC periods. 3

Depilatory tweezers [Pl.160.b]:

Achaea has so far produced two bronze tweezers, found
at the settlement-site of Paralimni (a/a.57) 4 and in Tomb B
at Kallithea (B.6). 5 The former was preserved in fine
condition. It is ca. 0.08 m. long, 0.015 m. wide at the
top of the loop broadening to 0.03 at the gripping ends.
The loop at the upper end is of roughly oval shape and the
arms are pinched together beneath the loop and are simply
curved toward their lower ends. The latter was found broken
at the top of its connecting elliptical loop. It is 0.115 m.
long while its width cannot be determined. The arms were
also pinched together and separated immediately below the
loop. They widen steadily from spring to blades, whose
edges are bent inwards fairly sharply.

Both these Achaean "pinched-spring" 6 tweezers were
found in LHIIIB-C contexts and belong to a type familiar
from several sites on the Mainland in Crete and in the
islands. 7

1 Cf. Desborough, IMTS., 59 who states that this is "yet
another item to be added to the list of losses" of the
Mycenaean civilization.

2 Like elsewhere, when "one-edged razors superseded leaf,
late in LM and LHIIIA", see Sandars, BSA(1958-59)235.
At least one Achaean example (PMX.321) comes from a
LHIIIA:2 context (Vrisarion).

3 They come from tombs dated LHIIIB and IIIC (e.g. Klauss,
Kallithea).

4 Ergon(1966)162, fig.191.

5 AM(1960)44.


7 Cf. examples listed by Wace, Ch.T. 191, notes 1,2,3;
Boardman, The Cretan Collection, 31; Catling, op.cit.;
and lakovides, Perati B, 284, note 4. Our examples
come close to some examples from Dendra RT, 90, nos.1-2;
Froymou, figs.244:2; 377:3-4; Cyprus, Catling op.cit.
fig.22:3.
Such tweezers are found more commonly in tombs than in settlement-sites and have been discussed by Persson, Wace, Blegen, Desborough, Catling and Iakovides. They can be dated back to the Third Millennium B.C. and continued in use, almost unchanged in their strictly functional shape throughout the Mycenaean period and down to the Iron Age.

Mirrors
In the Patras Inventory only one bronze mirror (PMX.100) is mentioned, its provenance described as "Mitopolis 1964?" Although no detailed description or illustration is available and I was not able to find it in the museum, it seems that the handle is missing and only the disc is preserved, the diameter of which is 0.09 m. As this Achaean site (Mitopolis) has earlier (1961) produced some other bronze objects of Late Helladic date it may be reasonable to believe that this mirror belongs also to the Mycenaean period and to a type familiar enough from several other areas.

Combs [Pls.158a; 160a]
Only two combs were found in Achaean sites. One comes from the rich cemetery of Klauss (PMX.29), the other (a/a 61) from the settlement-site of Paralimni (Teichos Dymaion). Both of them are made of ivory, a material which was imported in fairly large quantities during the Late Helladic times into the mainland of Greece, where it was worked into several small objects (e.g. combs, mirror handles etc.)

1 Cf. Wace, op.cit., note 1. Examples from two settlement-sites (Eutresis, Zygouries).
2 See Persson RT., 90; Wace, Ch.T., 191; Blegen, Prosymna, 349-350; Catling, Cyp.Br.W., 68, 223; Desborough, LMTS., 59; Iakovides, Perati B, 284-285.
3 Petrie, Tools and Weapons, 51, pls.LXII; LXIV.
4 Desborough, op.cit.; Iakovides, op.cit.
5 See above p.23
6 e.g. Argolid, Attica, Crete. Cf. examples listed by Iakovides in Perati B, 280, note 4 with all the relevant references.
7 Cf. PFAE(1937)93, fig.11.
8 Ergon(1966)163, fig.193.
Measurements are not known for either of these examples. Although slightly damaged, they are well enough preserved to allow their details to be studied. Thus, in both specimens the back and the teeth were cut in one piece of ivory. The back was divided into two zones, by two horizontal lines along it, either grooved (a/a 61) or moulded (PMX.29). In both examples the back was left undecorated.

The teeth, which are more or less well preserved in both combs, are shorter and more densely cut in the example from Klauss than in that from Paralimni. By shape and context they can be safely placed in the LHIIIC:1 period.

A number of such ivory combs have been found in Late Bronze Age contexts elsewhere on the Mainland, in Crete and in the Aegean islands, many with elaborate carved decoration but some like ours, plain except for horizontal grooved or moulded lines along the handle.

Pins: In the Patras museum there are five bone-pins, two of which come from tombs excavated at Klauss. Ephor N. Yialouris reports that "a large bronze pin-head" (a/a 64) was recovered in a LHIIIC tomb at Kangadhi, but I was not able to find it in the museum.

---

1 That from Klauss was found broken into two pieces, while in the case of a/a 61, only one of the two joining pieces was found.

2 For shape cf. the examples from Perati (Perati B, 287, fig.126). They were found in LHIIIC:1 Achaean contexts. Cf. above notes 7 and 8, p. 441

3 Cf. examples listed by Hood and others in BSA(1958-59) 246 and by Iakovides in Perati B, 287 notes 1-4 and p.288 note 1.

4 Some of these elaborate ivory combs may have been worn as ornaments on the hair, but this is unlikely as regards the plain ones which most probably were used simply to comb the hair. Cf. for a discussion of the Mycenaean combs and their use, Wace Ch.T. 210 and Iakovides, Perati B, 288; Evans, P.M.IV, 1005 n.2.

5 They are illustrated in PAE(1937)93, fig.11.

6 JHS(1955)17. It was overlooked by Desborough LMTE., 54 "complete absence (of bronze-pins) from the LHIIIC cemeteries of Achaea".
Of the five bone-pins three are very fragmentary and only two are preserved well enough to show their shape and size (PMX.33, 48; Pls.158a.8; 154d). They are 0.11 m. and 0.20 m. long respectively, circular in section and the latter one (PMX.48) tapers to a point. The head is preserved in both examples, better in PMX.48 than in PMX.33. The former has one incised projecting ring around the top of the shank, which then swells out into a sort of elongated globe, ending to a tapered-off moulded head with no enlargement. It is decorated with incised dotted circles on the globe and the upper part of the shank below the globe. (Pl.154d) I know of no exact parallel of it from elsewhere.

The other example (PMX.33) is simpler, its shank being broken at the lower end and leaving a small flat disc at the top bordered by an incised line. It is left undecorated. (Pl.158a.8)

Nothing can be said about the shape of the other three bone-pins and the bronze one, since no detailed description of them is at present available and I did not see any of them in the museum. But judging by the shape of the two known examples and the context, all the Achaean pins can be placed in the LHIIIC:1 period.¹

Pins of bone, ivory and bronze are far from rare during the entire Mycenaean period,² but while the crystal and gold embellished pins of the Mycenaean shaft-graves³ are almost unique for size and grandeur, the majority of the later finds, to which our examples belong, are of a simplicity which amounts to insignificance.⁴

The Achaean bone-pins, judging by their blunt tapering point, appear to be unsuitable for fastening the dress, but more likely they were used, as elsewhere⁵, as hair-pins.

¹ In shape the Achaean bone-pins find parallels at Prosyna and Perati (Prosyna, 285, fig.107 nos.4-6; Perati B, 288-289). All six examples come from LHIIIC:1 chamber tombs (Klauss, Kangadh).²
³ Tsountas, MMII, 70; Karo, Schachtgräber, 57-58 and 186-187.
⁵ e.g. at Perati, op.cit. 289.
Opinions differ as to the origin of the bronze-pins. A northern origin seems to be more probable, though the possibility that they are "a bronze version of the small ubiquitous pins of bone and ivory" and therefore a Mycenaean or Minoan development cannot be excluded. As regards the origin of the bone-pins we may be on fairly safe ground in thinking them local Mycenaean products.

Rings: There are nine almost intact rings in the Patras collection, coming exclusively from tombs excavated in several Achaean sites. Four of them (PMX.15, 41, 47, BE.407) are made of gold, all the others (PMX.360, BE.412, AM.42, a/a 72) of bronze. Diameter of hoop varies between 0.02 m. (PMX.41) and 0.027 m. (BE.407).

Though the shape cannot be always ascertained, it may be said that at least two of the Achaean rings are just plain circles (PMX.47, BE.412), one is made in the form of a circular serpentine (PM.407) and three (PMX.15, 41, 360) have a bezel at right angles to the ring. This bezel is of different shape in each of these three rings, i.e. oblong in PMX.15, square in PMX.41, and circular in PMX.360.

The bezel of PMX.41 (Pl.154f) was plain and slightly concave, while that of PMX.15 with bevelled and granulated sides had an inset amber bezel now totally decayed. Finally

1 Desborough, LMTS., 54 and note 5, but Miss Sandars's one alternative suggestion is an Asiatic origin of these pins (op.cit. 237).
2 Cf. Sandars, op.cit. 237 and Deshayes, Deiras, p.205.
3 Cf. Iakovides, Perati B, 289.
4 Drosia, Ano Sychaina (Agriapidia), Katarraktis (Bouga), Aigion (Gymnasion), Aigion (private collection) and Kangadhi. See the Catalogue of the artefacts.
5 The description of the Catalogue is sometimes either very brief (e.g. AM.42) or vague (PMX.47 "Gold rings").
6 For such rings with plain but convex bezel cf. Higgins, GRJ.84; Marinatos, AB(1933)90 fig.42; Iakovides, Perati B, 292 no:M.235 (pl.108).
7 Cf. examples listed by Iakovides Perati B, 292 note 3. Our example finds close parallels at Perati (M.178) and Talyssos, Annuario(1923-24)126 (Tomb XVII).
the bezel of PMX.360 is inlaid at its centre with a small square engraved stone bearing the design of a rosette. This use of an engraved ring-stone is almost unique in the Bronze Age and anticipates by many centuries the custom of Classical Greece.

Especially worthy of note is also that the hoop of PMX.15 is decorated with a relief wavy line bordered by two edging ones along its outer side. The inner side of the bezel is decorated with a relief design similar to diaper net or tricurved arch. (Pl.154a-c)

With the exception of two examples (AM.42, PM.360) whose context is unknown to us, all the others are dated LHIIIC:1 by virtue of their shape and context.

Rings were either worn on the finger purely for adornment, or were used to hold signets. Such signet-rings have not yet been found in Achaea.

Bracelets. Paul Aström mentions a bracelet (a/a 73) from Aigeira, now housed in the Pergamon-Museum, East Berlin (Inv.no.?). Details concerning material, shape, measurements and date are not at present available.

1 Cf. for a similar ring with a bezel of engraved rock-crystal and dated ca.1600-1550 B.C. (Sphoungaras), Higgins, GRJ. 85.
2 Compare Perati B, 293 (no.M.178) for the shape of PMX.15. The other rings were found in tombs with LHIIIC:1 pottery (Ano Sychaina, Kangadhi etc.)
3 Cf. Iakovides Perati B, 294. Desborough does not exclude the possibility, however, that they were used "only rarely for the hair and ear", LMTS., 50.
4 Higgins, GRJ., 83; Vermeule, Greece in the Bronze Age, 223; Iakovides Perati B, 294, where one can find a discussion for the shape and use of the several kinds of rings of Bronze Age.
6 Dr. G. Heres (Staatliche Museen zu Berlin, Antiken-Sammlung) kindly informed me that some fragments of a glass necklace (Inv. nos.30774-30779) from Aigeira were lost during the last war.
Although familiar to the Mycenaeans, since the time of the royal Shaft Graves,\(^1\) bracelets are rarely found in tombs.\(^2\)

**Necklaces.** Seventeen necklaces have been found in tombs excavated in Achaea and the beads that went to make them up were of many shapes and of differing kinds of material.

Necklaces made solely of glass-paste beads and plaques predominate, comprising eleven examples (PMX.23, 24, 9, 10, 11, 12, 5, 28, 30, a/a 88), while two others (PMX.62) are made of a mixture of glass-paste and "stone" beads, and another two are of bone-beads (a/a 76). Those of gold and agate beads are rare, each of them represented by one example only (a/a 74, PMX.31).

The average number of beads is 25-50, but at least two necklaces, i.e. PMX.30 and PMX.31, consist of a much greater number of beads (320 and 180 respectively).

Nothing is known to us about the shape of the gold and bone beads of the three necklaces from Kangadhi (a/a 74, a/a 76). The agate beads of another example from Klaus (PMX.31) are flattened globular in shape and of a pink colour.

All other necklaces consist either of glass-paste standard relief-beads\(^3\) (Pls.157a.3; b.3-4) or of moulded square plaques\(^4\) (Pls.157a.1-2; 158c), bearing stylized representations of marine and vegetable life and find parallels in Kephallenia\(^5\) and elsewhere.\(^6\)

---

1. Cf. Karo, Schachtgräber, 75-76, pl.XLIII (Grave IV) and Mylonas, Ancient Mycenae, 132 (Tomb B). Cf. also Karo, Schachtgräber, 75-77 pl.XLII and pp.178-180 (Grave A.IV).
2. Cf. examples listed by Iakovides, Perati B, 296 and notes 10-14, who discusses the development, distribution and use of the Bronze Age bracelets.
3. For the development of the relief-beads cf. Higgins, GRJ., 76.
4. Higgins has suggested (op.cit. 42) that they were sewn to clothing. The possibility, however, that at least some of them were used to make necklaces or diadems, I think, cannot be altogether excluded. Cf. for one diadem made of such moulded plaques A.Delt.(1963) Chr.103, pl.138e-s (Olympia-Kladeos). Cf. also Iakovides, Perati B, 311 (= necklaces).
5. Cf. Kavvadias, Προϊστορική Αρχαιολογία, 366, figs.455-7 (Mazarakata); Marinatos, ΑΕ(1932)45, pls.14, 17 (Lakkithra) (1933)90, pl.3 (Metaxata).
All the Achaean necklaces were found in LHIIIC:1 contexts. Necklaces were very popular throughout the Late Bronze Age and were worn both by women and men. Gold was favoured by the rich, while the less prosperous, who could not afford gold, used necklaces made of semi-precious stones (agate, onyx etc.) or bone or glass-paste, such as those worn by the painted women at Thebes.

**Beads [Pls.154, 156-159]**: A total of over 335 - those used in the seventeen already mentioned necklaces excluded (over 709 in all) - were found in several Achaean sites, mostly in tombs.

They are made of ten different materials including clay, stones (mostly semi-precious), amber, glass-paste, faience, frit and porcelain.

The majority (98) are of glass-paste followed by agate (72), steatite (50), clay (43), rock-crystal (32), amber (15), frit (12) and carnelian (9). The other substances seem to have been used less frequently (four of porcelain and some others of faience).

The shapes are either plain geometric forms (globular, biconical etc.) or stylized imitations of objects belonging to the natural surroundings (e.g. seeds and kernels of plants or seashells and argonauts), and they are represented as follows: Globular beads, the simplest, are the most numerous amounting to over one third of the total (111), while relief-beads (82), flattened biconical (ribbed),

1 Vermeule, Greece in the Bronze Age, 227.
3 Only two settlement-sites have produced a small number of beads (Paralimni: only two; Katarraktis-Ayios Athanasios: forty-three).
4 Their exact number is not known.
5 Ribbed beads are recorded from many Late Bronze sites, e.g. (1) Mainland: Mycenae - very many found by Tsountas in National Museum, Athens; *Dendra* (RTs 105, fig.80; Tomb 2); *Asine*, 376, fig.243; tomb I.1; (2) Crete: *Knossos* (PT 72, fig.81a: T.660); *Karteros* (A.Delt.11, pl.2,23); *Upper Gypsades* (BSA 1958-59, 245, fig.24; pl.59a II.2); (3) Troy: *Dörpfeld, Troja und Ilion*, 398, fig.387b: Troy VI).
ellipsoid-cylindrical (31) and acorn-shaped (12) are relatively common. Especially worthy of note here is the occurrence of twelve wheel-shaped\(^1\) beads (PMX.19). Such beads made of faience were popular in Syria\(^2\) and Egypt,\(^3\) but in Greece, though known from many sites,\(^4\) they never gained much popularity, probably due to their difficult shape.

There are two barley-shaped beads while two other shapes, i.e. ovoid and disc-shaped are represented by single examples only. Thirteen more are of "various shape,"\(^5\) and for a much greater number of beads the shape remains unknown to us.\(^6\)

Most of these shapes of the Achaean beads are known from other Greek sites as well as from Egypt and the Middle East.\(^7\)

As to the decorative motives used in the Achaean relief-beads\(^8\) (Higgins's "Standard" Type) one could note that most of them consist of stylized representations of vegetable and marine life, such as:

---

1. They are sometimes also called lantern-beads, cf. Wace, Ch.T. 205.
2. Syria, XIII (1932) pl.IX:2 (Ras Shamra); Antiquaries' Journal, XIX (1939)28 (Tell Atchana).
3. Leemans, Mon.Egypt., II, pl.XXXVII, 105; Wace, Ch.T., 205 notes 5-6 (Tell-el-Amarna, British Museum, no.57425).
4. Cf. for similar (faience) to ours: AE(1887), pl.XIII,6 =National Museum Athens, nos.2515 and 3258 (Mycenae); National Museum, Athens no.3424: Perrot-Chipiez, Histoire de l'Art dans l'Antiquité, VI, p.946, fig.509 (Nauplia, TombA b); AE(1932) pl.I7; (1933)91, pl.3 (Kephallenia, Lakithra T.A,Γ; Metaxata T.A-Γ); A.Delt.(1964)177, pl.184a (Kenia-Olympias); FLMS. pl.3,18 and Annuario (1923-24)157, fig.82 (Enkomi, Tomb 88 and Ialysos Tomb XXII, no.22 (3552); Wace, Ch.T., 94, 205 (Mycenae, Tomb 526:7g). For one similar bead in gold, cf. AE(1888)137, National Museum, Athens, no.2307 (Mycenae, Tomb 2). Cf. also Higgins, GRJ., 74, note 1.
5. Their description in the Patras Inventory.
6. No indication of the shape in the Patras Catalogue. Some of the most common and characteristic Mycenaean bead-shapes (Cf. Higgins, GRJ., fig.14 and plates 10-11) are noticeably absent from the Achaean repertoire. The same occurs also at Perati (Perati B p.306).
7. See above notes 1-4 and some of the examples listed by Iakovides in Perati B, 308.
8. Those used for the Achaean necklaces described above (p.446) are included here.
1. **Double rosette (Higgins type 1)**. It is found on some relief-beads of glass belonging to a necklace from Katarraktis-Bouga\(^1\) (PMX.9, Pl.159a). I know of no identical type from elsewhere,\(^2\) except of some beads from Ialysos in Rhodes.\(^3\)

2. **Simple and double sea-shells (Higgins's "cockles" Type 11)**:

   The type in its simple form is used on seven glass beads from Katarraktis-Bouga\(^4\) (PMX.6; Pl.156b.6) and is known from other areas as well.\(^5\) Double sea-shells appear to be peculiar to Achaea (a local innovation?) and the type is represented by some glass beads found also at Katarraktis-Bouga\(^6\) (PMX.10-11; Pl.157b.3-4). Higgins illustrates no parallels nor have we found any from other sites.

3. **Simple and double argonaut (Higgins's Types 8-9)**:

   The simple variety is represented by twelve glass-plaques from Klauss\(^7\) (PMX.28; Pl.159d) and nine others from Katarraktis-Bouga\(^8\) (PMX.5; Pl.159c). Parallels to those from Klauss are found in other areas,\(^9\) but the type of simple argonaut from Katarraktis-Bouga seems to be unparalleled elsewhere\(^10\) and is not illustrated by Higgins. As to the

---

\(^1\) Some of them are illustrated in [PAE(1932)59, fig.4].

\(^2\) It comes very close to some Kephallenian beads from Mazarakata, Lakkithra and Metaxata (Kavvadias, *Αρχαιολογική, 366, fig.456; AE 1932, pl.17; 1933, 91, pl.3) and some others from Olympia (Bambes-Makrysia) [PAE(1954)295, fig.8].

\(^3\) They are, however, plaques of square shape (different from ours). Cf. Higgins, *MMA*, 174, fig.216.

\(^4\) [PAE(1932)60, fig.5].

\(^5\) In gold, blue frit, gold foil and glass. Cf. examples listed by Higgins (GRJ., 79, fig.14f) from Kakovatos, Mycenae, Dendra, Menidi. Add to these examples one from Perati (Perati B, 307, fig.128, no.35). He also mentions a mould for casting such beads from Knossos.

\(^6\) [PAE(1932)60, figs.6-7].

\(^7\) [PAE(1937)93, fig.11 (left)].

\(^8\) Op.cit. (1932)61, fig.9.

\(^9\) Mostly in gold, cf. examples listed by Higgins (op.cit.) from Mycenae, the *Prinaria* Deposit, Argos, Dendra. He mentions a mould for casting beads but in glass from Knossos.

\(^10\) With the probable exception of Kephallenia, where at least one such bead (though slightly damaged) was found at Metaxata, cf. *AE*(1933)91, pl.3 (B.4).
double argonaut motive, it occurs on twenty glass-plaques from Aigion (AM.36; Pl.158c lower row). They belong to a common type known from other Late Bronze sites.  

4. Pendant pothook spirals (Higgins's Type?). It occurs on thirty glass plaques from Katarraktis-Bouga (PMX.12; Pl.159b) and nine similar ones from Aigion (AM.36; Pl.158c upper row). Each plaque is divided by one rolled vertical line into two halves, each of which is decorated with one such spiral. The Type is not mentioned by Higgins, but it is found in Kephallenia and Olympia.  

5. "Waz. lily" (Higgins's Type 16). The type is probably represented by one glass-plaque from Klauss. It is known from other areas, where it occurs not in plaques but in relief-beads. Thirteen amber relief-beads from Leontion (a/a 105) bear motives not easily traceable, since they were found damaged by the dampness of the tomb. (Pl.154e.2)  

Before finishing, a few general observations may be mentioned here concerning the materials and technique employed by the Achaeans in making beads, as well as the development of their types.  

First, amber beads occur at three Achaean sites (Paralimni, Chalandritsa, Leontion) but neither in size nor in number can they be compared with those found in the

---

1 To the examples mentioned by Higgins (op.cit.) from the Argolid, Thessaly, Crete and Attica add one more from Perati (Perati E, 306-7, fig.128:34).

2 Some of them are illustrated in PAB(1935)61, pl.12.

3 Kavvadias, Προϊστορικό Αχαιοπολιτισμός, 366, fig.455 (Nazarakata); AE(1932) pl.17 (Lakkiithra); (1933)91, pl.3:E.3, E.4, E.8 (Metaxata) and fig.40:A.1, B.5.

4 A.Delt.(1963) Chr., 103, pl.138e-s (Renia).

5 PAB(1937)92, fig.11 (next to the ivory-comb). The illustration is bad for the relief-design to be traceable with certainty (our Plate 159d right).

6 Add to the examples listed by Higgins (op.cit.) from the Argolid and Manidi some more found in Kephallenia, cf. AE(1935)91, pl.3 (lower row, Metaxata); (1932)pl.14 (Oikopodá).

royal interments at Mycenae\(^1\) and Kakovatos.\(^2\) They are more similar to those found at other less prosperous Mycenaean cemeteries,\(^3\) and could suggest a link with the North\(^4\), direct, or more likely indirect\(^5\) and their occurrence cannot be simply accidental.

On the other hand the presence of these beads in the LHIIIIC Achaean cemeteries is of interest and value, since in other areas\(^6\) amber beads were more commonly found in LHII and II tombs and only rarely and in small quantities in LHIII\(^7\) ones.

Secondly the glass or glass-paste\(^8\) of which most of the

---

1 Karo, Schachtgräber, 110, pls.XXV, no.101, LVI, no.513; GL, no.208.

2 Müller, AM(1909)279-282, pl.XV, nos.10-18, 20, 25. Cf. also Taylor, AJA(1954)50-52 and Marinatos, Antiquity (1957)97-100 (two tholoi in Western Messenia). Miss Sanders stresses (BSA, 1958-59, 237) that amber is plentiful on the west coast of the Peloponnesse.

3 e.g. Prosyna, Prosyna 286, T.XLIV, II, III, VI, XLIII, LT (LH1-LHIII); Kephallenia, AE(1932)42, Pl.15 (A.10, A.3, A.5); (1933)92-93, pl.2, fig.43 (Lakkithra and Metaxata); A.Delt.(1919)116, fig.30, Inv.nos.833-5 (Diaskata); Epirus, BSA(1958-59)237, note 44; Perati, Perati B, 303, 306, pl.36a.

4 Since the amber used for the beads is Baltic. For discussion of the origin of the amber cf. Kavvadias, Προϊστορική Αρχαιολογία, 100, 242; Blegen, Prosyna, 286; Higgins, AJA,39; Sanders, BSA(1958-59)237-239; Lakovides, Perati B, 384; C.W. Beck, Archaeology, 23, i (1970)7-11. Since it was probably brought down to Achaea along the eastern coast of the Adriatic through commercial intermediaries, rather than by direct importation.

5 e.g. Mycenae, Prosyna, Western Messenia. For discussion of the distribution of amber in Late Bronze Greece cf. Lakovides, Perati B, 383 (note 4) and 384.

6 Cf. e.g. Mycenae, Ch.T., 204; Epirus (Kalmbaki) etc. Nilsson (MHR., 18) attributes this lack of amber to the weakening of the northern connexions. D. E. Strong's opinion (Catalogue of the Carved Amber in the Department of Greek and Roman Antiquities of the British Museum, pp.17-18) that, contrary to what has been generally accepted, amber was increased during the LHIII, is only partially right and cannot modify the conclusions reached so far by most scholars about amber. Cf. also Lakovides, Perati B, 384, note 1.

7 For the distinction between glass and glass-paste cf. Lakovides, op.cit. 379 and notes.
Achaean beads are made do not seem to be always clear or pure. The colour, which is mostly blue, has also suffered (e.g. Pl.157a.1-2), and with the inevitable disintegration of the material owing to the dampness of the earth, it is sometimes difficult to distinguish glass beads from beads of frit or decayed faience.

It is most probable, as has been already pointed out,¹ that the art of making glass beads originated in Egypt and did not reach Crete before the sixteenth century B.C. They were current during the entire Mycenaean period. During the LHIII the great majority of the glass beads may no doubt be regarded as cheap popular substitutes for the more costly prototypes in metal and precious stone. This seems to be the case with Achaean where precious metals are noticeably absent.²

Thirdly, beads made of faience, as was stated above, are not always easy to be distinguished from those of frit, since they are very similar in appearance.³ So some of the Achaean beads described as being made of frit⁴ may well be of blue faience⁵ (PMX.19=wheel-shaped).

Beads of this kind either coloured or white are known earlier in Crete (1800 B.C.) than on the Mainland. On the latter they appear from 1500 B.C., remain in use until the end of the Bronze Age and reappear in historical times.⁶

---

¹ By Higgins, GRJ., 42.
² Apart from a necklace of gold beads (from Kangadhi) and four gold rings (from Drosia, Ano Sychaina, Aigion) and the silver kylix from Kataraktis, nothing new has been discovered so far in Achaean. Cf. also Desborough, IMTE., 98.
³ But they differ in composition, cf. Higgins op.cit., 44.
⁴ Cf. E. Vermeule, AJA(1960)16, no.50c.
⁵ Cf. for one identical bead from Mycenae, Wace Ch.T., 205, pl.IX, no.76.
⁶ Higgins, GRJ., 45 (on Greek and Etruscan sites in the 7th century B.C.).
² Dr Higgins has suggested to me that four beads from Chalandritsa and Drosia, described in the Patras Inventory as made of porcelain, may well be of faience, since porcelain was unknown to the Mycenaeans. Cf.; however, Kavvadias Προϊστορικές Αρχαιολογίες, 569, fig. 457 ("some porcelain discs") and A.Delt.(1919)116, fig.30:6 from Kephallenia.
Fourthly, as stated above, a considerable number of beads made of agate and steatite\(^1\) were recovered in Achaea, in contrast with other Late Helladic cemeteries where such beads are scarcely found.\(^2\) This may indicate a special preference\(^3\) of the Achaean bead-makers for these two kinds of stone. Beads of such materials are mostly opaque, occur in different colours and are found in all periods of the Late Bronze Age.

Fifthly, a few beads of rock-crystal, similar to those found elsewhere in Greece,\(^4\) occur in Achaea. Cornelian is relatively rare in Achaea in comparison with other areas where this material was very popular\(^5\) for beads of various shapes. The cornelian must have been imported from Egypt or elsewhere, but in most cases it appears to have been worked into beads after its importation, as the finish and workmanship vary a great deal. Cornelian beads occur fairly frequently in the tombs in Crete from MM times on\(^6\) and have also been found with burials on the Mainland as far back as the EH period.\(^7\)

---

1. Steatite beads are of inferior quality to those made of other stones, cf. Higgins, *op.cit.*, 37. For discussion of the origin and use of these two materials cf. also Lakovides, *Perati B*, 386-287.

2. Cf. e.g. Mycenae, *Ch.T.*, 208, 210 (only two of agate and one of steatite); *Prosymna*, 294-5 (only one agate and twenty-eight of steatite); *Perati B*, 302 (four of agate and ten of steatite); Khalkis, *BSA*(1952)89 (nineteen of agate).


4. Cf. e.g. Salamis, National Museum, Athens, no.3628; Mycenae, *Ch.T.*, 209; *Prosymna*, 293; Crete (Upper Gypsades), *BSA*(1958-59)246 (IV.5); 250 (X.11); Kephallenia, *AE*(1932)42 (Lakithra); *Perati B*, 302.

5. Cf. e.g. Mycenae, *Ch.T.*, 208-9 (71); *Prosymna*, 287 (217); *Perati*, *Perati B*, 302 (75).


Lastly, clay was the cheapest material for making beads. Forty-three examples were found in Achaea, while from elsewhere I know one example only from Perati.¹

Gold beads, like those used in the one Achaean necklace (a/a 74)² were cast solid. Bone and stone beads were cut, sometimes roughly and imperfectly, while beads of faience and glass were cast either in clay or steatite moulds³ of a kind found at several Bronze Age sites.⁴

All the beads were perforated for suspension or for attachment. A necklace from Asine, Tomb 5, shows how the colours were arranged. Frescoes and other representations also illustrate the arrangement of beads.⁵ They were worn, strung together, round the neck (necklaces) or the wrist (bracelets) or even the head (diadems).⁶

The great majority of the Achaean beads, though their context is not always known, seem to belong to the LHIII period.⁷

Sealstones [PL.160c]: Five sealstones were found in Achaean tombs at Chalandritsa (PMX.94, 143, 144) and Skoura (PMX.95, 142) while four more examples are of unknown provenance (PMX.96, 97, 140, 141).⁸

---

¹ Cf. Perati B, 302.
² See above, p.446.
³ Some of the glass beads were cut from canes, cf. E. Blegen, Prosymna, 301, note 1; Higgins, op.cit., 42.
⁴ Clay moulds in which faience beads were mostly made (Higgins, op.cit., 44) have not been discovered, but a number of steatite moulds used for making glass beads have survived, cf. Higgins, op.cit., 16, 43, note 1, and Tlakovides, Perati B, 310 notes 4-6; 311 notes 1-2.
⁵ See above, p.447 and Higgins, GRJ., 73 note 1.
⁶ See above, p.446, note 4 (Olympia-Kladeos).
⁷ The only probable exception being the wheel-shaped beads from Vrisarion, which by shape can be placed earlier (LHII-III). Cf. Wace, Ch.T., 205.
⁸ The last two examples are labelled "from confiscation".
All these examples were found more or less well preserved. The materials used are the comparatively hard stones, rock-crystal, cornelian and the softer steatite, while one (PMX.144) appears to be of a white chalky substance, probably an imitation of Egyptian faience.\(^1\)

Their diameter varies between 0.011 m. and 0.015 m. with a maximum of 0.018 m. (PMX.144). Five of the sealstones (PMX.94, 95, 142, 143, 144) are lentoid in shape, two others are ellipsoid (PMX.97, 141), while the ovoid and amygdaloid shapes are represented by single examples only (PMX.96, 140).

All the Achaean sealstones following the usual custom are drilled through from both ends and in consequence the join in the centre is not always very exact. In the case of the one faience sealstone the hole has been made by means of a string or wire while the material was being moulded.\(^2\) The perforations in the lentoid sealstones are usually vertical with reference to the design, while in the amygdaloid and ellipsoid horizontal.\(^3\)

It is not always easy for the design of these Achaean sealstones to be seen, since for four of them (PMX.94, 95, 96, 97) no illustration is at present available and the brief description of the Patras museum catalogue is of little help in identifying the original design.

The other five examples with their modern plaster impressions are shown in Plate 160c.

Our observations concerning the interpretation of the designs of the Achaean sealstones are therefore limited, and their study to some extent incomplete.

\(^1\) Cf. E. Blegen, Prosymna, 273, 280, nos.21-22 (= two cylinder-seals).

\(^2\) Higgins, op.cit., 43.

\(^3\) Persson has suggested (RT., 58) that many of the lentoid sealstones perforated along the vertical axis were intended to be worn on the wrist, since they would then be right way up to the wearer, while those bored along the horizontal axis were presumably intended for necklaces. Cf. also Wace, Gh.T., 262-263.
So far as can be determined from the description of the Catalogue and the illustrated examples, representations of horned animals predominate in the small Achaean repertory, comprising three examples (FMX.94, 143, 144). There are two stones bearing lion designs (FMX.97, 140), two bearing daimons (FMX.96, 141) and two others (FMX.95, 142), decorated with quadruped animals of an unrecognizable kind.

On matters of detail one may note that the designs of these sealstones are similar to those recognized elsewhere on the Mainland and in Crete. Thus,

(1) The cornelian amygadaloid sealstone FMX.140 bears the figure of a crouched lion. The excellence of the material — cornelian — and its finely modelled shape appear to be equal to the fine quality of the engraving. The engraver used what tools he had with much expertise. The modelling of the body is delicate and that of the head, hair of the mane, legs, tail and hind quarters very fine. The style and technique are directly related to a gem from Central Crete, though our example is more monumental. These characteristics would seem to point to Crete as its probable place of origin. The exact figure of the lion occurring on the ellipsoid stone PMX.97 is not known to us.

(2) Of the horned animals variety the lentoid PMX.143 is made of a material (rock-crystal?) so poor and so streaked with white and grey that the design is difficult to make out. It appears to show an animal with a long tail like a horse, but which has also two very long horns reaching all the way across the upper part of the field. It is very similar to one found at Prosymna (Fig.590), though ours is of better workmanship and the animal's long and spindly legs are straight, not bent.

2 The possibility, however, that it was made locally inspired by Cretan or Mainlander prototypes (cf. AE, 1889, pl.I, no.27, Vapheio) cannot be excluded.
3 This stone has a conical back. Cf. Kenna, Cretan sealstones, nos.303, 316.
4 It seems very doubtful whether the material is rock-crystal, as is described in the Catalogue, or most probably another softer substance.
The white milky (agate or faience?) lentoid stone PMX.144 is much worn in the upper part of the field. It shows two (or three?) goats standing and facing in opposite directions. Neither the design nor the poor workmanship would allow this example to be ranked among the better Achaean sealstones. The same-sized wheel appears to have been used to engrave all parts of the animals. The style shows a boldness in crowding so many figures into one space. Style and technique betray a Mainland origin of this gem.\(^1\) Representations of goats are familiar from the Mainland and Crete.\(^2\) The horned animal of the rock-crystal lentoid sealstone PMX.94 cannot be identified, since no illustration is available and the description of the Patras inventory is somewhat confused ("deer or roe deer or horse").

The upper part of the field of the steatite lentoid PMX.142 has been rubbed off, so the design is difficult to make out. It appears to show an animal (horned?) with a long tail (deer or horse?), while part of the head of another horned animal is engraved above its hind quarters. Detached heads of animals used as fill ornament of the main figure on the field are known from a series of sealstones found both on the Mainland and in Crete.\(^3\)

Though no illustration is available, the description of the Catalogue is fortunately clear and helpful for the design of the steatite ovoid sealstone PMX.96 to be traced. It is apparently the figure of a daimon with human body and head of an animal whose identification is uncertain.

---

1. Cf. Kenna, \textit{op.cit.}, 81, note 4 "the technical skill and sensitiveness in the arrangement of forms observable in the finest period of Minoan glyptic are absent in the mainland products."

2. Cf., e.g., examples from the Mainland: Wace, Ch.T. 201, pl.XXVIII, no.36 (Mycenae); Furtwängler, \textit{Ant.Gemmen}, III, 52, fig.35 (Mycenae); ditto, pl.III, 26 (Argos), and from Crete: Kenna, \textit{Cretan sealstones}, nos.263, 285, 313, 320, 339 etc.

3. Cf. examples listed by Iakovides, \textit{Perati B}, 333-334 (no.A.6, fig.143), and notes 1-3. Nilsson has suggested (\textit{MMR}, 234) that these detached heads are the heads of sacrificed animals.
The cornelian ellipsoid PMX.141 has also the figure of a daimon, which in this case is that of a man-bull (minotaur). The body is curved to fit the field, but there is no fill ornament as it occurs in some other similar examples from the Mainland\textsuperscript{1} and Crete.\textsuperscript{2}

Since such sealstones decorated with daimons and especially with man-bulls are less frequently found on the Mainland\textsuperscript{3} than in Crete, where they occur from the beginning of the Late Minoan period,\textsuperscript{4} it is reasonable to suppose that these two Achaean examples are imports from Crete, or the motives have been inspired from Cretan prototypes.

Lastly it is not clear from the description of the Patras Catalogue what kind of quadruped animal is represented on the steatite lentoid sealstone PMX.95, nor is any drawing or illustration at present available to help identification.

With the exception of two (PMX.140, 141) sealstones, whose context is not known to us, all the other examples were associated with objects belonging to the Late Helladic III period.

But even for these documented sealstones one must be very cautious in trying to determine their chronology, for, as has been rightly pointed out,\textsuperscript{5} unlike pottery these objects enjoyed a long life. The comparative rarity\textsuperscript{6} of sealstones and their probable use as heirlooms\textsuperscript{7} may have extended their life beyond one owner. The material

1 Cf., especially one from Prosymna, Prosymna, 274, fig.580; one from Vaphio, AE(1889) pl.X, no.27.
2 Cf. especially, Kenna, op.cit. nos.322, 325. He has suggested (p.56) that these curved daimons represent a subsidiary development of the torsional tendency and are connected with religious ideas.
3 Cf. examples listed by Nilsson in MMR\textsuperscript{2}, 374, note 16.
4 Evans, Scripta Minoa, 124; E. Blegen, Prosymna, 274; Kenna, Cretan sealstones, 56 (=LMIB-LMIB).
5 Kenna, op.cit., 14 note 12.
6 Owing, most probably, to the value of the stone enhanced by the engraver's art.
7 Desborough, LMTS., 51, 175.
and style may be regarded as almost safe criteria of date and by using them we may assign most of the illustrated Achaean sealstones to the LHI-II, while only two (PMX.143, 144) appear to belong to the Late Helladic III period.

It has long been suggested and sufficiently established that these perforated sealstones were worn as ornaments by women as well as by men either on the wrist or around the neck (necklaces) strung together with less expensive beads. The possibility, however, that some of these objects were regarded as amulets must not be overlooked.

II Household utensils

Metal vessels [Pl.162] Four metal vessels were (PMX.58-61) found by Zapheiropoulos at Katarraktis in 1956 but nothing new has been recorded from Achaean since then.

They were found more or less damaged, but it was possible for the shape of all to be restored. They are made of two different metals, i.e. one of silver (PMX.58) and all the others of bronze. Their shape is also varied and according to this they fall into two groups:

A. Embossed Kylix

Diameter of rim 0.137 m. It has a round handleless bowl and stood on a probably splayed foot, which is now broken

1 Kenna, op.cit.; Desborough rightly observes (op.cit.) that "their popularity precedes the LHIIIIC period".
2 Compare Prosymna, 278, no.590 (for PMX.143); PMX.144 is dated LHIII because of its poor workmanship and sketchy design. Cf. Kenna, op.cit. p.82 and note 3.
3 Evans, PM, II, 705, pl.XII, figs.441, 443; Tsountas, AR(1889)146-8; Persson, Dendra, R.T., 58.
4 See above, p.465, note 3. It seems, however, that they were originally intended to be used as seals. Cf. Kavvadias, Προϊστορική Αρχαιολογία, 732.
5 Kenna, Cretan seals, 1, note 1.
6 PAE(1956)195; Ergon(1956)88-89.
7 Only two of them (PMX.59, 60) are mentioned and classified by Catling in Cyp.Br.W., 181. The other two (PMX.58, 61) have been overlooked by him.
8 This may be a cup of a base ring type, similar to some from Dendra, NT, pl.IV, fig.88; NT., fig.25, pl.X, XI.
and missing. The relatively deep and broad bowl, which has been partially repaired, has a marked straight narrow lip left undecorated. The whole of the bowl is used as a field for some ornaments of figure-of-eight-shields executed in repoussé and placed in a "radial" pattern scheme. Small circles are used as fill ornaments. Round its base the bowl is embellished with a single row of embossed dots set in a narrow zone.

Several varieties of kylix made in silver are known from the Mycenae Shaft Graves, Dendra and Crete, but as far as I know our example hitherto lacks true parallels both in shape (handleless) and decoration (figure-of-eight-shields). The eight-shaped shield, according to Furumark, is a popular Cretan decorative motive, but there does not seem to be any Cretan silver kylix decorated with it.

B. Cups: Three examples of the mesomphalic type.

Variations in the shape of their bowl and handle distinguish them in three forms:
a. Deep mesomphalic (Catling's Form 22). To this form can be assigned the cup PMX.59 (Pl.162b). Diameter of rim 0.18 m. Upper part of the deep rounded bowl damaged; rim straight; round base. There is one skillet-type handle resembling that of Catling's form 27a and made of a piece with the bowl. It and the upper part of the bowl are decorated with relief ornament of spirals. The lower part of the bowl is covered with relief concentric arcs and fringed designs which are used as fill ornaments. There are successive relief lines round the rim and the base. The papyrus-shaped terminal of the handle is decorated with parallel relief lines radiating from a projecting knot.

1 For use of this term see Stubbings, BSA(1947)29.
2 Karo, Schachtgräber, Grab V, pl. CXXXV (no. 864).
3 Persson, N.T., 135-7 and fig. 117 (four in all).
4 Evans, PM IV, ii, 363-4 and E.T., 155, fig.139.
6 Evans, PM., III, fig. 197, pl. 23 (frescoes) and pp. 309-317 with ref. and ill.
7 Catling, Cyp.Br.W., 180-1, fig. 21:5.
This is a rare form of vessel found only on the Mainland, while it is altogether absent from the Cretan and Cypriot repertory. Of the hitherto known examples none is exactly similar to ours either in shape or in decoration. One example from Mycenae cited by Catling has similar bowl but different handle (of loop shape). Spiraliform decoration is restricted, in contrast with our example, on the rim of the bowl and the centre of its handle.

b. Shallow mesomphalic (Catling's Form 23a). This form is represented by PMX.60. (Pl.162c) Diameter of rim 0.185 m. Relatively shallow bowl slightly damaged on the rim. The handle is a horizontal loop with a slightly vertical knob set in its centre. The two handle attachments are each fastened by three rivets. The bowl is left undecorated. Its inner surface was once covered with gold leaf, scanty traces of which are still visible. This form of vessel is missing in Crete and Cyprus, while it is found only once (Mycenae 0.T.78) on the Mainland.

c. Carinated mesomphalic (Catling's Form 23b). PMX.61 (Pl.162c) may be assigned to this form. Diameter of rim 0.20 m. It has a carinated and deeper bowl than PMX.60. Its "wishbone" handle is made of a flat strip of metal. This metal vessel is to some extent reminiscent of the Furumark's angular ceramic cups (Type 240). It is, like the preceding one, left undecorated. Catling mentions no parallels nor have we found any from the Mainland, Crete or Cyprus.

The context of these four Achaean metal vessels is most probably dated LHII, to which period I am inclined to place them. Metal vessels of Late Bronze date have been discussed either briefly or in detail by Stubbings, Desborough and Catling.

---

1 Catling (Cyp. Br. W., 180) knows no example nor have I found any from these two islands.
5 See above, pp.96-97
6 Stubbings, BSA(1947)60 ff.; Desborough, JITE., 58-59; Catling, op.cit., 147 ff.
Cleavers [Pl.161a,c]: Four cleavers have been so far found in Achaea (PMX.323, 324, 329, a/a 123). Apart from one, a/a 123, which was recovered in a chamber tomb at Vrisarion, the provenance of all the others is unknown to us. Almost all specimens were found fairly well preserved. They are of relatively small size, varying in length (including the tang) between 0.182 m. and 0.208 m., while the width of blade does not exceed 0.062 m. In shape they bear a close resemblance to razors, but they are bigger and heavier and have much stronger blades. The cutting edge in two examples (PMX.324, a/a 123) has been eaten away by corrosion and the preserved width of blade must be considerably less than the original dimension.

Three examples (PMX.323, 329, a/a 123) have a straight or slightly concave back and riveted handles. The fourth, PMX.324, has a concave back and a long narrow handle which is also riveted. The straight-backed examples belong to a type frequently found on the Mainland and in the Dodecanese, while the curved form to a type more commonly found in Crete than on the Mainland.

None of the Achaean cleavers, though, as noted above, their context is mostly unknown, seem to be earlier than LHIIIA when this type of instrument suddenly made its appearance in the Mycenaean world and replaced the so-called leaf-shaped razors.

Evans suggested an Egyptian origin, in which he was followed by most scholars.

1 It has been very briefly described as a razor by Mrs Vermeule, cf. AJA (1960) 16, pl. 5, fig. 56K. But Ikovides (cf. Perati B, 341 note 3) rightly calls it cleaver.
2 PAE (1925) 46, fig. 2.
4 Evans's "triangular" type, see above p. 437 (razors).
5 Cf. examples listed by Ikovides in Perati B, 341, note 3, from Mycenae, Prosymna, Dendra, Delphi, Athens, Voula, Rhodes and Kos.
6 Deshayes, Les outils de Bronze, p. 332.
7 Cf. e.g. one example from Perati, Perati B, 340, fig. 146 (M. 128).
9 Evans, P. T., 117.
10 e.g. Blegen, Prosymna, 347; Sandars, BSA (1958-59) 235; Catling, Cyp. Br. W., 107; Ikovides, Perati B, 341.
The precise purpose of this very common tool is still controversial. The most probable explanation is that they were used for chopping meat. This idea is supported by the size and weight of their blade as well as by their general form, which much resembles those employed in any modern meat shop to-day. Whether these could have been used for any heavier work (e.g. cutting or splitting wood) is rather improbable and in any case unknown to us.

Knives [Pis.161; 163a,c; 164b; 169b]: Twenty-seven knives came to light in several Achaean sites. Most of them are more or less nearly complete and made of bronze, the only exception being two specimens from Paralimni (PMX.159, a/a 140) which are made of iron. Although measurements are not always given, they appear to vary considerably in size, the smallest being 0.071 m. (a/a134), the largest 0.235 m. (PMX.327, 328) long. Width of blade averages 0.015-0.025 m. with a maximum of 0.032 m.

All illustrated and more or less well described examples are one-edged. Some of them, found at Chalandritsa, Klaus, Vrisarion and Kallithea have been classified by Miss Sandars and J. Deshayes.

Taken together variations in shape of blade and haft provide the following types of Achaean knives:

A. Straight-backed (Sandars's Class 1). This is the most common type comprising almost half of the total number (twelve examples: PMX.35a,b,c, 76, 156, 312, 322, 327, 117, Berlin, no.30746, a/a 145, a/a 146a) [Pis.164b; 161a-c; 169b; 163a,c]
Several minor variations in shape but common to them all is a "straight back, slightly curved or parallel-edged blade and a riveted haft, the rivets placed in a single line along it".¹

It is not always possible to distinguish between flanged and unflanged examples (Sandars's Class 1b and 1a) as the flanges may be very slight and do not show well in the photographs. Nevertheless we have ventured to differentiate flanged from unflanged variety based mainly on Sandars's criteria. Thus, to the (1) unflanged variety (Class 1a), may be assigned eight knives² (PMX.35a,b,c, 312, 322, 327, Berlin 30746, a/a 145). One of them (Berlin 30746) has parallel edges to blade and haft which are almost in the same plane. In four other examples (PMX.35a,³ 327, 322, 312) the tapered blade is broader than the haft forming an angle where it joins it. This latter feature is more marked with the flanged knives and occurs more commonly in later times to which many of our examples probably belong. (III-B-C). The small rivets that secured the handle are still in place in three knives, but the panels of the perishable material (mostly wood) had in all examples vanished. To the (2) flanged variety (Class 1b), we have assigned the remaining four knives (PMX.76, 117, 156, a/a 146a). Two of them (PMX.117, 156) found at Paralimni are almost identical in shape and differ from the other two in having an almost straight and sharply tapered blade forming no angle where it joins the haft. Such an angle is clearly observable in PMX.76 and a/a 146a and may indicate a later date⁴ for them. The blade of PMX.76 is curved downwards towards its tip, which is broken. That of PMX.156 is decorated with two pairs of parallel incised lines running the length of it, each pair outlining a narrow rib.⁵

¹ Bandars, PPS(1955)175.
² Four of them (PMX.35a,b,c, 312) as well as one of the Class 1b (a/a 146a) have been already classified by Sandars in PPS, op.cit.
³ This is the number of the new Patras Inventory, corresponding to the number 36 of the old inventory, cf. Sandars, PPS(1955)189.
The haft in all four examples is flanged on either side. In three knives, PMX.76, 117, 156, the flange along the top continues all the way to the end of the blade. Whether the fourth knife, a/a 146a, has such a top-flange is not easy to make out from the bad illustration. But this last example is exceptional in having a short broad haft and tapered blade of an almost concave profile.¹

It must be mentioned here, that none of the knives belonging to this type A (Class 1) has visible surviving elaborate decoration of the kind observed in two examples, one from Crete² and one from Mycenae.³ This may be simply accidental, or it is quite possible that in some cases corrosion has obscured decoration.

B. Straight-backed with triangular blade and broad haft (Sandars's Class 6a). One example (PMX.328) (Pl.161c) is assigned to this type by Miss Sandars,⁴ and another one from Paralimni (a/a 134), though not illustrated, may belong here. In both examples no differentiation between haft and blade is observable. The wooden panels of PMX.328 were secured by means of five rivets (two of which are preserved) placed across the broadest part (two) and in an asymmetrical triangular formation (three) a short distance behind. Two pairs of faint incised lines on blade.

This is a very rare type of knife and Sandars knows only one similar example from Crete.⁵

C. Sickle-shaped. Two knives, both found at Paralimni (PMX.119, 157(Pl.163a), have a curved tapered blade of a concave profile, which gives them the appearance of sickles rather than of true knives. It is broader than the short haft forming, like the knives of

---

¹ This may be due to the whetting down of the cutting edge, cf. Sandars, op.cit.
² Pseira 38, Herakleion Museum 1585; PPS(1955)175, fig.1:4 (Class 1a).
³ Wace, Ch.T., 104, pl.VII, no.25 (Tomb 529)(Class 1b).
⁴ PPS(1955)183, 195, fig.4:3.
Class la, lb, an angle with it. The short, unflanged haft was secured by one rivet only, which in both examples is missing.

Sandars does not mention the type, nor have we found any similar from other sites.

D. One knife from Katarraktis (PMX.56)(Pl.166b), of a curious and unique shape should be mentioned at this point. It looks like a cross between the ordinary Classes 1 and 6. It is unflanged, broadening on both edges at the joint of haft and blade, but forming no angle of the kind observed in some examples of the Classes 1 and 6. Its very long gradually tapered blade ends in a rather straight tip. The haft was secured by means of six small rivets, four of which are set in a single line along it and the other two in a row across it. No real parallel is known to me from other sites.

E. Unclassified. Of the remaining ten Achaean knives, nine are briefly referred to in publications but are not illustrated, while one from Klauss (a/a 146b, Pl.165c) is badly broken and the bad illustration does not permit identification of the shape. Two of these unclassified knives are made of iron (PMX.159, a/a 140), and it is very unfortunate that no detailed description or illustration is at present available, since iron knives are extremely rare in the Mycenaean world.¹

The main characteristics of the one-edged knives² as found in the Late Bronze Age, their origin, evolution and range in time and space have been discussed in detail by Miss Sandars³ and others,⁴ so there is no need for further discussion here. They occur throughout the Late Bronze Age in Crete and Greece; they were most common during LMIII and LHIII.

---

1 Cf. examples listed by V. Desborough, LMTS., 61, from Perati, Crete, Cyprus and Syria and by Takovides, Perati B, 348, who mentions two more examples from Naxos and Lefkandi; cf. also ditto, 376-378 for a detailed discussion of iron objects.
2 The two-edged knives are too rare and have been neglected so far.
It seems, however, necessary to stress that the evidence of Achaea comes to confirm the conclusion reached by all scholars, that knives of our Type A (Class 1) outnumber all other known types of knives.\(^1\) Whether the Achaean material helps for any useful and valid conclusion about the origin and evolution of the Mycenaean knives to be reached is rather questionable.\(^2\)

The presence of the two sickle-shaped knives (Type C) present a problem to which no solution is offered here.\(^3\)

As to the two iron knives an East Mediterranean origin\(^4\) is most likely, and judging by their context they could be roughly contemporary with some other iron examples found at several LHIII, LMIIIC and LCIIB sites.\(^5\)

The context and the information given by the excavators are not always helpful for the dating of the other Achaean knives. It seems more likely, however, that most of them belong to the LHIII period, late rather than early, the only probable exceptions being the unusual knife from Katarraktis (PMX.56) found in LHII\(^5\) context and some others from Vrisarion, a site which has produced material earlier than LHIII date.

III. Tools and Implements

Axes (Pls.163a-b; 164a-d; 167b). A small number of these tools have been found in Achaea (fifteen examples: PMX.36a, 36b, 39, 116, 120, 145, 339, Berlin 30749, a/a: 152, 153, 154, 155, 156, 162, 163). Most of them are made of bronze (thirteen examples) and only two of stone. All but one (a/a 153)\(^7\) of the bronze specimens were found oxidized but more or less complete, while the two

---

1 See above p.463, note 6.

2 No example of the type with a "distinctive projecting snout at the back of the blade near the tip" (Class 6b) is known from this district, nor any other feature indicates a northern origin for them. Cf. IMTS., 60.

3 They are probably survivals of an earlier group, represented in Troy VI and in the LH hoard from Anthedon (Boeotia), which may have given rise to the usual mainland sickle, as well as to a number of knives. Cf. PPS (1935)175.

4 Cf. Desborough, IMTS., 61; Lakovides, Perati B, 348, 377.


6 It was found together with other metal objects of LHII date. See above, pp.96-97, Chapter of Tombs, and p.461.

7 The description of the original report is very brief and vague (FAT, 1920, 131).
stone specimens were badly damaged.

The shape of three examples (PMX.36b, a/a 152, a/a 153) is unknown to us, while flat and double axe forms are represented by eight and three examples respectively. One example (PMX.145) is lugged.

A. Flat axes [Pl.163a; 164c-d; 167b]. The two stone specimens (PMX.39, a/a 154) and six others of bronze (a/a 162, a/a 163, PMX.116, 120, 339, Berlin 30749). Measurements not known, for a/a 163, while only the preserved length of PMX.39 is given (0.10 m.). The size of all other specimens varies, ranging between 0.10 m.-0.203 m. in length and 0.034-0.054 m. (lower end)-0.015-0.05 (upper end) in width.

The kind of stone used in both stone specimens is not known to us, nor the shape of PMX.39. The shape of the other stone axe a/a 154 is elongated rectangular, with a rather thick butt. The small haft hole was bored near this end. Both stone Achaean pierced axes were found in LHIII contexts.¹ Such stone tools are known since MH,² they survive throughout the Mycenaean period in a variety of forms³ and continue into the Iron Age.⁴

Two bronze examples, a/a 162, a/a 163, are of different shape but cast in a one-piece mould. The former is wedge-shaped and its cutting edge is only slightly lunate. It has also slightly convex sides with small vestigial flanges. Deshayes, who has published it,⁵ is not sure to which of his Types this Achaean example must be assigned (Type E or B3a, Losiris no.271?). Some close parallels are known from Cyprus from hoards which can be dated to the twelfth century B.C., to which period our example most probably belongs.⁶

---

1 In chamber tombs at Klauss and Chalandritsa.
3 Cf. e.g. Thebes, A.Delt.(1917)85, fig.62 nos.1-4. Cf. also Lorimer, Monuments, 434; Tsountas-Manatt, The Mycenaean Age, 349, note 1.
4 On their appearance in the Iron Age and their explanation in later times, see Mylonas, Olynthus, 64, where the chief references are collected.
6 Catling, Cyp.Br.W., 86, pl.6b-e.
The latter bronze axe (a/a 163) is a heavy tool with broad butt and no flanges. It has a large elliptical haft-hole, not unlike a modern carpenter's axe, but narrower, and a rough knob on one side of the butt above the haft-hole. The shoulder bears two different relief characters, a cross (+) on one side, a two-pronged fork (¥) on the other. This axe has been published by Bosanquet, who compares it with an almost identical example from Italy (Campania) and thinks, on consideration of the wide distribution of the type in Italy, that our example is an import from there. It is dated to the transitional period from bronze to iron, and "illustrates the prolonged overlap of bronze and iron".

The four other bronze specimens (PMX.339, 116, 120, Berlin 30749) are also cast in a one-piece mould, wedge-shaped and resemble in some way a/a 162. They differ, however, from it by widening between butt and blade to a greater degree and by having straight butt and a slightly convex cutting edge whose flanges are much more pronounced. Two of them (PMX.116 and Berlin 30749) are almost identical in shape. They have a long and angular butt and immediately below it the blade widens gradually to the slightly lunate cutting edge. The broadening from butt to cutting edge is gradual and straight without forming any angle in PMX.120 and 339. I am a little uncertain whether these four bronze objects are flat axes or chisels, since they resemble more closely chisels of Deshayes's Type C:3a than flat axes of his Type E:b.

2. It is said to be in the British Museum and labelled "Pozzuoli 1889".
4. N. Zapheiropoulos takes PMX.339 as a chisel; P. Úström takes Berlin 30749 as a flat axe while E. Mastrokostas is in doubt whether PMX.116 and 120 are chisels or flat axes. Cf. *PAE*(1958)176; *Op.Ath.* (1965)98; *Ergon*(1965) 104.
There is little to be said about these obviously carpenter's tools, since they have been fully discussed by Catling, who points out that at least in Cyprus they appear as early as E.C.I, and last throughout the Late Bronze Age, occurring concurrently with double axes. In Greece they remain rare throughout the entire Mycenaean period, but survive into Iron Age.

B. Double axes [Pl.164a-b]. Of the three examples, one (a/a 155) is very briefly mentioned by Hope Simpson and no illustration is at present available to determine its form and dimensions. The other two, PMX.36a and a/a 156, have been published by Buchholz and Davaras respectively. They are solid, cast tools of the functional type heavy enough to carry considerable weight behind their blow. The shape of PMX.36a is Buchholz's Type III and Deshayes's B.1b, while that of a/a 156 is Buchholz's Type I or Deshayes's A.a. Judging by the shape of the shaft-holes the former example is of a Helladic type (oval hole), the latter (round hole) is

3 Catling (op.cit. p.86 notes 5-6 and p.297) mentions three similar tools from Mycenae, Athens, Ithaka.
4 Cf. our example a/a 163.
5 AMS., 89. I was not able to find it in the Patras museum.
7 AAA(1970)313, figs.3-4.
8 Buchholz, op.cit., 8, Abb.1.
9 Les utils de Bronze, Vols.I, 257; II, 107-8, pl.XXXIV nos.2,9 (2064, 2071). This example has been, however, overlooked by him.
10 Buchholz, op.cit.; Deshayes, op.cit., p.255-6; Pl.XXXIV no.8 (Cret-Gournia).
11 According to Buchholz (op.cit., p.9) round shaft-holes are more characteristic of Cretan double axes, while oval ones are almost confined to the Mainland.
probably imported from Crete or Cyprus. Buchholz rightly dates PMX.36a LHIII, as it was found in a LHIII context, while the other example a/a 156 by virtue of its particular shape appears to be earlier in date (LH-I-III).

It will be unnecessary to discuss the origin, development, distribution and use of this tool, since this has been covered in detail by Buchholz; it is also treated by Catling. Irrespective of an Aegean or East Mediterranean origin of the double axe, it had reached first Crete by EMII, where it enjoyed much popularity used both as a tool and in cult practice throughout the Bronze Age. In Greece, Dodecanese and Cyprus it appeared later, at the beginning of the Late Bronze Age and remained in use, as a tool or weapon only, throughout the entire period.

c. Trunnion axe [Pl.163b]. The lugged or trunnion axe PMX.145 is a rare form. It was found in a LHIII context and consists of a flat blade with two distinctly protruding trunnions. The only close parallels known to me come from Dodona, Anatolia (Caesaria) and Tureng Tepe (Turkestan). Some other

2 Catling, Cyp.Br.W., 88 "The majority (of double axes) have round shaft-holes". The possibility, however, that the Achaean example was locally made cannot be excluded, since double-axes with round shaft-hole are recorded from at least two Helladic sites (Dodona, Asea. Cf. Davaras op.cit. and notes 8-9).
3 Chalandritsa, PABE(1929)88.
4 See above, note 1.
7 Buchholz op.cit., 21. He argues against an Aegean origin.
8 For its religious use and meaning cf. Nilsson MMR, chapter VI and A Companion to Homer, 465; Mylonas, Ancient Mycenae, 169-171.
9 Cf. Catling, op.cit. Note, however, that all Cypriot examples are dated to the twelfth century B.C.
11 Sarapanos, Dodona 101; pl.LIV.7.10.
12 Deshayes, Les Outils de Bronze, Vols.I, 115 (no.1042); II, pl.XIV.13 and LV.9.
Late Bronze relative examples from the Mainland, Crete, Cyprus, the Aegean islands and the Near East are listed by Catling. Trunnion axes have been recently discussed by Mrs Maxwell-Hyslop, Catling and Deshayes, who pointed out that the type was known on the Caspian since the end of the third millennium B.C. A Near Eastern origin of this tool cannot, however, be excluded, since it is widely distributed in Anatolia and the Near East.

Sickle [Pl.167b]. Only one example is recorded from Achaea (PMX.338). It was found at the settlement-site of Drakotrypa together with other objects of LH III date. It measures 0.22 m. l., and 0.03 m. w., and is preserved in almost fine condition. The shape is very simple (Catling's type a) consisting of a knife-like blade of curved profile without a midrib. It has a short tang pierced for a single rivet which is missing. The tang is narrower than the blade forming an angle with it where it joins it. Teeth - if ever it had any - must have been ground on the cutting edge, but all traces of them had vanished.

Similar sickles occur in hoards elsewhere on the Greek mainland. Other instances from Crete, where metal sickles are recorded from at least LM I, and Cyprus, where these tools do not appear before the twelfth century B.C., are listed by Deshayes and Catling. This tool was also

1 Cyp.Br.W., 87-88 and notes.
2 "Bronze lugged axe- or adze-blades from Asia", Iraq xv, 69ff.
6 PAE(1958)176, pl.136 ; Ergon(1958)140.
8 Sickles without teeth occur elsewhere. Cf. e.g. Cretan Collection, 25, fig.9B (Heraklion no.1071).
known in the Near East.\footnote{Catling (op.cit.) mentions some examples from Ras Shamra and Atchana.} Our example resembles, however, Aegean types more closely than Near-Eastern, and must probably be regarded as a local product, belonging to an Achaean reaper, inhabitant of the settlement at Drakotrypa.

**Handle [Pl.165a].** One fragmentary pommel made of black soft steatite was recovered at the settlement site of Paralimni (a/a 165)\footnote{Ergon (1966)163, figs.195-196.} associated with other small objects of LHIII date. It is richly decorated both on its flat and conical sides with different engraved ornaments, i.e. rosette and parallel chevrons running in a single row round its perimeter on the former, while the latter is covered with alternating vertical rows of concentric circles and herringbone designs. Similar pommels either decorated or plain are recorded from Mycenae, the Acropolis of Midea, Ialysos Tomb XVII and Perati.\footnote{Perati B, 349, fig.153 (A.265, 151) and for references to other sites, notes 4-5.}

It seems fairly safe to follow Lakovides's recent suggestion\footnote{Schachtgräber, 84, fig.20, pl.XVIII, 508-509.} that they belonged rather to staffs or possibly sceptres of the sort found at Mycenae\footnote{Ergon (1966)162, fig.191.} than to swords and daggers.

**Fish-hook [Pl.160b].** The coastal settlement-site of Paralimni\footnote{Ergon (1966)162, fig.191.} has yielded one fish-hook (a/a 166) made of bronze and preserved in fine condition. It is fairly big in size (0.06 m.) and bent in a semicircle. Its upper end terminates in an open small loop, apparently designed for the fastening of a thread or wire, while the lower part ends in a strong pointed barb. It resembles more closely Lakovides's Type B than Type A. The context is not earlier than LHIII.
Fish-hooks are recorded comparatively rarely in the Bronze Age. They have earlier been discussed by Keramo-
poullos¹ and recently by Iakovides, who lists all the known examples from Greece, Crete and Cyprus;² he also points out that they occur since Early Bronze Age, last in their strictly functional shape throughout the Late Bronze Age and continue in use almost unchanged in form until our times.

Net-weight. One made of lead was found at Para-
limni³ (a/a 167) together with other small objects of LHIII date. Unfortunately it is not illustrated nor is any detailed description given. Leaden net-weights are recorded from Enkomi, Phaistos, Naxos, the cargo of Cape Chelidonia wreck, Vravron and Perati.⁴

Wheel. One leaden six-spoke wheel (a/a 168) from Para-
limni⁵ is briefly mentioned but not illustrated by E. Mastrokostas. The context is dated LHIII. Six-
spoke wheels,⁶ but made of bronze and belonging to Late Bronze Age wheeled-stands, are known to me only from Cyprus.⁷ The stand to which our example presumably belonged may, therefore, have been imported from Cyprus.

1 A.Delt.(1917)178-180, fig.129:1 (Tomb 19, Kolonaki).
3 PAE(1964)67.
4 Perati B, 355, notes 1-5.
5 Ergon(1966)163.
6 This is the standard number on Hittite chariots, cf. Lorimer, Monuments, 316, n.1. The Aegean chariots have four-spoke wheels (cf. Furumark, NP, 332, fig.56 and the same Op.Ath.i,47ff.; Lorimer, op.cit. 307; Catling, Cyp.Br.W. 210, note 1; Tsountas-Manatt, The Mycenaean Age, 92). The Homeric chariot wheel had eight spokes, cf. Iliad v 723 (κύκλα κάλκα όκτακυμή). Six, seven and eight-spoke wheels have been found at Olympia and Ephesus; the six-spoke wheel appears also on a number of vases of post-Mycenaean date. See for references, Lorimer, op.cit. 319 and notes 6-10.
7 Cf. Catling, op.cit., 207 (no.35); 208 (no.36); 210 (no.38).
Spool. One, made of terracotta (a/a 169) and fairly well preserved was found at Paralimni. It is 0.042 m. long and has concave sides and flat ends. There is no visible longitudinal hole and at one end it is decorated with six small incised spokes. The associated objects range from EH-LHIII.

Spools made of different materials (stone, clay, bone) are well known since EH and last in various forms throughout the Mycenaean period. However, similar spools to ours, with concave sides and flat ends are, to my knowledge, recorded only from Malthi, Kephallenia, Argos and Perati.

Pestles. One small (0.044 m. long) made of stone and "some others" of clay (a/a 170) were found at Paralimni, but no illustration or detailed description of them is at present available. The context is LHIII. No parallel of the clay ones is known to me from elsewhere. Stone pestles have a long tradition going back to EH and continuing in use during the Late Bronze Age. They have been explained as tools used for powdering colours on small palettes.

1 PAE(1965)136, pl.180a.
2 Cf. e.g. Valmin, Malthi, 356, pl.XXV:63.
3 Cf. examples listed by Iakovides in Perati B, 353, notes 12-14.
4 Valmin, op.cit. 356, fig.71,F:1; 338, fig.46.
5 Marinatos, AE(1953)80, 93 note 4, fig.38 (Mataxata, Tomb B).
6 Deshayes, Deiras, 109, 231, pl.XCVII (BM.105, 106). They have been overlooked by Iakovides.
7 Iakovides, Perati B, 353-4, pl.90b (A.96).
8 PAE(1964)67.
9 Cf. examples listed by Iakovides, in Perati B, 353 note 10.
11 By Tsountas, AE(1899)74ff.
Anchor. One fragmentary clay anchor was recovered at Paralimni (a/a 171) associated with objects of LHIII date. Measurements and exact shape not known to us. No parallel can be traced in other Late Bronze Age sites and it may, perhaps, be explained as a cheap imitation of a real metal anchor. Its precise purpose is questionable.

Mould. One four-sided mould (PMX.149) was found at Paralimni together with other LHIII objects. It is made of stone (steatite?) and measures 0.031 m. diam.; 0.05 m. wide, 0.015 m. long. It was apparently designed for casting seal-rings. Stone moulds intended, like our example, for casting jewellery have survived.

Hoes. Two stone hoes (a/a 173) were found at Katarraktis-Drakotrypa together with two small bronze objects of LHIII date. It is unfortunate that no illustration is given and the brief mention does not permit identification of the shape. Stone hoes are known since Neolithic times and last well into the Late Bronze Age.

Discs. Both pierced and unpierced clay (a/a 175) and stone discs, one made of sandstone (PMX.180) were collected by E. Mastrokostas at Paralimni. They are not illustrated and only the dimensions of PMX.180 are given:

1 PAB(1964)67.
2 PAB(1963)95, pl.66d.
4 PAB(1958)176.
5 Tsountas, ΑΙ Προϊστορικοί Ακροπόλεις Μυλονας και Σέκλου, 307-319; Mylonas, Η Νεολιθική Εποχή της Ελλάδος, 120-122.
6 Cf. e.g. Perati B, 337-338 and notes 1-2 (Korakou, Malthi).
7 PAB(1964)67.
height 0.011 m., diam. 0.035 m. It is pierced in the centre. Such disc-shaped stones are often found and interpreted either as idols or amulets.  

**Hammers or Mace-heads [Pl.165b-c]**

Three stone hammers (a/a 177b, PMX.196, 197) were found at Paralimni associated with objects ranging from EH-LHIII in date. They are made of different kinds of stone (a/a 176a and PMX.197 of limestone; PMX.196 of sandstone) and measure 0.089 m., 0.05 m., and 0.115 m. long respectively.

One, PMX.196, is unpierced and in shape comes close to one from Cyprus, which Catling discounts, as probably not belonging to the original composition of the Mathiati hoard (12th century B.C.). Of the two others, which are both pierced, about half of the hammer PMX.197 is preserved, while a/a 176a is complete and its haft hole is bored in the centre.

Similar stone tools, pierced or unpierced, are known since EH, and continue in use during the MH and LH periods. They have generally been explained either as hammers or mace-heads.

---

1. Cf. e.g. Dörpfeld, *Troja und Ilium*, I, fig.344c-d and Beil.45:VII.
2. Cf. e.g. BOE, I, pl.IX:42; II, pl.CLXXXIV:11; Boyd-Hawes, *Gournia*, pl.III:7; Valmin, *Mathi*, 342, pl.XXV:24-26; 70.
3. Ergon(1966)163, fig.194; PBE(1965)135, pl.178a,b; Ergon(1965)103-104, figs.128, 129.
5. Cf. e.g. Valmin, *op.cit.* 346, pl.XXVI:A3, fig.73:3 (EHIII).
IV. Armour and Weapons

Greaves. A pair of bronze greaves (PMX.317a, 317b) (Pl.168a) was found in 1953 by Yialouris in chamber tomb A at Kallithea.\(^1\) They are made of thin sheet-metal shaped to the contour of the leg. They were badly damaged by corrosion and have been considerably restored in wax. Preserved length 0.256 m. Greatest width 0.126 m.

PMX.317a preserves the lower part and some of the lacing, which consists of small, flat strips of metal folded at intervals round the rear edges and fastened by large, flat-headed rivets, leaving a bight through which the wire laces could be threaded. The wire laces terminate in a ring. It is not clear how it was fastened by the wearer, unless opposite loops were tied together with leather laces.

Though no traces of the lacing system of PMX.317b are preserved it seems almost certain that it was similar to that of PMX.317a, since they must originally have been a pair.

Both these greaves have their surface embellished with simple repoussé ornaments: "three bands, each consisting of double repoussé ridges with a line of beading between, which intersect at the centre of the greave dividing its surface into six approximately triangular divisions, in the middle of each of which is a large repoussé boss. A seventh boss marks the intersection of the bands."\(^2\) A similar ornamental double band follows the edge of the greaves the outermost of which is left plain.

The burial with which the greaves were associated is dated some time after 1200 B.C.\(^3\)

They are close to the Enkomi greaves\(^4\) in design, but the lacing system is different - a move towards greater efficiency is observable in the Achaean greaves - and the decoration is more elaborate.

---

1 BCH(1954)124, fig.25.  
3 Catling, op.cit.  
It is not my present purpose to discuss the origin and distribution of the bronze greaves, since this has been covered in detail by Lorimer, G. von Merhart, Hampe, Yialouris, Mrs Vermeule, Desborough and Catling. The following main conclusions, however, appear to be justified:

In view of what has been said about the origin of the greaves found in Greek Late Bronze Age sites, it appears that a Mycenaean origin of this type of armour suggested by Catling is well founded and convincing.

The Panoply Tomb at Dendra shows that such bronze greaves were known in Greece by 1400 B.C., when a change in defensive armour took place, and continued in use throughout the entire Mycenaean period.

Catling places the Achaean greaves last in the series of the already known bronze greaves of Late Bronze Age, and he has good reason for believing it.

Frescoes and vase paintings show how the greaves were worn, but fail, of course, to make clear of what material(s) they were made.

Irrespective of the fact that some greaves may have been leathery or even padded linen, the Achaean evidence taken together with that of Dendra and Cyprus clearly shows that some - probably worn by wealthy and splendid warriors - were

---


2 A Cypriot or Near-Eastern origin has been rejected by Catling (Cyp. Br. W. 140) and Lorimer (Monuments, 252. Cf. also BRGK 1956-7, 91).

3 Cyp. Br. W., 142. He argues against a European origin of the bronze greaves suggested by G. von Merhart, Hampe and Vermeule (op. cit.).

4 Archaeological Reports (1960-1) 10, fig. 8; AE (1957) Parartema, 15-18; AKA (1963) 280-1, pl. 62.

5 The tomb contained among other finds LHIIIA:1 pottery.


7 As is confirmed by the Achaean evidence.

8 Cyp. Br. W., 141.


10 Cf. e.g. Palace of Nestor, III, Pls. 15 (21. H. 48); 26 (39. H. ne); 12 (16. H. 43).
made of bronze and that the two Homeric epithets έυκνήμιδες
and καλκοκνήμιδες\(^1\) must not be any longer regarded as an
intrusion and anachronism\(^2\) but as a genuine Mycenaean element.

**Corslet.** [Pl.168b]. From the same burial in chamber
tomb A at Kallithea which con­tained the two bronze greaves described above, come three
ornamented bronze strips (PMX.314a, 314b, 315).\(^3\) Preserved
length 0.268 m.; 0.238 m.; and 0.172 m. respectively,
width 0.027-0.03 m. They have been restored in wax and
are slightly bent.

Two of them (PMX.314a-b) are decorated on either edge
with double repoussé ridges, the space between filled with
a line of beading. The third fragment (PMX.315) is left
plain except for a single repoussé ridge following either
edge of it.

They have been discussed in detail by their excavator,
N. Yialouris,\(^4\) who appears to be right in interpreting them
as reinforcements for a leather corslet. The Warrior Vase
painting and the stele from Mycenae show how such metal
strips were used to strengthen the corslet by studs.\(^5\)

Yialouris cites some parallels from Central Europe,
but strongly argues against a European origin\(^7\) of this type
of armour and in this he was followed by Snodgrass.\(^7\) This
was much strengthened and confirmed by the finds of the
Panoply Tomb at Dendra, which show that bronze corslets were
in use in Greece by 1400 B.C., much earlier than any of the
European examples. Precedence in the development of this
type of armour must, therefore, once more be attributed to
the Mycenaean Greeks.

---

1. The latter occurs only once (Iliad, H.41), the former
some 40 times.
2. As Miss Lorimer believed (Monuments, 250, 252). Cf.,
however, Catling, Gyp.Br.W. 142; Bowra, Mnemosyne (1961)
97; Yialouris, AM (1960) 37.
5. Lorimer, Monuments, 200, pls. II and III.
7. Proposed by the late G. von Merhart, BRGA (1956-57) 91ff.
8. EGAW, 81, 83.
As to the materials(s) employed from the frescoes and vase paintings no definite conclusion can be reached. It is likely, however, that some, like our example, may have been leather, others, like that of Dendra, were of bronze. Like the greaves they continue in use throughout the Mycenaean period and reappear in modified forms in later times.¹

Since these three bronze strips were closely associated and somewhat similarly decorated with the bronze greaves they must be contemporary with them. We may reasonably conclude that the Achaean xαλκοξιτωρ² warrior buried in that tomb wore bronze greaves and a leather corslet, reinforced by these ornamented bronze strips.

Helmet [Pl.169b]. Chamber tomb B at Kallithea³ produced three fragmentary boar's-tusks (a/a 181), measuring 0.062 m. long. They are pierced diagonally through from the edges, so that no hole appears on the face, and have one pointed and one straight end (Wace's Group A:2).⁴

Similar boar's tusks, apparently used for the reinforcement of leather helmets,⁵ have been found more frequently on the Mainland than in Crete.⁶ With the material recovered from Tomb 513 at Mycenae Wace was enabled to reconstruct a helmet and to discuss the various types of cut pieces of boar's-tusks.⁷

---

¹ For a full discussion on the use and long history of the corslet cf. Snodgrass, EGAM, 72ff.; Lorimer, Monuments, 196ff.

² It occurs twenty-four times in the Iliad as an epithet of the Achaean, or Argeioi, or Epeioi or Boeotians, or even Cretans and Trojans. Cf. Lorimer, op.cit., 208-211; see also Yialouris, AM(1960)54 and 67.

³ AM(1960)44, 54-56; Beil.31:4.

⁴ Ch.T., 215; pl.XXX.

⁵ A proposal made long ago by Reichel (Homerische Waffen, 101ff.) and universally accepted. Cf. Nilsson, MNR², 16; Wace, op.cit.; Persson, N.T., 126-129; Blegen, Prosymna, 485-4; Lorimer, op.cit., 212; Stubbings, A Companion to Homer, 516; Alexiou, Antiquity 28 (1954)211

⁶ They occur only once in Crete in a LMIII tomb (Evans, P.T., 66-7), while they are found on several Late Helladic sites, cf. examples listed by Wace, Blegen and Lorimer op.cit. Cf. also Nilsson MNR², 18.

⁷ Wace, Ch.T., p.213.
The representations and remains show that the boar's-tusk helmet was already used in MH times and continued in Mycenaean times. Some have doubted whether it remained in fashion to the end of the LHIII period; but the Achaean evidence provides us with a positive answer to this question, since the three boar's-tusks were closely associated with LHIIIB-C objects. A post-Mycenaean survival of an actual boar's-tusk helmet is rather questionable.

Shield-boss [Pl.167d]. In the Aigion museum I was able to recognize among other bronze and iron objects said to be from Achladies-Achouria and Chadzi-Trapeza, a small fragmentary circular bossed plate (a/a 182). Diameter 0.086 m. It consists of a flat round disc, the centre of which had once been raised to form a hemispherical boss (D. 0.043 m.), but which is now almost flattened, due surely to some kind of pressure exercised on it (fallen roof of the tomb?). The boss is pierced by a single hole at its centre. There is no other rivet or stitch holes. There is no visible impressed or repoussé ornament. Context uncertain.

Similar bossed plates have been found at a number of sites on the Mainland, in Crete and Cyprus, extending from the end of the Bronze Age to the Geometric and, at least in Cyprus, to the Archaic periods. They have been discussed recently in detail by Catling.

---

1 It was Reichel (op.cit.) who first recognized that in these we have an illustration of the helmet lent by Meriones to Odysseus and precisely described in Iliad K.261-5. Lorimer (op.cit.) listed all the known examples of such representations. Cf. also Wace, Ch.T., 213-4.
2 H. Goldman, Excavations at Eutresis, 52ff. and 220; Mylonas, Προϊστορική Ελλάδα, 55 and 145, fig.119.
3 Lorimer, Monuments, 218-219; Stubbings, A Companion to Homer, 516; Desborough, LMTS., 63.
4 Cf. AM(1960)44.
5 Lorimer (op.cit., 214) argues against such a survival, and she is right.
6 They are summarily listed in the Inventory (AM.37).
7 Snodgrass, EGAW, 48, and 39-41 (= Catalogue of all known examples).
Desborough,^1 and Snodgrass^2 and most, if not all,^3 of them have been interpreted as shield-bosses.

The suggested reconstruction of the Kaloriziki shield^4 shows the way they were fastened and attached to one or more types of metal-reinforced^5 shield.

Our example resembles closely those found at Kaloriziki Tomb, which are dated by Catling "at the very threshold of the Iron Age",^6 a date which should also be suggested for the Achaean shield-boss.

**Spearheads [Pl.161a-c; 163c; 166b; 167a-c].**

This form appears in greater profusion in Achaea than other weapons. Twenty-two examples have been recorded so far from several sites. Almost all^7 were found in Late Helladic chamber tombs. Some are complete, others more or less well preserved. With the exception of three iron examples (AM.37b-d) all are made of bronze. They vary considerably in size from about 0.08 m. (PMX.135) to 0.35 m. (Berlin 30750) long, and between these two extremes there are many intermediate types. Average width of blade 0.03-0.034 m.; diameter of socket 0.008-0.012 m.

They fall into three main types according to the shape of blade and socket:

A. Broad-bladed leaf-shaped with large sockets: Nine examples.

Common to them all is the leaf-shaped blade, a more or less wide, flat or

---

1 *IMTS.*, 65-66.
2 *EGAW*, 38ff. He also gives a catalogue of all the known examples.
3 Cf. op.cit., 47 for the very few examples interpreted as probable cymbals, tympana, votive miniatures, belt-attachments etc. The identification of this type of object as a shield attachment is by no means certain. The original explanation that they were cymbals (Xanthoudides, *AE*, 1904, 47ff.) has not been disproved, though it seems unlikely.
4 Catling, op.cit.
5 Catling says (op.cit.) that these bosses were simultaneously used as ornaments and as reinforcing elements of the shield.
6 Catling, op.cit., 145f.
7 The only probable exceptions being the four examples from Aigion (AM.37) and PMX.320, the exact provenance of which is unknown.
round midrib running right to the tip and sloping shoulders. Minor variations in shape of blade and socket provide two subvarieties:

1. With rounded shoulders and unringed socket: PMX.75, 310, 316. [Pis.161b; 167a]. Two of them (PMX.310, 316) have been classified by Snodgrass (Type A:2-3). The third one (PMX.75) with its broad leaf-shaped blade reaching down almost to the bottom of the socket is to some degree comparable to his Type C, but it differs from it by having a ridge following each edge from socket junction to tip on both sides of the blade. The blade is decorated with rows of small parallel incised lines. No real parallel is known to me from elsewhere.

2. With angular shoulders and ringed socket. It is not certain whether two of these examples (Berlin 30752 and a/a 196, Pl.163c) had ever ringed sockets, but it seems reasonable to suppose so judging from the other four examples similar in shape (PMX.307, Berlin 30750, 30751, 30753). The blade in all these specimens tapers to a distinctly acute point. The socket which was formed, as in most of the Achaean spearheads, from a metal sheet rolled over and welded together along the edges, was secured and reinforced at its end by a comparatively substantial ring. Two examples (Berlin 30751, 30752) resemble closely some found at Prosymna and Khalkis both in general outline and in having a flat midrib decorated with two or more raised parallel lines. The midrib of all other examples is left undecorated. The blade of PMX.307 has been bent of "killed", as so many other bronze weapons placed in tombs. This type of spearhead is frequently

1 BEAW, 118.
2 Op.cit., 120, fig.7
3 Blegen, Prosymna, 339-340, fig.510 nos.1-3.
4 BSA(1966)45, fig.4 Khalkis Museum no.746.
found on the Mainland, in Crete¹ and the Aegean islands but it is altogether missing in Cyprus.²

B. Lanceolate. [Pls.166b; 16la,c]. Five examples (PMX.57; 320, 326a, 326b, 346)³. This type differs from A in having a longer and always ringed socket, still narrower blade and sloping instead of rounded or angular shoulders. Midrib less prominent than Type A, but running also right to the acute point. Two of them (PMX.320, 326a) are listed by Vermeule⁴ and Desborough.⁵ Mrs Vermeule mentions one close parallel from Ithaka and others from Central Europe.

Lanceolate spearheads have recently been discussed by Snodgrass⁶ and Desborough⁷ both of which, judging by the pattern of their distribution in Greek sites, agree about a probable European origin⁸ of the Type. In this they were followed by Catling, who pointed out that the form appeared later in Cyprus and was introduced there from the Aegean rather than from the Near East.⁹

C. Spearheads proper. [Pl.167c-d]. One bronze and three iron specimens, all from the Aigion region (AM.37a-d). They have tubular sockets, elliptical blade and blunt point.¹⁰ A slight midrib is visible on the bronze example (AM.37a), which is better preserved than the others. Oxidization obscures tracing of such a midrib on the three iron spearheads, but it seems certain that they had virtually no midrib. The blade of the bronze

---

¹ "The angular shoulder of some LHIII spearheads may be a distinctive feature of the period but not necessarily so in Crete", Boardman, Cretan Collection 26, note 1 and refs.
³ It is classed in this group according to the description of the Patras Inventory only.
⁴ AJA(1960)15, pl.5, fig.36 no.E and J.
⁵ LNTS., 67.
⁶ EGAW, 119. The Achaean examples have been overlooked by him.
⁸ First proposed by Childe, PPS(1948)185, note 4.
¹⁰ Cf. Catling, op.cit., 119, pl.13. (Parallels from Cyprus, Crete and the Mainland.)
example (PMX.37a) and that of one of the three iron specimens are bent or "killed", like those of PMX.307 and 135.1

D. Unidentified. For four more examples (PMX.135, a/a 194, a/a 195, a/a 197) we are uncertain about their type, since no illustration is available and the brief description of the original reports is not helpful for the shape to be traceable.

In all Achaean well-preserved spearheads (Types A, B and C) the wooden shafts were fastened by single nails driven through from one side to the other, as is clearly indicated by the presence of two small holes drilled opposite each other at the middle of the socket or just at the junction of it with the blade (PMX.307). In fact the socket of at least one spearhead (PMX.326a) was found still containing remains of the wooden shaft.2

Miss Lorimer3 and more recently Snodgrass4 have discussed the use, distribution and chronology of spearheads, but this type of weapon merits still a fuller and more systematic study.5

It was introduced in LH Greece at the very beginning of the Mycenaean period6 from Crete, where it already occurs in MMIII times.7 It persisted in various forms throughout the Late Bronze Age and continued in use in post-Mycenaean times. Frescoes representations and vase painting8 show how the spear (δυσός)9 was used by the warriors mainly as a thrusting weapon.10

---

1 See above p. 484 note 5.
2 Cf. Prosymna, 340.
3 Monuments, 254 ff.
4 EGAW., 134-139.
5 Iakovides, Perati B, 357.
6 Karo, Schachtgräber, 206. Cf. also Lorimer, Monuments, 256.
7 Lorimer, op.cit., 255 note 1 and refs. (Mochlos).
8 Op.cit., 256 note 7 (Fresco fragments from Mycenae, the Warrior Vase and stele, the Tiryns chariot sherd).
9 It occurs many times in the Iliad. For refs. cf. Lorimer, op.cit. 258-259 and notes.
10 Snodgrass (op.cit. 136) says that "the problem of distinguishing between throwing and thrusting-spears remains unsolved".
As to the chronology of our examples, the shape taken in conjunction with the context may be used as a good criterion of date, according to which they fall into four main groups:

a. What seem to be the earliest spearheads in Achaea are three examples of our Type B (PMX.57, 326a-b) found in LHII and LHIIIA-B contexts.\(^1\) The earliest known examples of this Type (lanceolate) elsewhere do not, however, antedate LHIIIb.\(^2\)

b. Most of the Type A:2 may be assigned to the LHIIIA:2-B (=The four examples from Aigeira).

c. Type A:1, two of Type A:2 (PMX.30?, a/a 196), two of Type B (PMX.320, 346) and the bronze example (AM.37a) from Aigion of Type C may be placed in the LHIIIC.

d. The three iron specimens (AM.37b-d) of Type C appear to be the latest in the Achaeian group, perhaps belonging to the very end of the Late Helladic period and the transition to the Iron Age. The four unidentified examples cannot at present be dated.

Spear butt-spike. [Pl.169b]. A single bronze example (PMX.311), found in Tomb B at Kallithea. It is preserved in fine condition and measures 0.089 m. long. The undivided long socket has two opposite rivet holes. The context is associated with LHIIIIB-C pottery. It has been classified by Catling in his Type b ("Spikes with long narrow shafts").\(^3\) Comparable objects are rare in the Bronze Age.\(^4\) As they

---

1 They were found in a LHII tholos tomb at Katarraktis (PMX.57) and in a chamber tomb (LHIIIA-B) at Vrisarion. See above p.
2 Desborough, LMTS., 67 (examples from Epirus).
4 Cf. the examples listed by Catling (op.cit.) from Cyprus, Crete and the Near East. (LHII-GLI; LHIII-LMIII).
have been treated in detail both by Miss Lorimer\(^1\) and Catling\(^2\) they need no further discussion here.

Swords. [Pl.163c; 166b; 169a-b; 170a-b]. Eight examples found exclusively in excavated LH tombs. They are all made of bronze and most of them are complete and in splendid condition. They vary considerably in size from 0.309 m. (Berlin 30744) to 0.814 m. (PMX.318) long and 0.035 m. (PMX.318) to 0.095 m. (Berlin 30742) wide. Following Desborough's\(^3\) distinction "swords" are represented by three specimens (PMX.318, 319, a/a 206), while "short swords" or dirks\(^4\) by four examples (PMX.53, Berlin 30742, 30743, 30744) and one (a/a 205) is undeterminable.

According to their shape they fall into three groups:

A. **Round-shouldered** (Furumark's Type b.3;\(^5\) Sanders's Type E.ii).\(^6\) It is represented by a single "short sword" (Berlin 30744)\(^7\)(Pl.170b).

Crescent-shaped top of tang; angular to rounded shoulder and leaf-shaped blade without midrib. Four rivets in the flanged tang, two of which are still preserved, and another two in the shoulder secured the handle, which was made of perishable material that has left no trace.

The context is associated with LI1IIAL-C:1 pottery. Similar examples are recorded from several Greek Late Bronze

---

1 Monuments, 261. She concludes from Iliad Z.213, where Diomedes' spear is stuck upright in the earth (ἐφορ κατετησεν ἐπὶ θεον' πουλυβοταρμ) that it must have had a spike, or σαυρωτηρ. This is certainly a possible inference but, as Catling states, not a necessary one.
2 Op.cit. Cf. also Snodgrass *EGA*, 133
3 JHES., 67 "any weapon longer than fifty centimetres should perhaps be called a sword", while those coming between 50-50 cms could be called short swords.
4 According to Catling, cf. Antiquity, XXXV, 121f.
5 CMP., 94, fig.4.
6 A.J.A.(1963)133, pl.25.
7 This sword has been briefly described before but not illustrated by P. Aström, cf. Op.Ath.(1965)97.
Age sites,\(^1\) ranging in date from LHIIIA.1 to LHIIIC.1-2.\(^2\)
Our example resembles closely four specimens from Prosymna and Dendra\(^3\) all of which are dated LHIIIA.1-B, a date to which our sword most probably belongs.

B. **Horned Type** (Sandars's Types C:i and G).\(^4\)

Three "short swords" (PMX.53, Berlin 30743, 30742) (Pls.166b; 170a). The first example was incomplete, having the tang and "horns" broken. It and Berlin 30743 belong to Sandars's Type C:i. Both these examples have "a slender blade with a high midrib and a horned protection for the hand carried out in the same casting as blade and tang".\(^5\)

The tang of the latter specimen is provided with substantial flanges. The mounting of its hilt was fastened by three rivets, one on each side of the midrib at the base of the horns and one near the middle of the grip. It is not certain whether the tang of PMX.53 was also flanged and had one or more\(^6\) rivets, but two rivets on the blade are placed similarly to those of Berlin 30743.

To the Sandars's Type G and Furumark's Class C:2\(^7\) belongs the third example (Berlin 30742). Tip of blade and pommel missing; narrow grip with three rivets; blade similar to that of the two other examples. It differs, however, from them by having shoulders with rather broad "downward hooked horns or quillons".\(^8\)

\(^1\) Cf. examples listed by Furumark (op.cit.), Dakaris (AE, 1956, 142) and Sandars (op.cit., p.149-150) from the Mainland, Crete, Dodecanese.
\(^2\) Cf. Furumark, CMP., 95 and Dakaris AE(1956)136 and 142. Miss Sandars says (op.cit.), however, that this Type "is not likely to have survived" until the very end of the Mycenaean period.
\(^3\) Prosymna, 330, 337, figs.198, 337; R.T., 97, no.23, pls.XXXIII:4 and XXX; N.T., 34-35, fig.35.1. Cf. also Dakaris, AE(1956)140, fig.9:8,11,12.
\(^4\) Op.cit. 119-121 and 144-146, pl.21 (Type C:i); pp.139-140 and 152, pl.26 (Type G).
\(^5\) Cf. Sandars, op.cit., 119.
\(^6\) Cf. Sandars, ADA(1953)119 "usually from one to three (rivet holes)".
\(^7\) Cf. Sandars, op.cit., 139.
\(^8\) Cf. Sandars, op.cit., 139.
Short "horned" type swords are known from several Late Bronze Age sites since LMIB and LHIIIA:1 times. Of the three Achaean swords the first two come close to two examples from Epirus (Perama) while the third one to two others from the Acropolis at Mycenae and may be regarded as contemporary with them. (PMX.53, Berlin 30743: LHIIIB-IIIA:1; Berlin 30742: LHIIIB-C:1)

C. Naue II Type (Catling's Group II, Early).

Three examples (a/a 206, PMX.318, 319)(Pls.165c; 169a-b). As these swords have been published, classified and discussed in detail by Yialouris, Mrs E. Vermeule and more recently by Catling they need no further discussion by us. Catling lists four examples similar to ours from Tiryns, Phokis and Mouliana dated ca. 1200 B.C. Since the Achaean swords belong to excavated groups associated with LHIIIB-C pottery, they are contemporary with the other four known examples of Naue II Type mentioned by Catling.

It will be unnecessary to discuss the origin, wide distribution, development and chronology of this controversial type of sword, since this has been covered in detail by Cowen.
and Catling; it is also treated by Desborough. In the Mycenaean world it occurs most commonly in LHIII C in a number of sites from the Mainland, Crete, Cyprus, Dodecanese and Ionian islands and must be regarded "almost certainly" as an import from Europe.

Lastly one sword from Vrisarion (a/a 205) is very briefly mentioned by Kyparissos and is not illustrated, so it cannot be assigned to any of the above mentioned three types of the Achaean swords.

Commentary

The long history of the sword and its appearance in a variety of forms in the Mycenaean realm has been carefully summarized by Catling and Desborough and I have no further comment to offer on their typology and development.

All that need be said here by us is that the evidence of swords and especially that of Naue II Type, supplements that of some other finds (e.g. amber beads, fibulae etc.) and indicates direct or more likely indirect connexions between Achaea and the North.

---

2 LMTS., 67-68.
3 Op.cit. 67 and note 7. Desborough has suggested, however (op.cit. p.68) that they were introduced "towards the end of LHIII B".
4 Cf. examples listed by Catling both in PPS and Cyp.Br.W., op.cit., with detailed description and refs.
5 Desborough, LMTS., 68. Catling (Cyp.Br.W., 114), without denying it has, however, suggested that the possibility that Group II represents a modification (of Group I) which took place in the Mycenaean world must not be altogether excluded.
6 PAP(1926)131 "blade of a sword".
8 Vermeule, AJA(1960)13-14; Desborough, LMTS., 98.
Daggers [P1s.163b; 166b-c; 170c]. Achaea has so far produced six bronze daggers (PMX.52, 54, 118, Berlin 30745, Ashmolean M.no.1927/1375, a/a 213). They come from excavated LH tombs and settlements and most of them were found in fairly good state of preservation. With the exception of a/a 213 for which no measurements are given the length of all examples varies between 0.16 m. and 0.243 m.

They differ in shape of blade and tang, according to which three main types can be distinguished:

A. Tangless Type (Blegen's Type a). Two examples (PMX.52,54) coming from the same site (Katarraktis-Ayios Athanasios) (Pl.166b-c). Common to them both is the absence of tang, the shape of blade, which from the hilt (width ca. 0.045 m.) tapers in double curve to the point and the manner by which the hilt was secured by three large bronze rivets with gold- (PMX.52) or silver-capped (PMX.54) heads. They differ, however, in section of blade which in the former specimen is of a lozenge-shaped form with broad flat central portion symmetrically bevelled towards the edge, while the latter has no flat central portion but simply a thick central midrib, and bears no decoration at all.

The two sides of the blade of PMX.52 bear an inlaid decoration in gold, silver and niello. In each face three dolphins are represented, the middle one in a downward curve, the other two in an upward curve. Although the order of niello, gold and silver in the details is different from that observed in a similar dagger from Prosymna, the depiction of the dolphins is very similar. The decoration of it exhibits delicate, skilful craftsmanship and the result achieved is artistic and pleasing.

Tangless daggers belong to an early type, of which many examples, either decorated or plain, have been found on the Mainland and in Crete.

1. Prosymna, 330.
2. PAF(1956)194-5, pl.88a; Ergon(1956)89, fig.88 (Tomb B).
3. Prosymna, 330-1, figs.420-421 and Plate II (upper) no.1.
4. Cf. examples listed by Hood in BSA(1952)269, n.135.
The context of these two Achaean tangless daggers is most likely LHII\(^1\) and they must, therefore, be regarded as contemporary with Blegen's Type a\(^2\) as they are very similar to them. Whether they are imports from the Argolid is a difficult point, but the possibility cannot be excluded.

B. Cruciform Type. Two specimens (Ashmolean M.no.1927/1375, Berlin 30745). The former has been described and classified by Miss Sandars in her Class E.i,\(^3\) but no illustration is at present available. Miss Sandars does not exclude the possibility that it would belong to Class E.ii, since the missing portion of the grip could have had a pommel flange.\(^4\) Context and date unknown. All the known examples from elsewhere range in date from mid-fifteenth century to early fourteenth century.\(^5\)

The latter example (Berlin 30745) (Pl.170c) has been described briefly before by Åström:\(^6\) "short, broad, square tang with one rivet-hole; sloping shoulder with three rivet-holes; low midrib". The tip is missing; two rivets are still in place. Its date could not be determined with accuracy, but it is certainly not earlier than LHIIIA:1, since its context ranges in date from LHIIIA:1-IIIC:1. No real parallel is illustrated by Sandars nor have we found any from other sites.\(^7\)

C. Peschiera Type. A single example (Pl.163b) from Paralimni (PMX.118):\(^8\) Sloping shoulders, narrow flanged grip with a crescent-shaped flanged extension on the top. The two ivory plates of the pommel and tang, which

---

1 See above p.97
2 It includes three examples, all attributed to LHII. Cf. Prosymna, 330-3.
3 AJA(1963)149. It is said to be "from near Patras".
4 Op.cit. This may be called "carver" since its blade is much narrowed by whetting. Cf. Sandars, op.cit., p.135, n.47.
7 Some distant relatives in shape can be recognized at Prosymna (Prosymna, figs.196, 607) and at Knossos, Zapher Papoura (Furumark, CMP., 93-94, b:1=IIIA:2).
8 PAE(1965)134-5, pl.177b; Ergon(1965)104, fig.130a.
are preserved, were secured by a large rivet placed at the base of the leaf-shaped blade. Well-marked broad flat midrib down the blade's length. The context is dated LHIIIA-B.¹

This type of dagger² which is of European origin is rare and was hitherto known mainly from Crete (Dictaean cave), Melos, and Naxos. It has been suggested that it was introduced direct to Crete "at some time within LMIII, not later than LMIIIA"³ by European warriors coming from Italy and this seems to be the case also with Achaea. Whether such daggers also went directly from Italy to the two Aegean islands (Melos, Naxos) is rather questionable.

Lastly an example (α/α 213) found in a tomb at Vrisarion is briefly mentioned by Dr Yialouris,⁴ but no description or illustration is at present available to help identification of its type.

Commentary

Desborough⁵ and Catling⁶ have recently discussed the origin, evolution, distribution and chronology of daggers found in the Mycenaean world, so a re-examination of them is not called for here by us. Enough to say that the presence of the fine decorated example, PMX.52, indicates close connexions between Achaea and the Argolid, while the Peschiera dagger (PMX.118) tends to confirm the evidence of other Achaean finds⁷ chiefly on the question of contacts with the North.

V. Miscellaneous Objects

In the Museum at Patras there are a single blade of flint (PMX.25), twenty-four blades of obsidian (PMX.42) and two horns of deer (PMX.113, 114) found at Leontion (A. Ioannis), Vrisarion and Paralimni. Objects made of

---

¹ Cf. PAE(1965)135.
³ Desborough, LMTS., 69 and note 7 for further refs.
⁴ Arch. Reports 1959-60, 11.
⁷ See above p.491, note 8.
flint and obsidian (e.g. arrow-heads, knives etc.) have been found elsewhere in Greece.\(^1\) Flint used for making arrow-heads and other implements is, however, not frequently found.\(^2\)

The obsidian may have been imported into Achaea from Melos or, most likely, from some Adriatic region.\(^3\)

Lastly, horns of different animals are well known from other Late Helladic sites\(^4\) and may have served as amulets\(^5\) or tools.\(^6\)

VI. Unidentified Objects

Seven objects (PMX.115, 137, 151, a/a 225, BE.406) made of different materials (stone, bone and bronze) and described vaguely in the Inventory of the Patras museum as "pointed tool", "tool or weapon?", "conical spear of a tool", "axes" cannot be at present identified.

1 Cf. e.g. Mycenae, Ch.T., 222; Prosymna, Prosymna, 458-9; Messenia, Dorion-Malthi, 356; Palace of Nestor I, 438; Euboea, BSA(1966)107.
2 Cf. examples listed by Wace, Ch.T., 222 and notes 6-10.
3 Since it is now recognized that Melos is not the sole source of obsidian in the Mycenaean world (cf. Jacobsen, BSA, 1966, 107 and note 179) and because Achaea was more closely connected with the West than with the Aegean islands.
4 Cf. e.g. Perati, Perati B, 381 (horn of goat); Messenia, Dorion-Malthi, 364 (deer's and goat's horns).
5 Iakovides, Perati B, 381.
6 Valmin, Dorion-Malthi, 364.
PART THREE

CHAPTER VII

SUMMARY AND GENERAL CONCLUSIONS

The foregoing analysis of the Achaean material leads one to attempt to define the pattern of settlement in the district, and to assess Achaea's role in the Mycenaean age.

The conclusions suggested are based on archaeological data, but the reader must be warned of the many serious gaps in our knowledge, though the picture provided by the new evidence is no doubt clearer than ever before. So my conclusions are at best tentative, and must remain so until they can be verified by further archaeological evidence.

The chapter will be divided into three main sections: In the first introductory section the general situation during the pre-Mycenaean period will be sketched. This is a necessary background to the Mycenaean period, since unbroken continuity of occupation from the end of Middle Helladic into Late Helladic is a reasonable supposition in Achaea, as in most other areas.¹

In the second, the situation existing in Achaea during the Mycenaean period will be explained with an attempt to define (a) the pattern of settlement; (b) the local features and (c) the relations of Achaea with the rest of the Mycenaean world.

The third, concluding, section will be devoted to (a) a reconstruction of the course of events and a very brief discussion of the problem of survival and continuity into post-Mycenaean times, and (b) the provisional chronology.

¹ e.g. Euboea (BSA, 1966, 101-2); Laconia (BSA, 1961, 170); Messenia (AJA, 1969, 175).
Archaeological remains assignable to the Early and Middle Helladic periods are, as we have seen, considerably less frequent in Achaea than are those of the succeeding Late Helladic period. Indeed only seven (nos.1, 6, 38, 47, 53, 54, 33?) Early Helladic and nine (nos.1, 2, 32, 33, 34, 37, 53, 56, 68) Middle Helladic sites have provided some evidence of occupation during these two periods. This by no means indicates that Achaea was sporadically populated during the pre-Mycenaean period. On the contrary one might suggest on the basis of the material remains, which occur both in the coastal and the inland area [e.g. Paralimni (1), Kamarais (53-54) – Katarraktis (33-34, 37), Kastria (47)], that penetration had extended to almost all parts of the district. Occupation in at least two MH cases, Paralimni (1) and Kamarais-Xerikon (53), seems to continue on the site of EH settlements.

The limited nature of our evidence at the moment makes it difficult, however, to follow the whole course of events in Achaea during the pre-Mycenaean period. It would be interesting to know, for example, whether some of the Achaean sites were destroyed at the end of the Early Helladic period, as in the case of many other mainland sites,¹ or whether there was a more gradual and peaceful transition from EH to MH, as at Lerna² (and possibly also at Tiryns).³

A destruction by fire of the settlement at Paralimni (1) by the end of the EH period is at present suggested by the settlement and ceramic evidence.⁴ Tomb and architectural remains from at least three sites [Paralimni (1); Katarraktis-Drakotrypa (32) and Ayios Athanasios (34)] indicate an unbroken continuity of occupation from the end of the following

---

1 Cf. Mellaart, in AJA 62 (1958) 11, for a useful list enumerating the mainland sites destroyed by the MH invaders.
2 Hesperia, XXIV (1955) 49; XXV (1956) 173; Gray in Myres, Homer and his Critics (1958) 254-5.
3 Gray, op.cit. 245, and refs.
4 See above p.62, and FAE (1962) 132.
MH into the Mycenaean period. But we have insufficient evidence to explain why EH occupation is not continued into MH in four sites [Kato Achaea (6); Leontion (38); Kamarais-Paliomylos (54) and Kastria (47)] and why also MH habitation was interrupted in six other instances [Gerbesi (2); Mirali (32); Katarraktis-Pyrgaki (37); Aravonitsa (56); Kamarais-Xerikon (53) and Krathion (68)].

2 Achaea in the Mycenaean period [Maps 16-21]

a. Habitation

It is the Mycenaean period that is best represented in Achaea, as it is in most other parts of Greece. Nearly all the known sites in the area have produced LH material remains.

Without proper excavation we are, however, unlikely to be able to trace the period of greatest prosperity in a particular settlement or even to be able certainly to define its beginning and end. But it would appear that by LH I-II at least seven sites [Paralimni (1); Akarnes (19); Katarraktis (33-34)]; Chalandritsa-Agriapidies (25)?; Vrisarion (48); and Aigion (57)] were occupied by the Mycenaeans. Four of them (nos.19, 25, 48 and 57) may be regarded as new sites, while for the remaining three we have some evidence that they were continuously occupied either from EH [Paralimni (1)] or from the preceding MH period (nos.33-34) [Map 16].

By LH IIIA, when the real Mycenaean expansion begins in Achaea (as elsewhere), there are nineteen sites: Vrachneika (8); Pavlokastron (14); Tsaplaneika (13); Klaus (12); Gerokomeion (17); Patras (18); Ano Sychaina-Agriapidia (10); Skoura (52); Kamarais-Xerikon (53); Aigion (57); Vrisarion (48); Faralimi (1); Katarraktis-Dakotrypa (33); Mayeira (55); Aigion-Kallithea (58); Chadzi (61); Achladies (62); Aigeira (69-70). The great majority of them may be new in

---

1 The few exceptions (nos.31, 32, 37, 47, 56, 68) are, mostly, established by "negative evidence" alone, and it is to be expected that many of these sites will prove, after all, to have been occupied in LH as well.

2 The reader must be warned again here, that when we speak of "new sites" in each period we are aware of the risk of a probable misleading, since most of our sites represent cemeteries, whose associated settlements have not yet been located. But at least in each such case we have no proof that these "new sites" were used in earlier times.

3 e.g. Laconia, BSA (1961) 170; Messenia, AJA (1969) 175.
this period (nos.8, 10, 12, 13, 14, 17, 18, 52, 55, 58, 61, 62, 69, 70), and in only five instances the LH IIIA people seem to continue on sites of the preceding LH I-II (nos.57, 48) or even earlier (pre-Mycenaean) periods (nos.1, 33, 53). Occupation in two LH I-II sites (nos.19, 25) appears not to have been continued into LH IIIA. [Map 17]

In the LH IIIB period twenty-eight sites [Paralimni (1); Pournari (4); Vrachneika (8); Aroe-Samakia (9); Ano Sychaina-Agrapidia (10); Klauss (12); Tsaplaneika (13); Pavlokastron (14); Kallitheia (15); Krini (16); Gerokomeion (17); Patras (18); Chalandritsa (23); Katarraktis (33-34); Katarraktis-Bouga (35); Leontion Vrayianika (38); Leontion-A.Ioannis (40); Vrisarion (48)?; Kamaraes-Palomylos (54)?; Aigion (57-58); Chadzi (61); Achladies (62); Aigeira (69-70); Dherveni-Psila Alonia (71); Mitopolis (28)] have produced more or less clear evidence of occupation. It is interesting to note that there seem to have been only nine new sites (nos.4, 28, 16, 15, 9, 23, 35, 40, 71), while for sixteen others we have evidence that they continue on the site of LH IIIA (nos.8, 10, 12, 13, 14, 17, 18, 58, 61, 62, 69, 70), or that occupation was uninterrupted since LHI-II (nos.57, 48?) or even pre-Mycenaean times (nos.1, 33?). Lastly three other sites, two pre-Mycenaean (nos.38?; 54), and one (no.34) with evidence of discontinuous occupation (pre-Mycenaean - LH II-IIIB) were re-occupied in LH IIIB. Continuity from LH IIIA into LH IIIB is not suggested by our present evidence for two LH IIIA sites (nos.52, 55). [Map 18]

To the succeeding LH IIIC period may be assigned thirty-two sites [Paralimni (1); Kangadhi (3); Pournari (4); Aroe-Samakia (9); Ano Sychaina-Agrapidia (10); Klauss (12); Kallitheia (15); Krini (16); Gerokomeion (17); Patras (18); Chalandritsa (23); Mitopolis (28); Starochorion (29); Vasilikon (30); Katarraktis (33, 35); Leontion (38, 40); Mikros Pondias (42); Manesi (44); Bartholomio (46); Kartezi (50); Drosia (51); Aigion (57-58); Kouloura (59)?; Vovoda (60)?; Aigeira (69-70); Dherveni-Psila Alonia (71); Tsaplaneika (13); Pavlokastron (14)]. What is especially worthy of note, as in the LH IIIB, is the small number of
new sites (nos.3, 29, 30, 42, 44, 46?, 50, 51, 59?, 60?). For a great many LH III C sites continuous habitation either from the preceding LH II B (nos.4, 9, 15, 16, 23, 28, 35, 38, 40, 71) or from even earlier periods (nos.1, 13, 14, 10, 17, 33, 57, 58, 12, 69, 70, 18) is traceable. We do not know what must have been the cause of abandonment of three LH II B sites (nos.54, 8, 34) which do not survive into LH III C, and it is difficult to explain the temporary interruption of occupation in two other LH II B sites (nos.61, 62), for which we have some evidence of re-occupation during SM times. [Map 19]

There is considerably less evidence for the situation in SM times. Nevertheless the present evidence suggests that at least twelve sites [Paralimni (1); Kangadhi (3); Klaus (12); Aroe-Samakia (9); Kallithea (15)?; Manesi (44); Aigion (57-58); Drosia (51); Chalandritsa (23)?; Chadzi (61); Achladies (62)] were occupied during this period. It is important to note that none of them is a new site. They are continued on the site either of LH III C (nos.3, 44, 51) or even earlier ones (nos.1, 12, 57, 58, 9, 15, 23). [Map 20]

Finally, twenty-four more sites [Gerbesi (2); Fostaina (5); Kato Achaea (6); Tsoukaleika (7); Ano Sychaina-West (11); Platanovrisis (20-21); Chalandritsa (22, 24, 26); Katarraktis (36); Pharae (31)?; Mitopolis (27); Leontion (39, 41); Ayios Vlaavios (43); Manesi (45); Vrisarion (49); Vareliossa (63); Helike (66)?; Keryncia (65)?; Mamousia (64)?; Akrata (67)?; Pellene (72)?] mentioned vaguely in the original reports as certain or probable "LH" are indicated on the general map of Late Helladic sites [Map 21]. But because of the absence of any specific evidence no precise date could be given, and therefore they are omitted from all other LH distribution maps as well as from the map showing the life-span of LH sites. [Map 23] Two of them (nos.2, 6), where the evidence suggests earlier than LH occupation (in the former ranging from MH and in the latter from EH but with interruption during MH), need only a passing mention.
To summarize the above tentative conclusions, the following general trends may be observed from the distribution of the sites in the various periods: [Map 23; Diagram p.534-7]

(a) Of a total number of thirteen pre-Mycenaean sites, eight (nos.1, 2, 6, 33, 34, 38, 53, 54) provided us with more or less good evidence that they were taken over (early or late in LH) by the Mycenaeans, while the remaining five (nos.32, 37, 47, 56, 68) were never revived.

(b) Of the four new LH I-II sites (nos.19, 25, 48, 57), two (nos.25, 19) show no signs of an earlier (EH, MH) or later (LH IIIA-SM) habitation, while in the other two sites life continues into LH IIIB (no.48) or even SM times (no.57).

(c) Of the fourteen new LH IIIA sites, it seems that in only two instances (nos.52, 55) occupation was confined solely to this period, while all the others continue into the succeeding LH IIIB and IIIC periods, sometimes (nos.12, 58, 61, 62) surviving into SM times.

(d) It is remarkable that none of the nine new LH IIIB sites is abandoned. On the contrary, the present evidence proves or suggests that six of them continued to be occupied in LH IIIC (nos.4, 16, 28, 35, 40, 71), while in the remaining three (nos.9, 15, 23) life seems to have been extended to the SM period.

(e) A quite different picture emerges during LH IIIC. Of the ten new sites only three seem to have survived into the SM (nos.3, 44, 51), while in all the others (nos.30, 29, 42, 46, 50, 59, 60) a break in occupation after LH IIIC is more or less clearly observable.

It is not possible, perhaps, clearly to understand the situation in Achaea during the Late Bronze Age except by dealing with the district on the basis of the three areas into which it has been divided above,¹ and by taking all the available evidence together.

To begin with, the Dyme area has been our most disappointing one. Apart from the important material from Kangadhi (3), Pournari (4) and Paralimni (1), some surface finds from

¹ See chapter on Prehistoric sites, p.5.
Gerbesi (2) and Kato Achaea (6), and some traces of LH chamber tombs from Fostaina (5), nothing new has so far been recorded from the whole of the Dyme plain, an area which we expected to be full of sites. Nevertheless these few sites have provided us with good evidence that this part of Achaea was inhabited by the Mycenaeans. At least at Paralimni occupation was uninterrupted throughout the entire Bronze Age and continued well into historical times, while in the other sites it was almost confined to the Mycenaean period.

Passing further north into the Central area, the Patras and Pharai regions are the most densely populated, while the Kalavryta and Tritaea regions have so far produced poor evidence of Mycenaean occupation. The majority of sites recorded from these last two regions belong to the closing phase of LH III (IIIC), the only exceptions being Kastria (47, EH), Vrisarion (48, LH I, IIIB) and Skoura (52, IIIA).

The density of Mycenaean population in the Patras and Pharai regions is not surprising, since the former lies closest to the sea and embraces some of the most fertile land in the district. Furthermore it is reasonable to suppose that the harbour of Patras was used as an important trade route of the district, especially with the Ionian islands and the West. The heaviest concentration is around Patras, which is possibly the main LH site in the region. Our fullest and best material comes, however, from Klauss (12) in the neighbourhood, and ranges from LH IIIA into SM. Most of the other sites in the region have produced material ranging from LH IIIA into IIIC, the only exceptions being six sites with LH I (no.19) or LH IIIA-B (no.8), or LH IIIB-C (no.16), or LH IIIB-SM (nos.9, 15), or LH IIIA-SM (no.12) finds.

As to the density of population in the Pharai region, it should be explained partly by the fertility of the plain of Pharai and partly by the position of most sites near or on the inner route from Patras to Kalavryta. This route may well have been the first stage of the trade between the Argolid and Achaea.

At present all the indications are that there were at least three outstanding sites in the region, i.e. Chalandritsa (23); Katarraktis (33), and Leontion (38). It appears likely
that the most important of these three sites is Katarraktis, which has produced important material coming not only from cemeteries but from excavated settlements as well, and ranging in date from EH into LH IIIC. Chalandritsa and Leontion seem to be flourishing centres during LH IIIB and IIIC, though in the latter case scanty EH remains may suggest a much longer life. It is surprising, however, to find the tholos tombs examined by Zapheiropoulos unassociated with any of these comparably large centres. One could reasonably expect to find evidence of a good settlement at Ayios Yeoryios (36) or Ayios Athanasios (34) in the neighbourhood but, to date, the evidence is insufficient to support such an assumption, nor can we ascribe these tombs to any of the various other sites in the region.

In the North-eastern area we have so far found convincing evidence of widespread and long-lasting Mycenaean occupation ranging from LH IIIB into sub-Mycenaean times. There seem to have been four outstanding sites, i.e. Aigion (57-58), Chadzi (61), Achladies (62) and Aigeira (69-70), each apparently exploiting the fertile plains around or to the north of them.

It must be supposed that Aigion was the most flourishing principal and controlling site of this area, with signs of the longest Mycenaean occupation (LH IIIB-SM). It is very unfortunate that no major Mycenaean settlement has so far been unearthed in this sector of Achaea, and we are exclusively dependent on tombs and surface finds. The later sites of Helike (66) and Mamousia (64) have hitherto produced no evidence of Mycenaean habitation.

It is now fairly clear that all the major arable areas of the district were occupied by the Mycenaeans. In several instances sites are reported in fairly close proximity to one another. These should probably be treated as a single economic and social unit, usually comprising one or two larger, and presumably dominating, settlements and other subordinate hamlets. Belonging to this category are Paralimni (1) (Dyme area), Patras (18) or Klauss (12) (Patras region), Chalandritsa (23) or Katarraktis (33) (Pharai region), Vrisarion (48) (Kalavryta region), Drosia (51) (Tritaea region), Aigion (57-58) and Aigeira (69-70) (North-eastern area). With the
exception of Paralimni (Teichos Dymaion)\(^1\) there is so far no evidence that any of the above major centres were fortified. It appears likely, however, if we judge from the remains of post-Mycenaean acropolises at Patras itself, Chadzi (near Aigion) and Aigeira, that these sites were also fortified and that the present lack of Mycenaean acropolis-remains is only a chance result.

The nature of the inland settlements is that of peaceful agricultural communities. On the other hand fishing and sea trade are likely to have played an important role in the economy of the district, to judge from the existence of many sites along the western and north-eastern coast. There appear to be several small harbours, but at least Paralimni (Karavostasi), Patras and Aigion were undoubtedly used as main posts of sea-trade.

The development outlined above for the habitation of Achaea during the Late Bronze Age accords in a general way with that of other districts, where more evidence from excavations is available.

What is significant in the case of this region is that most of the archaeological evidence clearly shows a withdrawal of the people into the hills and mountains, and a marked increase\(^2\) in the size of the population during the latter half of LH III, if we can judge from the distribution and the number of new sites (nineteen in all) attributable to the LH IIIB and IIIC periods.

What forced the Achaeans to withdraw into the inner part of the district towards the end of the Late Bronze Age?

One could suggest that this move was dictated by a natural reason, like danger of earthquakes or floods or a desire of the people to be more sheltered from the coast, while continuing to cultivate the same land.

Without excluding this reasonable possibility, I am inclined to believe that the cause must have been some disturbance within the district; but was this internal, or the result of intrusion from some area outside Achaea?

---

1 And probably Mitopolis-Ayia Varvara (27).
2 Mrs E. Vermeule is, therefore, in error when she speaks of a marked decrease of the population at that time. Cf. *AJA* (1960) 20.
All the evidence so far seems to support the acceptance of the second alternative as a strong likelihood, though one cannot say that there is certainty.

A further question arises. Assuming there to have been some newcomers, whatever their intentions, where did they come from? It has been frequently stated, and not without good reason, that they were refugees from the Argolid after the great upheaval there at the end of LH IIIB and the transition to IIIC. But if so, there seems no reason why some further groups of newcomers should not have arrived in Achaea from Laconia via Arcadia, from Messenia via Elis, or from Elis itself.

For Laconia, though the present archaeological evidence shows little connections with Achaea, an influx of refugees from there during LH IIIC is suggested by the literary evidence. Messenian and Elean features on the other hand are, as I have suggested above and will discuss again below, undeniable, and sufficient to suggest the possibility that some people made their way from these two previously flourishing areas to Achaea, escaping the disaster which resulted in the gradual depopulation and desertion of their lands at the closing phases of the Late Bronze Age.

Achaea was obviously chosen as affording security, and it is clear that in this the refugees from the above-mentioned areas were not deceived, as our evidence suggests that Mycenaean life persisted here longer than in most parts of Greece.

But it is on the whole wiser to conclude that there is as yet no clear-cut evidence to show the intentions and the exact origin of the newcomers, who appear, in my opinion, to have been responsible for the disturbance in Achaea at some point in the course of LH IIIB and IIIC periods.

One things is, however, certain, that a strong element

2 See above, p.87.
3 Pausanias (vii.1.5) records the expulsion of the Achaeans from Lacedaemon and Argos by the Dorians, while Strabo (viii.5.5) says that the Achaeans migrated at this time from Laconia to Achaea.
4 Vermeule's opposite opinion (AJA, 1960, 18 and note 25) must be, therefore, modified.
5 Cf. LMTS., 225, 233.
of the original Achaean population survived near the major coastal centres - not all took to the mountains, whatever the nature of the disturbance. Moreover the newcomers, irrespective of whether they were warlike intruders or peaceful refugees, exerted no great influence on the native population.

As to the second point, i.e. the increase of population, it may be explained as either (a) the result of a sudden and overwhelming immigration of outsiders all at once, or (b) the result of a gradual and peaceful infiltration of new peoples over a longer period of time.

The first explanation accords with the theory of a sudden influx of refugees from the Argolid (or elsewhere) following the catastrophic invasion of the Mainland at the end of LH IIIB. This is an attractive explanation supported by the position of Achaea away from the overland route southwards across the Isthmus, and the mountainous nature of its greater part which made it ideal for defence. It fails, however, to take one major factor into account, which, to my mind, without excluding altogether the possibility of the sudden influx of refugees, speaks in favour of the second explanation.

For, as was stated above, it appears that only nine new sites were settled during LH IIIB, while in all other LH IIIB sites occupation is traceable as early as LH IIIA or even earlier. The same applies also to the LH IIIC period, during which only ten new sites were settled.

Consequently it is perhaps safe to claim that sudden and overwhelming influx of newcomers all at once is not proved or suggested by the present evidence, while it seems far more likely that Achaea was gradually infiltrated by the newcomers, who settled down among the existing original inhabitants. They seem to have been content to maintain the old sites for the most part, especially when they were situated on or near the coast.

Some negative evidence deserves cautious mention here, that of the almost absolute absence of new LH IIIB and IIIC sites in the North-eastern area on the one hand, and on the

---

1 It was given first by Mrs E. Vermeule (op.cit. p.19), and has been to some extent accepted by Desborough, LMTS, 100, 225.

2 The only exception being so far Dherveni-Psila Alonia (71) (new LH IIIB site).
other hand the abandonment of all but one (no.44) new LH IIIC site in the inland regions of Pharai and Kalavryta. It may be claimed in both cases that this is a matter of chance, but if so, it is remarkable.

In conclusion, it must be admitted that the fragmentary and limited nature of our evidence at the moment makes it difficult to know what exactly happened in Achaea during the last phases of the Late Bronze Age. Nevertheless, it cannot be doubted, from our new evidence, if from nothing else, that the Achaean way of life was not destroyed, and it survived in the plains as well as in the mountainous area throughout the entire Mycenaean period.

b. Local Features

Returning now to the local features of the district, they may be summarized as follows:

(1) The settlement evidence is at present too meagre and insufficient for one to be able to attribute any features with certainty to the local stonemasons and architects.1

(2) The tombs, especially the chamber tombs, though in general resembling those found elsewhere on the Mainland, belong to a clearly local type, easily distinguishable both from that found in the Argolid and from that of Kephallenia.2 The local characteristics (small - but not low and shallow - and simple chamber; stepped entrance; relatively short dromos) have already been dealt with elsewhere (pp.85f.), and it is only necessary to state here that burial in other kinds of tombs (tholos, tumuli etc.) is extremely rare. It would be wise, however, to suspend judgment in this case until the discovery of further tombs.

(3) The study of the pottery clearly proved the existence of many local features in the technique as well as in shape and decoration of the vases. Since they have been analysed

---

1 The only fortified settlement yet known, at Paralimni-Kastro tis Kalogrias - the other, at Mitopolis-Ayiya Varvara, is still uninvestigated - appears to follow the principles of construction known from other fortified sites in the Argolid. This accords with the legendary tradition (Polybios iv,59.4) which ascribes the building of the fortress to Herakles who came from Tiryns.

2 The striking similarity of a tomb (Dherveni) to the Kephallenian ones has already been noted above, p.83 (Chapter on tombs). Cf. also LMTS, 35.
in detail in the relevant chapter (pp. 379ff.), it will be unnecessary to repeat them here. I wish, however, to stress at this point:

(a) The homogeneity of the Achaean pottery, which shows that all the ceramic finds belong to a local artistic and technical tradition with no sense of dependency on any central area.

(b) The high standard of technique and draughtsmanship of the vases, with no signs of inferiority when compared with those found in other, better known and more prosperous, LH districts.

(c) The absence of any non-Mycenaean element in contrast with what is observed in Kephallenia and Epirus.

(d) The marked disparity between the ceramic material attributable to LH IIIB and IIIC and that of the earlier Mycenaean periods. This, although it is clearly observable, is not, however, to such an extent as most of the previous researchers have concluded.

(e) The distinct difference between the pottery from the South-western Achaea and that from the region of Aigion, both in style and date. This may well indicate a different course of events in these two sectors of Achaea during the Late Bronze Age.

(4) Lastly, the evidence of artefacts is fragmentary and insufficient to show local peculiarities. Enough to say that precious metals are noticeably absent in Achaea.

**c. External Relations**

For one to be able to judge the course of events and understand the role of Achaea during the Late Bronze Age, its relations with the rest of the Mycenaean world must be determined.

In outlining these relations it is obviously essential to be able to distinguish between Achaean elements which are to be found in other areas with which Achaea maintained contacts, and all the foreign ones which found their way to Achaea. Furthermore, it is necessary for a fuller understanding of the nature of these relations that the similarities and common characteristics should, where this is possible, be also presented. This is important.
since common elements usually indicate close and constant cultural interconnections, while the exchange of goods undoubtedly reflects no more than mere commercial relations.¹

I would suggest that the combined evidence of tombs, pottery and artefacts leads to the following conclusions:

(1) Links between Achaea and Argolid-Corinthia existed during the entire Mycenaean period. In particular contacts during LH I-II can be traced in the occurrence in Achaea of some objects (one sealstone, PM.143; one bronze cup, PM.60 and two bronze daggers, PM.52, 54) imported from the Argolid, as well as in the presence in both areas of some wheel-shaped faience beads.²

These links seem to have been strengthened during the LH III period, especially as regards LH IIIA some Achaean vase-shapes (three globular flasks, PM.472, AM.23, BE.640; small piriform jars of FS.44-45 type; one hand-made miniature jug, BE.680) and bronze objects (two spearheads, Berlin 30751, 30752; one sword, Berlin 50744) show close similarities with Argive examples from Deiras, Mycenae, Prosymna and Dendra,³ but so far no Achaean exports to, or imports from the Argolid have been recognized.

In the succeeding LH IIIB period one stirrup jar (BE.675), one conical krater (PM.258) and possibly the alabaster pyxis (PM.1052) were imported into Achaea from the Argolid. Many more vase-shapes and decorative motifs (stirrup jars decorated with flower and multiple stem; oinochoai of FS.120-3 type; one collar-necked amphoriskos, PM.1052; three composite vessels of FS.327-8 type; two pithoi, PM.1049, a/a 814; some rounded alabastra of FS.85 type; one square-sided alabastron decorated with deep wavy line, BE.703; deep bowls of FS.284 type; one shallow angular bowl, BE.643; three piriform jars, PM.330, 443, BE.704, decorated with FM.57:2 and 35:18; one clay chair, BE.386, and one based askos, AM.26) have much in common with contemporary examples from Argos (Deiras), Asine, Korakou, Mycenae, Tiryns,

¹ Cf. Iakovidès, Perati B, 415, 469.
² See above, pp.456, 461, 492, 448.
³ See above, pp.288, 232, 275, 484, 489.
Prosymna, Berbati and Dendra.\(^1\)

During the LH IIIC and SM periods the Achaeans exported one stirrup jar and one two-handled jar to Argos (Deiras)\(^2\) and possibly one four-handled jar to Korakou,\(^3\) one two-handled jar to Prosymna\(^4\) and three more to Asine.\(^5\) At the same time they imported from the Argolid two stirrup jars (PM.459, a/a 815) and imitated shapes and decorative motifs of the Argive Close Style and Granary Class.\(^6\) Furthermore one Achaean oinochoe (PM.254), one krater (PM.905), two bird-shaped terracotta figurines (PM.765, 766) and some boar's tusks of a helmet (a/a 181) are more or less closely related to contemporary specimens from Argos, Asine, Korakou, Mycenae and Prosymna.\(^7\)

(2) To what extent the presence of stepped dromos and entrance in some Achaean chamber tombs entails a link with Laconia (Epidavros-Limera) during LH III is not yet known, nor is the pottery (a few conical kraters of FS.300-301 similar to some from Monemvasia) of much use.\(^8\)

(3) The Achaean ceramic material displays close affinities with that of Messenia, especially during the latter half of the LH III period. In fact some vase-shapes and decorative motifs (two-handled storage jars; legged vases; one stirrup jar decorated with vertical dashes, PM.798 and some others with flowers; three piriform jars, PM.191, 323, 623; one shallow angular bowl, a/a 736 and two kylikes, PM.738, 356) find close parallels in the material from the Palace of Nestor and Tragana.\(^9\) Whether or not one two-handled storage jar with warts on the shoulder found at Tragana\(^10\) is an import from Achaea is questionable.

---

2 Deiras, pl.LX no.8-9 (DV.89); pl.XCI no.1 (DV.158 = Late SH).
3 Korakou, 68, fig.98. 4 Prosymna, fig.16, no.1213.
5 Asine, figs.233:3; 260:8; 268:6.
6 See above, pp.221, 385-6. 7 See above, pp.264,325,377, 478.
8 See above, pp.87, 329.
9 See above, pp.152, 260, 174, 175, 223, 231, 344, 346, 347.
10 AE (1914) 108.
(4) Communication between Achaea and Elis is traceable as early as LH IIIA and continues to be maintained during LH IIIB and C. Especially with regard to LH IIIA one conical rhyton (PM.1029) may be regarded as an import from Elis, while the Achaeans possibly exported one small handleless jar to Elis.\(^1\) As to LH IIIB certain Achaean vase-shapes (one large piriform jar, PM.623; three advanced piriform jars, PM.196, 726, Baur no.39; some square-sided alabastra of FS.96; one spouted shallow cup, PM.42) and decorative motifs (flower and multiple stem on the shoulder of stirrup jars; net pattern on piriform jars and rounded alabastra) as well as some glass plaques and beads decorated with relief designs (PMX.9) are very similar to Elean examples from Strefi, Trypes, Makryisia and Diasela.\(^2\) Exchange of goods, although probable, has not yet been recognized. During LH IIIC-SM one two-handled storage jar was probably exported from Achaea to Elis, while one legged square-sided alabastron from Trypes and one composite vessel from Diasela find close parallels in Achaea.\(^3\)

Finally another common element between the two areas, for which, however, no precise date within LH can be given, may be seen in the construction of some chamber tombs (= grave pits covered with slabs in the chamber).\(^4\)

(5) It is somewhat surprising, since Arcadia is one of the closest districts to Achaea, that there are no positive signs of communications and exchange between the two areas. Their absence may nevertheless simply be accidental, since only a part of the former district has been recently investigated.\(^5\)

(6) Contacts with Aetolia seem to have been restricted in the LH II period, as is suggested by the presence of five squat jars (FS.87) recently found at Aigion, which closely resemble some others recorded from A.Elias Ithorias.\(^6\)

---

1. See above, pp.369, 236.
2. See above, pp.231, 224, 261, 354, 220, 249, 449.
3. See above, pp.152, 260, 316.
4. See above, p.87.
6. See above, pp.274, 391. Cf. also Hope Simpson GAMS, 92, for some other similarities observed between the LH IIIC material from Thermon and that from Achaea.
Long-lasting links between Achaea and Kephallenia are obvious and undeniable, starting from LH IIIA and strengthened during LH IIIB and IIIC.

As regards LH IIIA, one may note the close similarity between three Achaean squat jars (FS.87, high variety) and some Kephallenian ones from Oikopeda, as well as that of some relief glass beads decorated with waz-lily.¹

During LH IIIB some Achaean vase-shapes and decorative motifs (one small piriform jar decorated with deep wavy line (PM.191); rounded alabastra of FS.85 decorated with diaper net; monochrome small globular jugs of FS.114 and one composite vessel (PM.877) resemble some examples from Prokopata-Razata, Lakkithra, Metaxata, Livatho and Kokkolata.² In the succeeding LH IIIC period one monochrome four-handled storage jar,³ three stirrup jars (two decorated with fringed concentric semicircles and the other with triangles and equally-spaced narrow bands down to the base)⁴, and possibly one two-handled storage jar,⁵ were exported from Achaea to Kephallenia. At the same time the Achaeans imported from the island one stirrup jar (PM.223) decorated with running spiral, two kraters (a/a 802, and PAK 1964, pl.64a), six kylikes of FS.275-6 type (PM.790, 791, 881, 902, 903, 928) and possibly one amphoriskos (PM.539).⁶

Common elements between the two areas, assignable to LH IIIC, are to be recognized in (a) the occurrence of certain vase-shapes (stirrup jars with sloping shoulders; amphoriskoi; legged square-sided alabastra of FS.99; small globular jugs of FS.115; deep bowls with two vertical handles; spouted conical kraters, our Type G); (b) the special preference of some decorative motifs (triangles and concentric semicircles) and (c) the quality,

¹ See above, pp.274, 450.
² See above, pp.227, 243, 272, 316.
³ AE (1932) pl.10 no.150 (Lakkithra, Tomb Δ).
⁴ Op. cit., pls.6 no.41; 7 no.41a (Lakkithra, Tomb Δ); A.Delt. (1919) 108, fig.24:3 (Diakata).
⁵ AE (1932) pl.9 no.144 (Lakkithra, Tomb Δ).
⁶ See above, pp.183, 324, 325, 349, 351, 281.
type and decorative motifs of glass beads (= cheap material; relief stylized representations of vegetable and marine life). 1

Further similarities between the two areas, which, however, cannot be assigned to any particular period of LH III with certainty, are to be seen in the appearance of some common features in (a) the construction of chamber tombs (= stepped entrance, size and shape of it; pits dug out in the floor of the chamber) and less so in the burial customs (= mass burial occurs only exceptionally in Achaea at Dherveni, Tomb I); (b) the pottery (= almost total absence of stirrup jars with an air-hole; total absence of pictorial motifs) and (c) the small finds (= amber beads; terracotta spools). 2

Similar links with the other Ionian islands are very likely; although there is as yet little (Ithaca: some stirrup jars of LH IIIC date decorated with successive and equally spaced narrow bands) or no evidence for it. 3

Contacts between Achaea and Attica appear to be limited to the latter half of LH III. They are, however, not readily discernible from the occasional similarities of the ceramic material of the two areas (LH IIIB: (a) SHAPES: some vases with rope-twisted handles; piri-form-shaped stirrup jars; some piriform jars of FS.45; one small globular jug, PM.350 and possibly one shallow cup, PM.266; (b) PATTERNS: flower on a stirrup jar, PM.675 and argonaut on the alabaster pyxis, PM.1052.

LH IIIC: (a) SHAPES: some four-handled storage jars; some two-handled storage jars with warts on the shoulder; cylindrical stirrup jars; legged square-sided alabastra; one angular deep cup PM.788; relative frequency of ring-vases; duck askoi (= SM); one high-based amorphiskos, PM.265 (= SM); (b) PATTERNS: wavy line on a stirrup jar, PM.58; dotted semicircles on another stirrup jar, PÆ, 1965, pl.176a; quirk on the

---

1 See above, pp.215, 285, 260, 272, 340, 331, 389, 446, 449.
2 See above, pp.86, 83, 390, 451, 475.
3 BSA (1958-39) 69, pl.4 (Polis).
body zone of a stirrup jar, BE.480) and those of some small finds (= one gold ring PMX.15; some clay beads and one spool a/a 169). ¹

(9) With Euboea links are also difficult to be proved from the occurrence of a few Achaean vase-shapes and decorative motifs ranging in date from LH IIIA to LH IIIC-SM

(a) SHAPES: mainly rounded and square-sided alabastra of FS.84-85 and 93-96; one baseless askos, BE.383; one feeding bottle, a/a 728; deep bowls of FS.284-5; kylikes of FS.275-6; one carinated deep cup, FM.788; duck-askoi; (b) PATTERNS: diaper net; wheel pattern; curving spiral; sea anemone; multiple stem) which show close similarities with Euboean examples from Khalkis, Limni, and Lefkandi. ² One handleless rounded alabastron of LH IIIB-C date³ was possibly exported to Euboea from Achaea, where this variety occurs more commonly.

(10) As regards Boeotia there are few signs of contacts with Achaea during LH IIIA (rounded alabastra of FS.84 decorated with rock pattern; one hand-made miniature jug, BE.680 decorated with deep wavy line), and LH IIIB (one clay chair, BE.386) during LH IIIC the Achaeans exported to Thebes two four-handled storage jars⁴ and possibly one legged square-sided alabastron.⁵

(11) The situation is not different with Phocis and Thessaly, where communications with Achaea appear to be restricted to LH IIIC. This is suggested by the presence of some stirrup jars in the LH IIIC Temenos tomb at Delphi (Phocis)⁶ very similar to contemporary Achaean ones, one four-handled storage jar exported to Phocis from Achaea,⁷ and one two-handled storage jar with warts on

¹ See above, pp.134, 156, 223, 272, 357, 175, 373, 144, 152, 216, 365, 305, 304, 278, 185, 189, 210, 444, 454, 475.
³ BSA (1952) 85, no.5536.
⁴ See above, pp.249, 275, 378.
⁵ AE (1910) 231-2, figs.22-23.
⁶ A.Delt.(1917) fig.109f (K.T.10).
⁷ PD. v. 9 ff.
⁸ Lerat, Locriens, pl.52.
the shoulder exported from Achaea to Pteleon (S. Thessaly). Whether links between Achaea and Thessaly existed earlier than LH IIIC, as the covering of dromos by slabs of two tholos tombs (Katarraktis, Tomb B; Karditsa) of LH II date suggests is not certain.\(^2\)

(12) Contacts between Achaea and Epirus during LH III(A?) are suggested by the evidence of artefacts only, namely by the presence of one trunnion axe (PMX.145) and two swords (PMX.145) and two swords (PMX.53, Berlin 30743), which find good parallels at Dodona and Perama respectively.\(^3\)

(13) Links with the Cyclades seem, on present evidence, unlikely, although one bird-askos from Naxos (Kamini)\(^4\) which is somewhat similar to the Achae an duck-askoi, perhaps indicates some sort of contacts during LH IIIC.

(14) For the Dodecanese we have now for the first time more or less clear evidence that communication was certainly maintained with Achaea during the entire LH III period. In particular, during LH IIIA the Rhodians exported to Achaea one (or more?) large piriform jar(s) (BE.673) with relief decoration, while one Achae an feeding bottle (a/a 728) finds close parallels in Rhodes (Ialysos) and Kos (Langada).\(^5\) In LH IIIB connections between the two areas are traceable in the presence of some common vase-shapes (piriform stirrup jars; alabastron-shaped compos. vessels of FS.327-8; spouted conical kraters, our type C; shallow spouted cup of FS.253) and decorative motifs (papyrus and flower on stirrup jars; curved-stemmed spiral on piriform jars; vertical circumcurrent whorl shells on kraters).\(^6\) During LH IIIC it seems likely that the Achaeans exported one two-handled storage

---

1. PAE (1953) 122 f. See also above, p.349 for some angular kylikes (FS.275-6) from Exalophos (Thessaly) similar to contemporary Achaean ones.
2. See above, p.95.
3. See above, pp.471, 490.
4. PAE (1960) 333, fig.275a.
5. See above, pp.231, 294.
6. See above, pp.315, 331, 358, 175, 227, 320.
jar to Kalymnos (BMA.1023) and possibly imported one
based square-sided alabastron of FS.97 from Kos (BE.428).
Apart from this some close similarities between the
Achaean and the LH IIIC material from Rhodes and Kos
are readily discernible (stirrup jars with sloping
shoulders; cylindrical stirrup jars; square-sided
alabastra with two handles banded all over; kraters
of FS.287; glass relief plaques decorated with double
rosette).  

(15) The evidence of artefacts and less so that of tombs and
pottery clearly shows contacts with Crete ranging from
LH I-II to LH IIIC-SM. Especially with regard to
LH I-II they are reflected in the occurrence in Achaea
of three sealstones (PMX.96, 140, 141) decorated with
Cretan representations (lions, daimones) and one double
axe (a/a 156), which can almost certainly be regarded
as imports from Crete. One hesitates whether to say
that the covering of dromos of some tombs with slabs
observed in both areas (Katarraktis, Tholos Tomb B;
Crete, Damania chamber tomb) constitutes a link between
them.  

On present evidence no connections are visible during
LH IIIA, while the presence of knives of Sandar's Class
6a hardly suggests a link towards the end of LH IIIB.  

During LH IIIC-SM the Achaeans exported one four-
handed storage jar to Phaistos and two two-handled
storage jars to Knossos. The special preference of
the Achaean potters for fringed designs may well indicate
an influence from the Cretan Fringe Style. Finally it
is difficult to decide whether any connection between
the two areas is suggested by the occurrence of cylindrical
stirrup jars and by the presence of two tombs, one from
Crete (A.Elias) and one from Kangadhi, which have their

1 See above, pp.215, 216, 254, 323, 449.
2 See above, pp.456, 457, 458, 471, 95.
3 See above, p.465.
4 Mon.Ant. XIV (1904) 644, fig.110.
5 BSA (1958-9) 247, pls.56c,e, 57a (Upper Gypsades); (1968)
211, pl.53a,b (A.Ioannis = SM).
chamber divided into compartments by means of stone walls.  

(16) Achaea also had connections with the island of Cyprus in LH III, as the evidence of pottery and artefacts makes clear. They are few during LH IIIA and may be traced in one or two common vase-shapes (small piriform jars of FS.45; stemmed kraters of FS.8-9) and decorative motifs (pictorial patterns; curved stemmed spiral). In LH IIIB links between the two areas may be seen in the use of fish as a decorative motif in one Achaean shallow spouted cup (PM.266) and one Cypriot dish (BMC. 671). There are more instances in LH IIIC, where exchange of goods or common elements between Achaea and Cyprus are to be observed. Some of the Achaean duck-askoi may have been imported from Cyprus, where the shape had a long tradition. Other close similarities are to be found in the occurrence of common vase-shapes (cylindrical and legged stirrup jars) and decorative motifs (connected type of concentric semicircles and triangles in stirrup jars and oinochoai; semicircles and triangles with central solid filling in stirrup jars). Finally one Achaean bronze flat axe (a/a 162); a pair of bronze greaves (BMX.317a-b); one stone-hammer (BMX.196); and one shield-boss (a/a 182) resemble closely contemporary Cypriot examples from Enkomi, Nikosia, and Kaloriziki.

(17) Further links with other areas outside the Mycenaean world to the East (Near East) and West (Italy) and North (Balkans, Central Europe and Baltic) during the latter half of LH III can be traced mainly by the evidence of artefacts and less so by that of pottery. In particular the occurrence of pictorial designs (fish, birds) on a few Achaean vases of LH IIIB and C date may betray a Near-Eastern influence on the Achaean potters. During this time the Achaeans imported from Syria - possibly through Cyprus - one trunnion axe.

1 See above, p.81.
2 See above, pp.232, 323.
3 See above, pp.304, 216, 217, 181, 269, 189, 392, 468, 478, 479, 483.
4 See above, pp.140, 143, 305, 322, 358.
5 Desborough, LMTS., 181.
The evidence of pottery is of very little help in tracing connections between Achaea and Italy (four-handled storage jars?; pyxides?; carinated solid-painted deep cups?). Nevertheless contacts between the two areas are clearly demonstrated by the presence in Achaea of one flat bronze axe (a/a 163) and one peschiera dagger (PMX.118), which must certainly be regarded as imports from Italy. Whether some blades of obsidian (PMX.42) were imported into Achaea from the Adriatic or Melos is not certain.

Northern influence on the Achaean pottery may be seen in the presence of some two-handled storage jars with warts on the shoulder, although we have good reason to believe that this ceramic feature (warts) is an Achaean innovation and peculiarity imitated by other local styles. It cannot be doubted, however, that the presence of some articles of trade (three bronze fibulae a/a 2, 3, BE.413; one bronze pin, a/a 64; fifteen amber beads, PMX.148, a/a 105, 106) and weapon types (five lanceolate spear-heads, PMX.57, 320, 326a-b, 346; three swords of type II, a/a 206, PMX.318, 319) clearly reflect contacts with the Balkans, Central Europe and the Baltic.

This is not surprising, since Achaea stood on the trading route for objects travelling from Central Europe via the Adriatic with stopping-points along it and the west coast of the Peloponnese.

In dealing with the common elements reference has been made in a few instances to some Achaean features and objects which have much in common with others found in more than one area with which Achaea maintained contacts (SHAPES: stirrup jars with sloping shoulders in Kephallenia and Rhodes; cylindrical stirrup jars in Attica, Cyprus, Crete, Dodecanese; large piriform jars of FS.34-35 in Messenia, Elis and Rhodes; legged vases in Elis, Messenia, Kephallenia, Attica, Cyprus; rounded alabastra in Argolid,

1 See above, pp.472, 467, 485.
2 See above, pp.393, 374, 365, 469, 494, 495.
3 See above, pp.152, 382, 432, 444, 451, 485, 491.
Kephallenia, Euboea, Boeotia; composite vessels of FS.327-8 in Argolid and the Dodecanese; and of FS.324 in Kephallenia and Elis; conical kylikes of FS.275-6 in Kephallenia and Euboea; carinated deep cups of FS.240 in Attica, Euboea and Italy; spouted shallow cups of FS.253 in Argolid, Attica, Dodecanese, Cyprus and the Near East; clay chairs in the Argolid and Boeotia. PATTERNS: flower and multiple stem on stirrup jars in the Argolid, Elis, Kephallenia, Attica etc.; diaper net and rock pattern I on rounded and square-sided alabastra in most other areas; pictorial designs in Cyprus and the Near East. SMALL FINDS: glass relief beads in Kephallenia, Elis and the Dodecanese; trunnion axes in Epirus and the Near East; TOMB FEATURES: covering of dromos with slabs in Thessaly and Crete.)

Can any interconnexion between Achaea and all these areas be traced through these common elements, or must they be explained as only coincidental? This cannot be known for certain, but in my opinion it is probable that, although in some cases (e.g. rounded and square-sided alabastra; flower and multiple stem on stirrup jars) the second alternative may be correct, in most cases, especially when we have to deal with a rare feature or type of object, we may be fairly safe in suggesting interrelations. Desborough referring to this phenomenon writes: "if a rare type of vase makes its appearance in two or more areas over a short period of time only, and if these periods can be shown on other grounds to be roughly contemporary, then one may be justified in suggesting a link, always providing the areas are mutually accessible." These conditions are fulfilled in most of the above-mentioned instances, and consequently the possibility of intercommunications is strengthened.

When these observations are considered as a whole (see Chart p.548), the following archaeological picture emerges:
(1) The situation during LH I-II is not easy to follow, owing to the limited nature of the available evidence. It

1 LMTS., 27-28.
is clear, however, that contacts with at least Argolid, Aetolia and possibly with Thessaly and Crete were maintained.

(2) With the exception of the Argolid, contacts with all other areas are interrupted during the succeeding LH IIIA period. By this time further links with Elis and Kephallenia in the neighbourhood as well as with other areas to the north (Boeotia, Epirus?) and east (Euboea, the Dodecanese and Cyprus) are to be found.

(3) During LH IIIB contacts with almost all the above areas continue - the only exception being Epirus where they seem to have been interrupted - and in some instances (Argolid, Elis, Kephallenia) become stronger. At the same time Achaea expanded its links to a wider sphere. Thus new areas (Laconia, Messenia, Attica, Crete?, Near East, Italy and Central Europe) were first linked with Achaea.

(4) With the exception of Laconia, where a break in contacts with Achaea is to be seen, communications with all other areas appear not to have been interrupted in LH IIIC, although a weakening of those with the Argolid, Elis and Messenia is clearly observable. On the other hand there is no doubt that links with the Ionian islands are strengthened, since not only Kephallenia but Ithaca as well maintained contacts with Achaea during this period. Furthermore our evidence suggests new links with at least two more areas (Phocis and Cyclades) and a renewal (?) of those with Thessaly and Aetolia (?)....

(5) During the SM times contacts with the Argolid, Ithaca, Kephallenia, Attica, Euboea, Crete, Cyprus and S. Italy are suggested, but they cannot be proved in all these areas, since the evidence is too fragmentary and scanty. The nature of these contacts is not always easy to interpret. Nevertheless from the above analysis the following deductions appear to be permissible.

(1) Close and friendly intercommunications (commercial as well as cultural) were maintained with Kephallenia, Ithaca?, Messenia, Elis and the Argolid. It must be stressed once more at this point that S.W. Achaea was closely related to its west coast neighbouring areas and the Ionian islands. Whether this is to be interpreted
as a political unity is another matter, but at least there appears to be a community of interests at some time especially during LH IIIB and IIIC. In N.E. Achaea we are faced with a rather different situation. This part of the district lies closest to the Argolid and is separated from S.W. Achaea by the Panachaikon range. It would be, therefore, geographically probable that it would look towards its eastern neighbouring district. Consequently close connections between the two are not surprising. Indeed, as was stated in the relevant chapter (p.392) there are some affinities between the pottery from the two areas, sometimes such as to indicate a dominating influence of the Argolid over the N.E. sector of Achaea.¹

(2) At present no such connections are visible with Arcadia, while they are hardly discernible with Laconia.

(3) Further links, mainly of a commercial nature, are to be observed with other areas to the north (Aetolia, Boeotia, Phocis and Thessaly). They appear to be one way only, i.e. from Achaea to all these districts.

(4) With Attica and Euboea the picture is not clear, but one might suggest cultural contacts with the former and commercial (and cultural?) with the latter area.

(5) The relations with Epirus are more difficult to interpret, but at least some sort of cultural contact is suggested by the scanty evidence of artefacts.

(6) The Dodecanese and the islands of Crete and Cyprus were to a greater or lesser extent directly or indirectly connected with Achaea by commercial as well as by cultural links.

(7) Finally Achaea maintained direct commercial, and possibly cultural, contacts with Italy, while the nature of its relations with the Balkans, Central Europe and Near East was no more than commercial and most likely indirect. It is also probable that they were one way only, i.e. from all these non-Mycenaean areas to Achaea.

¹ This is supported by the literary evidence, from which it becomes clear that this part of Achaea belonged to the Kingdom of Agamemnon (Homer, Iliad 2.573-5; 8.203).
So on the basis of the new evidence presented above, we can envisage close and strong ties as existing between Achaea and its adjacent areas and islands to the west, but at the same time it is probably safe to claim that there was communication over a wider sphere (Central Greece, Epirus?, Argolid, Laconia?, Crete, Dodecanese, Cyclades?, Cyprus, Near East, Italy, Balkans, Central Europe, Baltic). The slenderness of this last point must be stressed, but it has seemed worth while setting out the evidence as now available. According to this it seems justifiable to doubt the validity of the conclusions drawn by most of the previous researchers (based on negative evidence) that "the remains are those of a people blocked off from any contact with the outer world" and "Achaea endured c.1230-1050/1000 B.C. in conditions of isolation and a clinging to simplified forms of old traditions" and that it was "a relatively isolated" area, or "diese späten Fundplätze waren vermutlich ziemlich isoliert".

3(a) Reconstruction

Looking back now over the conclusions that I have so far drawn, I shall try to reconstruct the course of events in Mycenaean Achaea and to explain its role in the Mycenaean world from the various strands of evidence available.

To begin with, there appears to be no sharp break in culture between the Middle and Late Helladic periods in Achaea, as elsewhere in Greece. At least three major MH sites are known to have been inhabited also in LH I-II.

1 Until results are in from at least a few well stratified Achaeaean settlements, it is premature to speculate on the precise nature of the intercommunications or on local peculiarities.
2 Vermeule, AJA 64 (1960) 21.
3 Vermeule, op.cit., p.18.
4 Desborough, LMTS, 100.
5 Mlin, EMF, 68.
6 e.g. Laconia (BSA, 1961, 170), Messenia (AJA, 1969, 172 ff.). Cf. also Wace and Blegen, Klio xxxii.2 (1959) 10-11; Wace, in Documents (foreword) xx; Gray in Myres, Homer and his Critics (1958) 260.
As regards the situation during the early Mycenaean periods (LH I-IIIA), the old view of sparse settlement in N.E. Achaea and little or none in its western part must be changed radically in the light of the new evidence collected by me. For, as was shown above (the known Mycenaean sites are almost equally divided between LH I-IIIA [= twenty-one] and LH IIIB-C [= twenty-two]), this new evidence has so far tended to confirm Wace's supposition, made long before a systematic study of the LH material of Achaea had been undertaken: "where so much of the Third Late Helladic period has been found, it would seem obvious that remains of earlier periods must exist. Achaea is famous for its fertility and therefore must have been well populated by man in early days."2

Furthermore, the present evidence suggests that during the early LH times peaceful conditions seem to have prevailed in the district and communications had been maintained with other areas, in the Peloponnese, the Ionian islands, Central Greece and the Aegean.

In the succeeding LH IIIB and especially during the transitional period of LH IIIB/C the situation changes, and there is some disturbance in the district, which seems to be the result of the arrival of newcomers. Evidence of such a disturbance appears in the foundation of new settlements in inhospitable and remote areas (mostly in the Tritaia and Kalavryta regions). There is as yet no certain and definite solution to the question of the origin of the newcomers. Irrespective of this, it does not seem likely that their arrival disrupted conditions in Achaea. For it does seem quite possible that the persistence of Mycenaean culture could have been stronger here than in most other districts.3

1 Vermeule, *AJA* (1960) 18 "extensive Mycenaean penetration of Achaea is a phenomenon of the post Trojan war period"; Desborough, *LMTS*, 9, 31, 100 "an influx of Mycenaeans took place when LH IIIC had started to take over from LH IIIB". So far the only dissidents have been P. Aström (Op. Ath. 1965, 96, 110) and R. Hope Simpson (*GAMS*, 86), who were never convinced of a habitation of Achaea restricted to LH IIIC.


During the whole course of LH IIIC, life in Achaea goes on tranquilly enough, to judge from the position of the settlements, so at least there was no cause for fear. The inhabitants of Achaea, living in an area remote from the route of invasion and protected by the eastern mountains of Erymanthos and Chelmos, pursued their way in security and relative prosperity; closely united with their neighbours to the south and in the Ionian islands they probably constituted one of the last strongholds of the Mycenaean way of life.  

Very little unfortunately can be said on the problem of survival and continuity into the Protogeometric period. The new evidence does not increase in any way our knowledge of Achaea at that time. May we not accept the possibility of some continuous habitation from the latest Mycenaean to the Protogeometric times? Such a possibility cannot altogether be dismissed. But our inability to find any Early Protogeometric site - Dherveni (64) is dated Late Protogeometric - in Achaea certainly indicates a period of "Dark Age" in the district at the end of the Mycenaean period, when some major Mycenaean sites were abandoned. In view of this, Desborough's expressed opinion "that after the abandonment of the Mycenaean cemeteries there was apparently a complete break" must be regarded as still valid.

It is perhaps unnecessary to stress that Achaea's role in the Mycenaean world was an important one. The Mycenaean Achaeans were not only farmers, shepherds and good potters, but fishermen, bronze-workers and adventurous traders as well.

1 That a strong Mycenaean kingdom survived at least in S.W. Achaea during LH IIIC is also supported by the literary evidence. In particular Pausanias (5.4.1) states that the Dorian invaders under Oxylos went through Arcadia into Elis instead of going by the coastal road "to avoid a battle" with the apparently combined forces of the Achaeans and their allies. Strabo on the other hand speaks (viii.5.5) of a migration of Achaean refugees from Laconia to Achaea. Achaea could not have been chosen by the Laconian refugees if during this time it was a weak power unable to afford them security and protection.

2 Cf. GGP, 221 ff.; LMTS, 22.
3 Possibly from c.1050/1000 B.C. to c.900 B.C.
4 Particularly the Klausen, Chalandritsa, Katarraktis-Bouga, Aigion and probably also Drosia, Paralimni, Leontion.
5 LMTS, 101.
6 A local bronze industry probably existed in Achaea.
Although a strong native element occupied the major centres of the district, retaining the local traditions and customs (the tombs and vases tend to show a strong local conservatism), a remarkable variety of influences from other areas outside Achaea is also to be observed.

It will be noted that I have already spoken of a different style and probable course of events between N.E. and S.W. Achaea. From what has been said it is clear that the former region (N.E.), although an integral unit of the district, remained throughout the Late Bronze Age an Argolid-dominated province. It is then reasonable to suppose that Mycenaean civilization persisted there as long as it did in the Argolid.

As to S.W. Achaea, the present evidence suggests that the whole of this region was left untouched by the invasion which had disastrous effects on Central and South Mainland Greece. The survival of the local social and economic structure, as well as the continuance of its relative prosperity, would depend in any case on the maintenance of internal peace and on the ability of the people to defend themselves against outside attack.

Indeed, apart from some disturbance caused by the arrival of newcomers at the transitional period LH IIIB/C, there is no hint of internal disruption. Achaea lay open to the danger of an external attack, but the Achaeans were probably capable of repelling any such attack whether by land or sea. The important towns were built in naturally defensible positions (Patras, Katarraktis, Chalandritsa), and in certain cases, notably Paralimni and Mitopolis (?), were provided with fortifications. It is very probable that the local Mycenaean ruler, to whom the sceptre found at Paralimni may well belong, had his administrative offices at this strongly fortified coastal site. It was, to my mind, the existence of this powerful ruler (king?) that was responsible for the security and prosperity of the people and the persistence of the homogeneity of the Achaean culture.

The possibility of existence of a powerful Mycenaean Achaean kingdom is strengthened by the fact that many refugees fled to Achaea instead of going to Arcadia, which was also mountainous but could not afford them security and protection as Achaea did. On the other hand, as was stated above (p. 530), the Dorians avoided western Achaea on their

---
1 See above, p. 473
way to Elis, and this seems to have been dictated by the fear of a battle with the united forces of the Achaeans and their allies.

There is no clue as to the cause of the destruction by fire of the acropolis at Paralimni at the very end of the Late Bronze Age. In spite of it, Mycenaean elements persisted more strongly here than elsewhere in Greece. In general it would not be incorrect to say that in Achaea we encounter one of the last strongholds of Mycenaean culture and civilization.

Such, then, is the picture of Achaea which may be developed purely from the archaeological evidence at present available. It is unnecessary to stress the hypothetical nature of this reconstruction. There are many problems that remain unresolved, and there is much yet to be discovered; the eventual picture will probably be different from what I have imagined it to be.

3(b) Provisional Chronology

There are difficulties in attempting to assign absolute dates to periods of a district such as Achaea, where frequently the main and the only criterion to define them is the changes in the style of its pottery. It must therefore be stressed that the chronological table given below is only suggestive and very tentative.

For the time being, and for simplicity, I have based my chronology for the Mycenaean period up to the end of LH IIIB on that proposed by Wace (PAPS 97 [1953] 424 n.8; cf. BSA 52 [1957] 220-223) rather than that of Furumark (CNP 115). For I see no reason at present to alter the proposed end of LH IIIA period by Wace (= end of the Amarna Age), and the additional length of time suggested by him for the succeeding LH IIIB style fits well in with the Achaean material remains (= a hundred and thirty years).

But as regards the length of LH IIIC, though retaining the date proposed by Wace for its beginning, I have decided to adopt the recent suggestions proposed by Desborough for its end (IMTS, 240 f.).

Indeed, it seems to me that a period of a hundred and sixty years (there is a case for making it even longer) is
a quite reasonable time span for the obviously large mass of LH IIIC pottery in Achaea, and agrees with the theory that the settlement in this district probably extended beyond the chronological limits of Mycenaean in other parts of Greece.¹

<table>
<thead>
<tr>
<th>B.C.</th>
<th>FURUMARK</th>
<th>WACE</th>
<th>DESBOROUGH</th>
<th>MY CHRONOLOGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1550</td>
<td>LH I</td>
<td>LH I</td>
<td>LH I</td>
<td></td>
</tr>
<tr>
<td>1500</td>
<td>LH II</td>
<td>LH II</td>
<td>LH II</td>
<td></td>
</tr>
<tr>
<td>1425</td>
<td>LH IIIA</td>
<td>LH IIIA</td>
<td>LH IIIA</td>
<td></td>
</tr>
<tr>
<td>1400</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1340</td>
<td>LH IIIB</td>
<td>LH IIIB</td>
<td>LH IIIB</td>
<td></td>
</tr>
<tr>
<td>1300</td>
<td>LH IIIB</td>
<td>LH IIIB</td>
<td>LH IIIB</td>
<td></td>
</tr>
<tr>
<td>1230</td>
<td>LH IIIC</td>
<td>LH IIIC</td>
<td>LH IIIC</td>
<td></td>
</tr>
<tr>
<td>1210</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.1200</td>
<td></td>
<td></td>
<td></td>
<td>LH IIIC</td>
</tr>
<tr>
<td>1100</td>
<td>LH IIIC (end)</td>
<td>LH IIIC (end)</td>
<td>LH IIIC (end)</td>
<td></td>
</tr>
<tr>
<td>c.1050</td>
<td></td>
<td></td>
<td></td>
<td>LH IIIC (end)</td>
</tr>
<tr>
<td>1000</td>
<td></td>
<td></td>
<td></td>
<td>LH IIIC (end)</td>
</tr>
</tbody>
</table>

¹ Vermeule, AJA (1960) 18 (reaching down to 1000 B.C. for the end of the Mycenaean habitation in the district); Desborough, LMTS 100-101 and 226 "the (Achaean) cemeteries indicate undisturbed habitation probably for at least two or three generations (after 1200 B.C.)."
**Diagram to Show the Assumed Life-Span of Occupation in Achaean Prehistoric Sites**

<table>
<thead>
<tr>
<th>Area no</th>
<th>Site no</th>
<th>Provenance</th>
<th>EH</th>
<th>MH</th>
<th>LHI</th>
<th>LHII</th>
<th>LHIIIa</th>
<th>LHIIIb</th>
<th>LHIIIc</th>
<th>SM</th>
<th>PG</th>
<th>LH</th>
<th>LHIIIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Paralimni</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Gerbesi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Kangadi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Pournari</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Fostaina</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Kato Achaean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Patras region</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Tsoukaleika</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Vrachneika</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Aroe-Samakia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Ano Sychaina</td>
<td>(Agrapidia)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Ano Sychaina</td>
<td>(West)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Klauss</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Tsaplokastron</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Kallithea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Krini</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Gerokomeion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Patras</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Akarnes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Phrae region</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Platanovrisis</td>
<td>(Bithelis)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Platanovrisis</td>
<td>(Kamini)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Chalandritsa</td>
<td>(A.Antonios)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table represents the assumed life-span of occupation in Achaean prehistoric sites, with columns for different periods (EH, MH, LHI, LHII, LHIIIa, LHIIIb, LHIIIc, SM, PG) and sites listed in rows. The symbols (?) indicate the presence or absence of occupation during certain periods.
<table>
<thead>
<tr>
<th>Areas no</th>
<th>Site no</th>
<th>Provenance</th>
<th>EH</th>
<th>MI</th>
<th>LHI</th>
<th>LHI1A</th>
<th>LHI1B</th>
<th>LHI1C</th>
<th>SM</th>
<th>PG</th>
<th>LH</th>
<th>LHI1I</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>Chalandritsa (A. Vasilios)</td>
<td></td>
<td>?</td>
<td>?</td>
<td></td>
<td></td>
<td></td>
<td>?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Chalandritsa (Troumbes)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Chalandritsa (Agriapidies)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Chalandritsa (Pori)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Mitopolis (A. Varvara)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Mitopolis (Profitis Elias)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Starochorion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Vasilikon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Pharai (Lalikosta)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Mirali</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Katarraktis (Drakotrypa)</td>
<td></td>
<td>?</td>
<td>?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Katarraktis (A. Athanasios)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Katarraktis (Rodia-Bouga)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Katarraktis (A. Yeoryios)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Katarraktis (Pyrgaki)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Leontion (Vrayianika)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>Leontion (Koutreika)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Leontion (A. Ioannis)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>Leontion (A. Konstantinos)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Areas no</td>
<td>Site no</td>
<td>Provenance</td>
<td>EH</td>
<td>MH</td>
<td>LII</td>
<td>LIII</td>
<td>LIIIA</td>
<td>LIIIB</td>
<td>LIIIC</td>
<td>SM</td>
<td>PG</td>
<td>LH</td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
<td>---------------------</td>
<td>----</td>
<td>----</td>
<td>-----</td>
<td>------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>c</td>
<td></td>
<td>Kalavryta region</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>42</td>
<td>Mikros Pondias</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Lomboka)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>Ayios Vlasios</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>44</td>
<td>Manesi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Vromoneri)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>Manesi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(village)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>46</td>
<td>Bartholomio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(near Lomboka)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>47</td>
<td>Kastria</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>48</td>
<td>Vrisarion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(A.Paraskevi)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>49</td>
<td>Vrisarion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Prinakia)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>Kertezi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d</td>
<td></td>
<td>Tritae region</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>Drosia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>Skoura</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td></td>
<td>NORTHEASTERN AREA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>53</td>
<td>Kamarais</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Xerikon)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>54</td>
<td>Kamarais</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Paliomylos)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>55</td>
<td>Mayeira</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>56</td>
<td>Aravonitsa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>57</td>
<td>Aigion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Psila Alonia)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>58</td>
<td>Aigion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Kallithea)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Areas no</td>
<td>Site no</td>
<td>Provenance</td>
<td>EH</td>
<td>MH</td>
<td>LHII</td>
<td>LHIIIA</td>
<td>LHIIIB</td>
<td>LHIIIC</td>
<td>SM</td>
<td>PG</td>
<td>LH</td>
<td>LHIIIB</td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
<td>---------------------</td>
<td>----</td>
<td>----</td>
<td>------</td>
<td>--------</td>
<td>--------</td>
<td>-------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>--------</td>
</tr>
<tr>
<td>59</td>
<td></td>
<td>Kouloura (Paliokamaros)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td></td>
<td>Vovoda</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61</td>
<td></td>
<td>Chadzi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62</td>
<td></td>
<td>Achladies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>63</td>
<td></td>
<td>Vareliossa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>64</td>
<td></td>
<td>Mamousia-Dherveni</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65</td>
<td></td>
<td>Keryneia (Ayios Yeoryios)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66</td>
<td></td>
<td>Helike</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>67</td>
<td></td>
<td>Akrata</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>68</td>
<td></td>
<td>Krathion (Silivainiotika)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>69</td>
<td></td>
<td>Aigeira</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
<td>Aigeira (Rovalona)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71</td>
<td></td>
<td>Dherveni</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>72</td>
<td></td>
<td>Pellene</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Map to show the assumed life-span of occupation in Athyan Prehistoric sites.
| Region       | Sparta | Argolid | Corinthia | Laconia | Corinthia | Peloponnese | Arcadia | Aetolia | Aetolia | Elis | Arcadia | Euboea | Boeotia | Phocis | Thessaly | Thessaly | Molossia | Illyria | Epirus | Cyclades | Dodecanese | Crete |
|--------------|--------|---------|-----------|---------|-----------|-------------|---------|---------|---------|-----|---------|--------|---------|--------|----------|----------|---------|--------|---------|-----------|------|
| Aegean       |        |         |           |         |           |              |         |         |         |     |         |        |         |        |          |          |         |        |         |           |      |
| Peloponnese  |        |         |           |         |           |              |         |         |         |     |         |        |         |        |          |          |         |        |         |           |      |
| Ionian       |        |         |           |         |           |              |         |         |         |     |         |        |         |        |          |          |         |        |         |           |      |
| Aegean       |        |         |           |         |           |              |         |         |         |     |         |        |         |        |          |          |         |        |         |           |      |

**Chart to show the external relations of the M Medium, A Medium, A Small, A Very Small.**
24. Map to show the external relations of Mycenaean Achaea.
GENERAL BIBLIOGRAPHY


ÅSTRÖM, P., Opuscula Atheniensia, V (1965) 89" Mycenaean pottery from the region of Aigion, with a list of prehistoric sites in Achaea."

ATKINSON, T., "Excavations at Phylakopi in Melos" (JHS, Supplement I, 1904).

BOSANQUET and others.

BLEGEN, CARL W., Korakou, a Prehistoric Settlement near Corinth, Concord, New Haven, 1921.

Prosymna, the Helladic Settlement, Cambridge, 1937.


BOSANQUET, R.C., "The Unpublished Objects from the Palaikastro, Excavations" 1902-1906, BSA, Supplementary Paper I.


DORPFEILD, W., Troja und Iliion; Ergebnisse der Ausgrabungen, Athens, 1902.

DORPFEILD, W., Die Kretisch-mykenische Kultur, Leipzig and Berlin, 1924.


FRÖDIN, O., Asine; Results of the Swedish Excavations, Stockholm, 1938.

PERSSON A.W.,
FURTWANGLER, A and LOESCHCKE G.,

FURUMARK, A.,

The Mycenaean Pottery; Analysis and Classification, Stockholm, 1941.
The Chronology of Mycenaean pottery, Stockholm, 1941.

GJERSTAD, E.,

GOLDMAN, HETTY.,

GRAEF, B.,

HALL, H.R.,

HIGGINS, R.A.,

HUXLEY, G.L.,

HOPE-SIMPSON, R.,

IAKOVIDES S.,
"Nuovi Scavi, nella necropoli micenea di Jalisco,

KARO, G.,
Die Schachtgräber von Mykenae, München, 1930.

KAUVADIAS, P.,
Προηγορική Αρχαιολογία, Εν Αθήναις, 1909.

KENNA, V. E. G.,

KRAIKER, W.

KUBTLER, K.,

KUBLER, K.,


MONTELIUS, O., La Grèce Préclassique, Stockholm, 1928.


MÜLLER, K., Tiryns, die Ergebnisse der Ausgrabungen... vol. I (with others), Athens, 1912; vol. III, Augsburg, 1930.


NAUE, J., Aghios Kosmas, an Early Bronze Age Settlement and Cemetery in Attica, Princeton, 1959.

NILSSON, M.P., Die vörromischen Schwerter aus Kupfer, Bronze und Eisen, München, 1903.


PAPAVASILEIOU, G., Περί τῶν ἐν Εὐβοίᾳ ἀρχαίων τάγην, Αθήνα, 1910.

PERSSON, A.W., The Royal Tombs at Dendra, near Midea, Lund, 1931.


SYRIPOULOS, K., Η Προτεστατίον της Πελοπονήσου, Αθήναι, 1964.

TAYLOR, LORD WILLIAM, Mycenaean Pottery in Italy and Adjacent Areas, Cambridge, 1958.

TSOUNTAS, C., Μυκηναϊ και μυκηναϊκος πολιτισμός, Αθήναι, 1893.

CHAPTER II : Topography.

ÅLIN, P., EMP., 63-68.

"Mycenaean pottery from the region of
Aigion, with a list of prehistoric

BLOUET, A., Expédition scientifique de Morée :

Architecture, Sculptures, Inscriptions et
Vues du Péloponnèse, des Cyclades et de


VERMEULE, E., *AJA. 64 (1960), "The Mycenaeans in Achaia" 1 ff.*
CHAPTER II: Prehistoric Sites

ALEXANDROPOULOS, A.G., "Εποχή και θορυβωδεία της Πρώτης Και των Χειμάρρων αυτής, Αθήναι, 1919. EMP., 63-68.


BAUR, P.V.S., Catalogue of the Rebecca Darlington Stoddard Collection of Greek and Italian vases in Yale University, New Haven, 1922 (Yale Oriental Series, Researches; vol. VIII) 39, 41-43.

BLINKENBERG, G., Arch. Studien 1904, 14.

DODWELL, E., A Classical and Topographical Tour through Greece, 1819, vol. I.

FIMMEN, D., Die Kretisch-mykenische Kultur, 1924, 9.

HOPE-SIMPSON, R., GAMS., 82-89.

KYPARISSES, N., PAE, 1925, 43-7; 1926, 130-1; 1927, 52; 1928, 110-19; 1929, 86-91; 1930, 81-88; 1931, 71-73; 1932, 57-61; 1933, 90-93; 1934, 114-15; 1935, 70-71; 1936, 95-99; 1937, 84-93; 1938, 118-19; 1939, 103-6; 1940, 31.


LEAKE, W.M., Travels in Morea, 1820, vol. II.

MASTROKOSTAS, E., Archaeology 15, 1962, 133.


PHILIPPSON, A., Die griechische Landschaften, Band III.

STAVROPOulos, A., Neue Peloponnische Wonderungen 1937.

SYRIOPOulos, K., Storia tis podes Hiron apo ton Mykikwn xronon meta tin periwnias, Patrai, 1954.


VERDELIS, N., AE 1956, Chronika, 11.

WIESNER, J., Grab und Jenseits..., Berlin, 1938.


CHAPTER III

Settlements-Architecture

ÅLIN, P., EMF., 66.

DESBOROUGH, V.R.d'A., LMTS., 98.

HOPE-SIMPSON, R., GAMS., 82-83.

MASTROKOSTAS, E., Archaeology 15, 1962, 133; PAE 1962, 127; 1963, 93; 1964, 60; 1965, 121; Ergon 1966, 156.

SKOUFOPOULOS, N., Mycenaean Citadels, 60.

VALMIN, N., Malthi-Dorion, 171.

ZAPHEIROPOULOS, N., PAE, 1958, 167; Ergon, 1958, 139.

CHAPTER IV

Tombs

ÅLIN, P., EMF., 68.


BENTON, S., "The Ionian Islands", BSA 32, 1931-32, 238.

BLEGEN, C.W., Korakou, 101.

PROSYMNA, 98.

CASKEY, J., "Excavations at Lerna" Hesperia 1957, 162.

DESBOROUGH, V.R.d'A., LMTS., 98.

FRÖDIN, O., and PERSSON, A.,

HOOD, S., "Tholos Tombs of the Aegean" Antiquity 1960, 166.

HOPE-SIMPSON, R., GAMS, 82-89.

IAKOVIDES, S. E., "Mycenaean Burial Customs" AAA vol. 1, 1969, 120.

KAVVADIAS, P., Προϊστορική Αρχαιολογία, Εν Αθήναι, 1909.

MAURI, A., Annuario 1923-24, 237.


PAPAVASILEIOU, G., Περί τῶν ἐν Εὔβοια ἀρχαίων τάφων, Αθήναι, 1910.

PERSSON, A. W., MT, 108.


SACKETT, L. H., Alteuropa, 1926.

SCHUCHHARDT, C., "Das adriatische Gebiet ...." Lund 1939.

TSOUNTAS, C., Μυκήναι και μυκηναίοι πολιτισμοί, Αθήναι, 1893 Αι προϊστορικοί αρχαιολόγοι Διμήνου και Σέκκλου, 1908, 154.
VERMEULE, E., Greece in the Bronze Age, 1967.


WACE, A.J.B., Mycenae, 16.

Chamber Tombs at Mycenae, Archaeologia 1932.

WACE, A.J.B.

and BLEGGEN, C.W., Symbolae Osloenses, IX (1930) 28.

WACE, A.J.B.

and THOMPSON, M.S., Prehistoric Thessaly (1912).

CHAPTER V

Pottery

AKERSTROM, A., Der geometrische Stil in Italien, Lund und Leipzig 1943.

ALIN, P., EMF., 68.


BAUR, P.V.S., Catalogue of the Rebecca Darlington Stoddard Collection etc., 41-43.

BENNET, E.L. et al., The Mycenae Tablets II, TAPS, 48, 1958, part I.

BENTON, S., BSA, XXXIX 1938-39, 8. (Polis cave)

BIANCOFIORE, F., La civilta micenea nell' Italia meridionale, I, La ceramica, Roma 1963.

BLEGEN, C.W., Korakou, Boston-N.York, 1921.

PROSYMNA, Cambridge, 1937.


BLEGEN, C.W.
and
RAWSON, M.,
BOSANQUET, R.C.
and
DAWKINS, R.M.,
BOUZEK, J.,
BRONEER, O.,
BROCK, J.K.,
BUCK, R.J.,
CASKEY, J.L.,
CATLING, H.,
CHADWICK, J. et al.,
COLDSTREAM, J.N.,
COLLIGNON, M.,
and
COUVE, L.,

Catalogues

BMC I, i, ii (1912, 1925)
CVA Denmark I, Copenhagen National Museum I,
1924; II (n.d.)
CVN Great Britain I, British Museum I, 1925.


DEMACOPOULOU, K.,

"Μυκηναϊκά άγρεια εκ θαλάμων τάφων

DEMANGEOL, R.,

Fouilles de Delphes; Ecole francaise d'Athênes,
vol.II:5. ( Sanctuary of Athena )Paris 1926.


DESHAYES, J.,

Deiras, Paris 1966.

DESOULAVY, P.,

"Vases Mycéniens du Musée de Neuchâtel"RA, 1900, 128.

DIKAIOS, P.,

Enkomi, IIIA. Mainz AM Rhein, 1969.

DOTHAN, T.,

The Philistines and Their Material Culture, 134-135.

EVANS, SIR ARTHUR.,


FRENCH, E.,

The Development of Mycenaean Terracotta Figurines,

"Late Helladic (IIIA:1-IIIB:2) Pottery from


FRÖDIN, O.,

Asine; Stockholm, 1938.

FURTWÄNGLER, A.,

Aegina, das Heiligtum der Aphaia, München 1906.

& LÖSCHCKE, G.

Mykenische Vasen, Berlin, 1886.

FURUMARK, A.,

MP., Stockholm 1941.

CMP., Stockholm 1941.

"The Mycenaean IIIC Pottery and its Relation to

"The Settlement at Ialysos and Aegean History
c.1550-1400 B.C., OA vi, 1950, 150ff."


Hall, E., Spoungaras, Philadelphia, 1912.


Heurtley, W., "Philistine and Mycenaean Pottery", QDAP, 1936, 94f.


Jacopi, G., Annuario, XIII-XIV, 1931, 253-345. (Rhodes)


"Some Mycenaean vases in the G.G.Pierides Collection, Cyprus, Kupriakai tis Proudai", 1956.

Karo, G., Schachtgräber, München, 1930.

Kavvadias, P., Proistoriki Arxaiologia, Ev Athena, 1914.

Keramopoulos, A., A.Delt. iii, 1917; AE, 1907, 1909, 1910, 1930 (Thebes)

Kourouniotis, K., Elenivika, Ev Athena, 1932.

Kunze, E., Orchomenos III, München, 1934.

Kyparisses, N., A.Delt. V, 1919, 90-122 (Kephallenia)

Langlotz, E., Griechische Vasen, München, 1932.


Mackeprang, M. B., "Late Mycenaean Vases", AJA, 42, 1938, 537ff.

Marinatos, S., AE, 1932, 1ff.; 1933, 68ff. (Kephallenia)

Mauri, A., Annuario, VI-VII, 1923-24, 86-247. (Rhodes)

Morricone, L., Annuario, XLII-XLIV, NS. XXVII-XXVIII, 1965-1966, 5-616. (Kos)
MYLONAS, G., E., "Ελευσί, Αθήνα, 1932.

OHNEFAL SCH-RICHTER, M., Kypros, the Bible and Homer..., London, 1893.

PAPAVASILEIOU, G., Περί τῶν ἐν Εὐβοίᾳ ἀγαθῶν Τηφὼν, Εν Αθήναις, 1910


PERS SO N, A. W., NT., Lund, 1931.

PT., Lund, 1942.


SCHUCHHRDT, C., Alteuropa...Berlin 1926.

SIEVEKING, J., und HACKL, R., Die Konigliche Vasensammlung zu München, Band I, München, 1912.

SJOQVIST, E., Problems, Stockholm, 1940.

STAIS, V., Collection Mycénienne du Musée National... Athènes, 1915.


LEVANT, Cambridge, 1951.


TAYLOR, W., MPI, Cambridge, 1958.

TSOUNTAS, C., Προϊστορική Ακροπόλεις, Εν Αθήναις, 1908.
ALEXIOU, ST.,

ÅLIN, P.,
EMF, 61.

ÅSTRÖM, P.,
The Middle Cypriote Bronze Age, Lund 1957.

ÅSTRÖM, L.,
Studies on the arts and crafts of the Late Cypriote Bronze Age, Lund 1957.

BASS, G.F., & others
Cape Gelidonya: a Bronze Age shipwreck, Philadelphia

CHAPTER VI
Artefacts
BIESANTZ, H., "Schmuck."

BIELEFELD, E., Archaeologia Homerica C. Göttingen, 1968

BLEGEM, C. W., Blegen, C. W., Blegen, E., BLEGEM, E., Prosymna, 328-354, 458-465

BLINKENBERG, C., Prosymna, 264-327

BOARDMAN, J., "Kretisch-mykenische Siegelbilder" Marburg, 1954

BOYD-HAWES, H., Crete, 1926

BUCHHOLZ, H-G., "Prosymna, 264-327"

BOSANQUET, R. C., Fibules, Copenhagen, 1926

BOURDAI, J., "Essays and Studies presented to W. Ridgeway."

BOURDAI, M., Cambridge, 1913

BOURDAII, M., "Ευωκόπικοι Αξαίοι", Mnemosyne, XIV, 1961, 97

BOURDAII, M., "Gournia, Philadelphia, 1908"

BUCHHOLZ, H-G., Zur Herkunft der kretischen Doppelaxt, München, 1959


CYP. BR. W., Oxford, 1964


DESBOURG, V., "LMTS, 47-69, Oxford, 1964"

DÖRPFELD, W., Troja und Ilion, Athens, 1902

EVANS, A., PM, London, 1921-36

PT, Archaeologia, LIX, 1905, 392ff.

FURTWÄNGLER, A., Ant. Gemmen, I-III, Leipzig-Berlin, 1900

FURUMARK, A., CMP, Stockholm, 1941

GOLDMAN, H., Eutresis, Cambridge, Mass., 1931

HALL, E. H., Sphoungaras, Philadelphia, 1912


MMA, London, 1967


IAKOVIDES, S. E., Periātai: Αγαλματα, Ev Αθήνας, 1970

JACOBSTHAL, P., Greek Ping, Oxford, 1956

KARO, G., Schachtgräber, München, 1930-3

KAUVADIAS, P., Προϊστορική Αρχαιολογία, Ev Αθήνας, 1914.


MAXWELL-HYSLOP, R., "Bronze, lugged axe-or adze-blades from Asia" Iraq, XV, 69ff.

MERHART VON, G., "Geschmierte Schienen", BRGK xxxvii-xxxviii (1956-57) 69ff

"Über blecherner Zierbuckel (Falerei)" JRGZM iii, 28ff.


MONTELIUS, O., La Crece Preclassique, Stockholm 1924.


NAUE, J., Die vorrömischen Schwerter aus Kupfer, Bronze und Eisen, München 1903.

NILSSON, M., MMR², Lund 1950.

PERONI, R., Badische Fundberichte, 1956, 69ff.


PERSSON, A., W., NT., Lund, 1931.

NT., Lund, 1942.


FLINDERS
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>REICHEL, W.</td>
<td>Homerische Waffen², 1901</td>
<td></td>
</tr>
<tr>
<td>SAKELLARIOU, A.</td>
<td>Die Mykenische Siegelglyptik, SIMA IX, Lund, 1964</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot;The First Aegean Sword and Their Ancestry&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AJA LXV, 1961, 17ff</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot;Later Aegean Bronze Age Swords&quot; AJA LXVII, 1963, 117ff</td>
<td></td>
</tr>
<tr>
<td>SÄFLUND, G.</td>
<td>Berbati, Uppsala 1965</td>
<td></td>
</tr>
<tr>
<td>SCHREIBER, T.</td>
<td>Alexandrinische Torentik, Leipzig, 1894</td>
<td></td>
</tr>
<tr>
<td>SNODGRASS, A.</td>
<td>EGAW, Edinburgh, 1964</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DAG, Edinburgh, 1971</td>
<td></td>
</tr>
<tr>
<td>STAIS, V.</td>
<td>Collection Mycenienn du Musee National</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Athens, 1915</td>
<td></td>
</tr>
<tr>
<td>STUBBINGS, F.H.</td>
<td>&quot;The Mycenaean Pottery of Attica&quot;, BSA, 1947, 60-69</td>
<td></td>
</tr>
<tr>
<td>TAYLOUR, W.</td>
<td>MPI, Cambridge, 1958</td>
<td></td>
</tr>
<tr>
<td>TSOUNTAS, C. &amp; MANATT, J.I.</td>
<td>The Mycenaeans Age , Chicago, 1897</td>
<td></td>
</tr>
<tr>
<td>VALMIN, N.</td>
<td>Malthi, Lund, 1938</td>
<td></td>
</tr>
<tr>
<td>VERMEULE, E.</td>
<td>Greece in the Bronze Age, Chicago, 1967</td>
<td></td>
</tr>
</tbody>
</table>
WACE, A. J. B., Ch. T. Oxford 1932.


WIESNER, J., Grab und Jenseits, Berlin, 1933.

XANTHOUDIDES, S. A., The Vaulted Tombs of Mesara, Liverpool 1924.

LIST OF PLATES

1. PARALIMNI (KASTRO TIS KALOGRIAS)
   a. Teichos Dymaion, northern long side.
   b. Part of the Cyclopean walls.
   c. Middle gate from south.

2. a. GERBESI. Loutra Araxou from south-west.
    b-c. KANGADHI. Sotiroula, site and sherds.

3. a. KANGADHI. Village from north and road to Riolos.
    b. AROE-SAMAKIA. Village from west.
    c. ANO-SYCHAINA. Village from south-west.

4. ANO SYCHAINA
   a. Asprochôma hill from south.
   b. Asprochôma hill from west.
   c. Asprochôma hill. Myc. chamber tomb.

5. VRACHNEIKA (AYIOS PANDeleimon).
   a. Ayios Pandeleimon area from Dresthena.
   b. Dresthena from Ayios Pandeleimon.
   c. Dresthena.

6. a. VRACHNEIKA. Chamber tomb at Ayios Pandeleimon from north.
    b. KLAUSS (ANTHEIA). Koukoura hill from west.
    c. TSAPLANEIKA (THEA). Ayios Nikolaos hill from south.

7. a. KALLITHEA. Tomb site.
    b.- d. CHALANDRITSA. Ayios Vasilios. Site and chamber tombs.
8. a. STAROCHORION. The village from north-west.
    b. PHARAI (LALIKOSTA). Coumaniotis field.
    c. KATARRAKTIS (LOPESI). Drakotrypa. Site and settlement.

9. KATARRAKTIS (LOPESI).
   a. Drakotrypa from north-west (hill Pyrgaki).
   b-c. Ayios Athanasios. Site and settlement.

10. KATARRAKTIS (LOPESI).
    a. Bouga hill from north-east.
    b. Ayios Yeoryios, from south-east.
    c. Katarraktis village and Pyrgaki hill in distance.

11. LEONTION (GOURZOUMISA).
    a. Leontion village and Vrayianika (background) from south-west.
    b. Vrayianika from south-west.
    c. Vrayianika, the rock where the chamber tombs were cut (one is still visible).

12. LEONTION (GOURZOUMISA).
    a. Ayios Ioannis from south-west.
    b. Ayios Andreas from north-east.
    c. Ayios Konstantinos from north-east.

13. a. MIKROS PONDIAS (LOMBOKA) Locality Lomboka from north-west.
    b. MIKROS PONDIAS (LOMBOKA) Koutroumanis field.
    c. MANESI. Locality Vromoneri from north-east.
14. **Vrisarion (Kato Goumenitsa).**
   a.-b. Ayia Paraskevi hill, site and one tomb.
   c. Prinakia from south.

15. a. **Aigion (Psila Alonia).** The cemetery of chamber tombs below the high school of Aigion (excavation 1970).
   b. **Chadzi (Trapeza).** Trapeza hill from north.

16. a-b. **Achladhes.** Ano Achouria from west and locality Achouria-spilia from south.
   c. **Helike.** The site from south.

17. a-b. **Mamousia (Dherveni).** The village from north and ancient Kerynia seen from Mamousia.
   c. **Aigeira (Ancient Hyperesia).** Locality Palaiokastron from north.

18. **Aigeira (Ancient Hyperesia).**
   a. Ravelona hill from north.
   b. Northern slope of Aigeira hill.
   c. Dherveni (Psila Alonia).

19. **Mycenaean Settlements.** Paralimni (Kastro tis Kalogrias).
   a. N.W. gate (Main entrance) seen from South-West.
   b. Middle gate, seen from south.
   c. Middle gate's section (from South).

20. **Mycenaean Settlements.** Paralimni (Kastro tis Kalogrias).
   a. Middle gate's section (from East).
   b. Middle gate's section (from West).
20a. MYCENAEAN SETTLEMENTS.
   a-d. KATARRAKTIS—AYIOS ATHANASIOS.
      a. Walls E, F right Δ.
      b. Walls A, H and Al.
      c. Sherds and a conical button.
      d. Walls Δ and A.
   e-g. KATARRAKTIS—DRAKOTRYP.
      e. M.H. Tomb.
      f. Pithos crushed in the corner E-K.
      g. Krater crushed on the wall T.

21. MYCENAEAN TOMBS. CHALANDRITSA (AYIOS VASILIUS).
   a. Ruined chamber tombs (from south).
   b. Some of the chamber tombs still preserved.

22. MYCENAEAN TOMBS. CHALANDRITSA (AYIOS VASILIUS).
   c-d. Some of the chamber tombs still preserved.

23. MYCENAEAN TOMBS. CHALANDRITSA (AYIOS VASILIUS).
   e. Some of the chamber tombs still preserved.
   f. The entrance of an intact chamber tomb (Ch. T.I).
      at the time of its excavation.
   g. Chamber of an intact tomb (Ch. T.II). Skeletons
      and vases.

24. MYCENAEAN CHAMBER TOMB. VRACHNEIKA (AYIOS
   PANELEIMON).
   a-b. Chamber seen from the dromos.

25. MYCENAEAN CHAMBER TOMB.
   c. VRACHNEIKA (AYIOS PANELEIMON). Dromos seen from
      the chamber.
   a. KLAUSS (KOUKOURA). The hill-side where the
      Mycenaean cemetery was located (seen from N.W.)
   b. The walling of a chamber tomb.
26. **KLAUSS (KOUKOURA)**
   a. Ch.T.IV.
   d. Ch.T.IX.

27. a-b. **KALLITHBA**
   a. Ch.T.A.
   b. Ch.T.B.
   c. **KATARRAKTIS (BOUGA). Ch.T.I,II.**

28. **KATARRAKTIS (BOUGA)**
   b. Ch.T.II.
   c. Ch.T.III.

29. **KATARRAKTIS (BOUGA)**
   d. Ch.T.IV.
   e. Ch.T.V.

30. f. **KATARRAKTIS (BOUGA). Ch.T.VI.**
   a. **LEONTION (VRAYIANIKA). Ch.T.I.**

31. b-c. **VRISARION (AYIA PARASKEVI). Two ruined chamber tombs from those excavated (I–XXV) by N.Kyparissé.**
   a. **AIGEIRA (ROVALONA). Ch.T.I.**

32. a. **AIGEIRA (ROVALONA). Ch.T.II.**
   b-c. **AIGION (PSILA ALONIA). Ch.T.A,B,C.**

33. **MYCENAEAN TOMBS. THOLOS TOMBS AT KATARRAKTIS.**
   (A. ATHANASIOS).
   a. Tholos Tomb A.
   b-c. Details of the tholos-wall of Tomb A.

34. **MYCENAEAN TOMBS. THOLOS TOMBS AT KATARRAKTIS.**
   (A. ATHANASIOS).
   a-c. Tholos Tomb B (dromos and lintel).
35. MYCENAEAN TOMBS. THOLOS TOMBS AT KATARRAKTIS.
   (A. ATHANASIOS).
   d. Tholos Tomb B (dromos and lintel).
   e. The interior of the tholos tomb B.
   f. The innermost lintel of the same tomb and its tholos-wall (details).

   b. MIDDLE HELLADIC. TUMULUS TOMB B AT MIRALI.

37. PRE-MYCEAN POTTERY. Early Helladic vases.
   a-f. PM. 792, 776. 1034. 778. 777. EH.a/a15.

38. a. PRE-MYCEAN POTTERY. Early Helladic vases. PM.921.
   b-f. Middle Helladic vases.
       PM.496. 1033. 1038. 1037. 1035.

39. a-g. PRE-MYCEAN POTTERY. Middle Helladic vases.
   a. PM. 1036.
   b-c. PM. 1039.
   d-f. Vases from Katarraktis (Drakotrypa). (Inv.Nos.
       unknown).
   g. PM. 184.

40. PRE-MYCEAN POTTERY. Middle Helladic vases.
   a-f. PM. 1044. 1045. 1042b. 1042b. 1040. 1041.

41. FOUR-HANDED STORAGE JARS.
   a-f. PM. 1. 5. 6. 7. 8. 8a.

42. FOUR-HANDED STORAGE JARS
   a-f. PM. 8b. 10. 10. 133. 200. 270.
43. FOUR-HANDED STORAGE JARS.
   a. PM. 273.
   b-c. PM. 368.
   d-f. PM. 382, 549, 633.

44. FOUR-HANDED STORAGE JARS.
   a. PM. 770.
   b. PM. 923.
   c. PM. 1047.
   d-f. PM. 1048.

45. FOUR-HANDED STORAGE JARS.
   a. PM. 136.
   b. a/a 746.
   c-f. PM. 2, 3, 4, 9.

46. FOUR-HANDED STORAGE JARS.
   a-f. PM. 132, 135, 269, 271, 274, 945.

47. a-b. FOUR-HANDED STORAGE JARS.
   a. PM. 1074.
   b. a/a 741.
   c-f. TWO-HANDED STORAGE JARS.
       PM. 11, 12, 13, 134.

48. TWO-HANDED STORAGE JARS.
   a-f. PM. 202, 203, 272, 367, 201, 137.

49. STIRRUP-JARS (Globular).
   a-i. PM. 127, 230, 228, 234, 234, 301, 313, 316, 317.

50. STIRRUP-JARS (Globular).
   a-g. PM. 318, 402, 404, 418, 479, 794, 874.
51. STIRRUP-JARS (Globular).
   a-b. Berlin, no. 30759.

52. STIRRUP-JARS (Globular).
   a-b. Berlin no. 30756.

53. STIRRUP-JARS (Globular).
   a-b. PM. 1130. 52.
   c-d. PM. 56.
   e-f. PM. 58.

54. STIRRUP-JARS (Globular).
   a-b. PM. 82.
   c. PM. 84.
   d-e. PM. 104.
   f. PM. 109.

55. STIRRUP-JARS (Globular).
   a. PM. 111.
   b-c. PM. 217.
   d. PM. 222.
   e. PM. 278.
   f. PM. 378.

56. STIRRUP-JARS (Globular).
   a-f. PM. 378. 478. 547. 616. 641. 706.

57. STIRRUP-JARS (Globular).
   a-b. Berlin, no. 30758.

58. STIRRUP-JARS (Globular).
   a. PM. 723.
   b. a/a 743.
   c-f. PM. 102. 131. 231. 237.
   g. AM. 4.
59. STIRRUP-JARS (Globular)
   a-i. PM. 114, 120, 123, 124, 126, 218, 220, 225, 235.

60. STIRRUP-JARS (Globular).
   a-g. PM. 297, 305, 388, 403, 411a, 423b, 428.

61. STIRRUP-JARS (Globular).
   a-g. PM. 453, 542, 639, 718, 719, 798, 873.
   h. AM. 3.

62. STIRRUP-JARS (Globular).
   a. AM. 3.
   b-c. AM. 5.
   d. BE. 17.
   e-f. PM. 94, 97.

63. STIRRUP-JARS (Globular).
   a-b. PM. 121, 294.
   c-d. PM. 419.
   e. PM. 669.
   f. B. 3.

64. STIRRUP-JARS (Globular).
   a-f. PM. 57, 59, 61, 62, 63, 65.

65. STIRRUP-JARS (Globular).
   a-f. PM. 67, 68, 70, 72.
   d-e. PM. 72.
   f. PM. 76.
66. STIRRUP-JARS (Globular).
   a-b. PM. 77, 78.
   c-d. PM. 79.
   e-f. PM. 80.

67. STIRRUP-JARS (Globular).
   a-b. PM. 81.
   c-d. PM. 86.
   e-f. PM. 87.

68. STIRRUP-JARS (Globular).
   a-d. PM. 88, 89, 90, 98.
   e-f. PM. 99.

69. STIRRUP-JARS (Globular).
   a. a/a 726.
   b. PM. 103.
   c-d. PM. 105.
   e-f. PM. 128, 209.

70. STIRRUP-JARS (Globular).
   c-d. PM. 211.
   e-g. PM. 212, 213, 214.

71. STIRRUP-JARS (Globular).
   a-b. PM. 227, 229.
   c-d. PM. 275.
   e-f. PM. 276.

72. STIRRUP-JARS (Globular).
   a-f. PM. 277, 279, 284, 286, 288, 291.
73. STIRRUP-JARS (Globular).
   a-b. PM. 292, 295.
   c-d. PM. 303.
   e. PM. 304.
   f-g. PM. 307.

74. STIRRUP-JARS (Globular).
   a-b. PM. 310, 312.
   c-d. PM. 380.
   e-f. PM. 381.

75. STIRRUP-JARS (Globular).
   a. PM. 384.
   b-c. PM. 389.
   d-f. PM. 390, 392, 393.

76. STIRRUP-JARS (Globular).
   a-b. PM. 394.
   c. PM. 395.
   d-e. PM. 396.
   f. PM. 397.

77. STIRRUP-JARS (Globular).
   a-g. PM. 398, 399, 405, 407, 413, 414, 423a.

78. STIRRUP-JARS (Globular).
   a-b. PM. 459.
   c. PM. 543.
   d-e. PM. 545.
   f. PM. 614a.

79. STIRRUP-JARS (Globular).
   a-e. PM. 621, 647, 651, 670, 672.
   f-g. PM. 745.
80. STIRRUP-JARS (Globular)
   a. PM. 746.
   b. a/a 758.
   c-d. a/a 783, 784.
   e-g. PM. 879, 906, 1028.

81. STIRRUP-JARS (Globular)
   a-b. PM. 1126, 1127.
   c. B. 13.
   d. BB. 4.
   e-f. PM. 14.

82. STIRRUP-JARS (Globular)
   a. PM. 53.
   b-c. PM. 54.
   d-f. PM. 55, 73, 101.

83. STIRRUP-JARS (Globular).
   a. PM. 101.
   b-c. PM. 206.
   d-f. PM. 207, 208, 221.

84. STIRRUP-JARS (Globular).
   a-b. PM. 223, 283.
   c-d. PM. 376.
   e-f. PM. 377.

85. STIRRUP-JARS (Globular).
   a-b. PM. 379, 434.
   c-d. PM. 546.
   e-f. PM. 946.

86. STIRRUP-JARS (Globular).
   a-i. PM. 95, 116, 125, 280, 281, 302, 308, 415.
87. **STIRRUP-JARS (Globular).**
   a-b. PM. 456. 615.
   c-d. PM. 674.
   e-f. PM. 878. 1128.

88. **STIRRUP-JARS.**
   a-b. Globular. AM. 52.
   c-g. Squat. PM. 92. 100. 232. 238.

89. **STIRRUP-JARS (Squat).**
   a-c. PM. 232. 238. 241.
   d-e. PM. 410.
   f-g. PM. 75. 256.
   h. a/a 782.

90. **STIRRUP-JARS (Squat).**
   a-c. PM. 219. 433. 721.
   d-e. AM. 6.
   f-g. AM. 53.

91. **STIRRUP-JARS.**
   a-b. Squat. AM. 62.

92. **STIRRUP-JARS.**
   a-b. Conical. AM 82.
   c-g. Piriform. PM. 115. 300. BE.18. AM.7.

93. **STIRRUP-JARS.**
   a-d. Cylindrical. PM. 151. a/a 816.
   e. Big domestic. PM. 625.
   f. Peculiar. PM. 898.

93a. **STIRRUP-JARS.**
   a. Peculiar. PM. 898.
   b. Stirrup-Jars' stoppers from Paralimni.
94. PIRIFORM JARS.
a-c. PM. 324, 330, 693.
d. a/a 757.
e-i. PM. 149, 190, 443, 444, 743.

95. PIRIFORM JARS.
a-g. PM. 747, 1050, 191, 323, 193, 194, 195.

96. PIRIFORM JARS.
a-c. PM. 325, 569, 727.
d-e. AM. 1, 2.
f. BE. 19.
g. PM. 623.

97. a-c. PIRIFORM JARS.
PM. 196, 726, 372.
d-g. SMALL HANDLELESS JARS.
PM. 166, 168, 170, 171.

98. SMALL HANDLELESS JARS.
a-h. PM. 341, 342, 447b, 568, 692, 703, 709, 717.
i. BE. 12.

99. SMALL HANDLELESS JARS.
a-b. PM. 732, 740.
c-d. BE. 10, 13.
e. PM. 449.
f-g. AM. 20, 22.

100. SMALL HANDLELESS JARS.
a. Berlin 30767.
b-c. PM. 169, 333.
101. SMALL HANDLELESS JARS.
   a. FM. 447a.
   b. AM. 21.
   c-e. FM. 156. 157. 167.
   f. BE. 11.

102. ROUNDED ALABASTRA.
   a-c. FM. 464. 599.
   d. BE. 14.
   e-g. FM. 465. 437a. 17.

103. ROUNDED ALABASTRA.
   a-i. FM. 21. 159. 160. 165. 250. 253. 346. 345. 347.

104. ROUNDED ALABASTRA.
   a-j. FM. 373. 334. 344. 66. 437. 19. 437b. 436. 702.
        710.

105. ROUNDED ALABASTRA.
   a-f. FM. 711. 713. 22. 18. 155. 158.

106. ROUNDED ALABASTRA.
   a-e. FM. 369. 435. 741. 332. 696.
   f. AM. 12.

107. ROUNDED ALABASTRA.
   a-e. AM. 15. 16. 17. 18. 19.

108. ROUNDED ALABASTRA.
   a. AM. 55.
   b. a/a 730.
   c-f. FM. 374. 20. 153. 264.
109. ROUNDED ALABASTRA.
   a-i. PM. 154. 164. 570. 724. 336. 23. 251. 162. 442.
110. ROUNDED ALABASTRA.
   a-c. PM. 335. 340. 689.
   d. a/a 785.
   e-h. SQUARE-SIDED ALABASTRA. PM. 33. 38. 32. 331.
111. SQUARE-SIDED ALABASTRA.
   a-f. PM. 471. 31. 439. 691. 694. 700.
   g. AM. 9.
   h. BE. 16.
112. SQUARE-SIDED ALABASTRA.
113. SQUARE-SIDED ALABASTRA.
   a-h. PM. 440. 30. 36. 337. 467. 468. 695. 869.
   i. AM. 11.
114. SQUARE-SIDED ALABASTRA
   a-e. AM. 13. 14. 34. 59a.
   e. Berlin 30764.
115. SQUARE-SIDED ALABASTRA.
   a. Berlin 30764.
   b. BE. 15.
   c-f. PM. 640. 617. 35. 469.
116. SQUARE-SIDED ALABASTRA.
   a-e. PM. 34. 257. 328. 329. 712.
   f. a/a 549.
   g. AM. 54.
   h. PM. 178.
117. SQUARE-SIDED ALABASTRA.
   a-d. EM. 182, 263, 355, 800.
   e. AM. 56.
   f. EM. 45.

118. SQUARE-SIDED ALABASTRA.
   a-b. EM. 180, 785.
   c-g. NARROW-NECKED JUGS.
       EM. 244, 371, 371, 698, 699.

119. NARROW-NECKED JUGS.
   a. AM. 58.
   b-c. EM. 458, 172.
   d. a/a 762.
   e-h. EM. 648, 173, 173, 424.

120. NARROW-NECKED JUGS.
   a. PM. 779.
   b. a/a 729.
   c. a/a 786.
   d-f. PM. 348, 391, 618.

121. NARROW-NECKED JUGS.
   a-e. EM. 174, 637, 697, 729, 254.
   f. Berlin 30768.

122. NARROW-NECKED JUGS.
   a. AM. 24.
   b. Berlin 30769.
   c. Berlin 30769.
123. SMALL GLOBULAR JUGS.
   a-g. PM. 349. 350. 352. 255. 353. 354. 425.

124. SMALL GLOBULAR JUGS.
   a-g. PM. 431. 429a. 430. 535. 733. 871. 911.
   h. AM. 25.

125. SMALL GLOBULAR JUGS.
   a-e. PM. 175. 387. 387a. 387c. 725.
   f. a/a 865.
   g-h. GLOBULAR WIDELY-NECKED JUGS.
       PM. 775. 1043.

126. SQUAT JARS WITH ONE VERTICAL HANDLE.
   a-c. PM. 47. 343. 387b.
   d-e. HAND-MADE MINIATURE JUGS.
       PM. 432. 690.
   f-g. AMPHORISKOI
       PM. 144. 320. 326.

127. AMPHORISKOI.
   a-b. PM. 870. 650.
   c. B. 33a.
   d-g. PM. 375. 445. 249. 446.

128. AMPHORISKOI.
   a-e. PM. 145. 26. 247. 322. 538.
   f. a/a 781.
   g. PM. 27.

129. AMPHORISKOI.
   a-f. PM. 383. 25. 645. 248. 539. 707.
130. AMPHORISKOI.
   a. PM. 910.
   b. a/a 780.
   c-f. PM. 742. 246. 205. 205.

131. AMPHORISKOI.
   a-f. PM. 321. 321. 148. 24. 15. 28.

132. AMPHORISKOI.
   a-e. PM. 142. 327. 1032. 265. 265.
   f. GLOBULAR FLASKS.
      PM. 472.

133. GLOBULAR FLASKS.
   a-b. AM 23.
   c. FEEDING BOTTLE
      a/a 728.
   d-f. ASKOI
      AM. 61. 61. 27.

134. ASKOI
   a. AM. 26.
   b-f. DUCK-ASKOI.

135. DUCK-ASKOI.
   a-f. PM. 262. 362. 541. 541. 629. 629.

136. DUCK-ASKOI.
   a. PM. 629.
   b-f. RING-VASES.
      PM. 46. 448. 705. 705. 705.
137. **RING-VASES.**
   a-d. PM. 675. 245. 358. 357.
   e-f. HYDRIAE.
      a/a 734. PM. 772.

138. **COMPOSITE VESSELS.**
   a-f. PM. 40. 704. 875. 876. 365. 366.

139. **COMPOSITE VESSELS.**
   a-b. PM. 877. 1051.
   c-f. KRATERS.
      PM. 784. 882. a/a 733. PM. 905.

140. **CONICAL KRATERS (Kalathoi).**
   a-f. PM. 258. 258. 441. 731. 450. 450.

141. **CONICAL KRATERS (Kalathoi).**
   a-f. PM. 259. 259. 628. 628. 267. 540.

142. **CONICAL KRATERS (Kalathoi).**
   a-b. PM. 540. 1030.
   e-g. DEEP BOWLS.
      PM. 773. 802. 914. 915.

143. **DEEP BOWLS.**
   a-d. a/a 804. PM. 730. 907. 904.
   e-f. DEEP BOWLS WITH TWO VERTICAL HANDLES.
      PM. 912. a/a 763.
   g. STEMMED BOWLS.
      PM. 793.
144.a. STEMMED BOWLS.
    PM. 909.

b. SHALLOW ANGULAR BOWL.
   a/a 736.

c-d. ONE-HANDED DEEP BOWLS.
    Berlin no. 30766.

145. KYLILES.
    a-g. PM. 189, 356, 789, 790, 791, 903, 902.
    h. SHALLOW CUPS.
       PM. 41.

146. SHALLOW CUPS.
    a-k. PM. 43, 44, 50, 48, 187, 266, 360, 359, 649, 451, 188.

147. SHALLOW CUPS.
    a-f. PM. 188, 361, 361, 715, 716, 186.
    g. AM. 29.
    h-i. PM. 42, 49.

148. SHALLOW CUPS.
    a-d. PM. 266, 266, 266, 872.
    e-f. a/a 724.

149.a. SHALLOW CUPS.
    AM. 30.

b-f. DEEP CUPS.
    PM. 363, 386, 686, 714, AM. 31.

150. DEEP CUPS.
    a. AM. 32.
    b-g. PM. 687, 701, 786, 685, 199.
151. a-b. DEEP CUPS.
   AM. 33. FM. 788.
c. MUG.
   FM. 198.
d. CONICAL RHYTON.
   FM. 1029.
e. LID.
   FM. 739.

152. a-b. PITHOI.
   FM. 1049. a/a 814.
c-d. ALABASTER PYXIS.
   FM. 1052.
e-f. TERRACOTTA FIGURINES.
   a/a 764. 725.

153. TERRACOTTA FIGURINES.
   a-c. AM. 59. 63. 63.
d. Berlin 30773.
e. Berlin 30773.
f. AM. 70.

154. ARTEFACTS.
   a-c. Gold finger-ring from Drosia (Inv.no.15).
d. Bone needle from Klauss.
e. Miscellaneous objects from Leontion-Ayios Ioannis: no.1. steatite whorls; no.2. moulded pendants of amber; no.3. bone whorl; no.4. flint blade.
f. Gold finger-ring of unknown provenance (Inv.no.41).
155. **ARTEFACTS.**
   a. Terracotta and steatite whorls and one stone axe in the museum at Patras (Unknown provenance, Vrisarion, or Klauss?).
   b. Two whorls (one of terracotta and the other of steatite) from excavated chamber tombs at Kangadhi (No inventory numbers).

156. **ARTEFACTS.**
   a. Beads from excavated chamber tombs at Vrisarion and Tsaplaneika (Thea). Nos. 1-2 paste; no. 3, frit; no. 4, glass; no. 5, stone; glass and paste; no. 6, terracotta whorl.
   b. Beads from excavated chamber tombs at Vrisarion, Leontion, Katarraktis-Bouga and Klauss. No. 1, cornelian; nos. 2-3 agate; no. 4, glass; no. 5, glass, glass-paste and faience; no. 6, glass (sea-shells).

157. **ARTEFACTS.**
   Beads and glass-plaques from excavated chamber tombs at Katarraktis-Bouga and Tsaplaneika (Thea).
   a. Nos. 1-2, moulded plaques of blue glass; no. 3, relief beads of blue glass; no. 4, beads of agate and paste.
   b. Nos. 1-2, beads of cornelian; nos. 3-4, moulded pendants of blue glass.

158. **ARTEFACTS.**
   a. Objects from excavated chamber tombs at Klauss. Nos. 1-3, beads of faience; nos. 4-5, beads of cornelian; no. 6, beads of stone; no. 7, beads of glass (Argonaut); no. 8, bone pin; no. 9, ivory comb.
   b-c. Moulded plaques of glass-paste and terracotta whorls in the museum at Aigion. (Inv. no. 36).
159. ARTEFACTS.
Some of the main decorative motives used on the Achaean glass relief-beads and plaques:

a. Double rosette;
b. Pendant pothook spirals;
c. Simple argonaut;
d. Simple argonaut (left) and lily (right).

160. ARTEFACTS.

a. Ivory comb from Paralimni; a/a 61.
b. Bronze depilatory tweezer and fish-hook from Paralimni. a/a 57;166.
c. Sealstones PMX. nos. 140-144.

161. ARTEFACTS.

a-b. Bronzes from Mitopolis (PMX.nos.75-77) and others (PMX.nos 320-325) of unknown provenance.
c. Bronzes from Vrisarion (PMX.nos.326 a-b), Chalandritsa (PMX.nos 327-328) and of unknown provenance (PMX.nos. 329-331).

162. ARTEFACTS.

Metal vessels from Katarraktis-Ayios Athanasios .
a. Silver kylix: PMX.no.58.
b. Bronze deep mesomphalic cup: PMX.no.59.
c. Bronze shallow (PMX.no.60) and carinated (PMX.no.61) mesomphalic cups.
167. **ARTEFACTS.**
   a. Bronzes from Kallithea (PMX. nos. 310, 314a-b, 316).
   c-d. Bronzes from Aigion: Spearheads (AM.37 a-d) and Shield-boss ? (Inv. no.?) a/a 182.

168. **ARTEFACTS**
   Armour from Kallithea Tomb A.
   a. Bronze greaves (PMX.nos. 317 a-b).
   b. Bronze strips of a corslet (PMX.nos.314 a-b,315).

169. **ARTEFACTS.**
   a. Kallithea Tomb A: Bronze sword (PMX.no.318) and spearhead (PMX. no. 316).
   b. Kallithea Tomb B: Bronze sword (PMX. no.319): spearhead (PMX. no.310): Spear butt-spike (PMX.no.311): Razor (PMX. no. 313): Knife (PMX. no.312) and Boar's-tusks from a helmet a/a 181.

170. **ARTEFACTS.**
   Bronzes from Aigeira (now in the Berlin Museum).
   a-b. Swords, nos. 30743-30744.
   c. Dagger, no. 30745.