## KEOS

#### **VOLUME XI**

## WALL PAINTINGS AND SOCIAL CONTEXT THE NORTHEAST BASTION AT AYIA IRINI

## **KEOS**

# RESULTS OF EXCAVATIONS CONDUCTED BY THE UNIVERSITY OF CINCINNATI UNDER THE AUSPICES OF THE AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS

#### **VOLUME XI**

# WALL PAINTINGS AND SOCIAL CONTEXT THE NORTHEAST BASTION AT AYIA IRINI

BY LYVIA MORGAN



Published by INSTAP Academic Press Philadelphia, Pennsylvania 2020



Design and production: INSTAP Academic Press, Philadelphia, PA Printing and binding: HF Group – Acmebinding, Charlestown, MA

Artwork: Lyvia Morgan

Graphic editing: Stuart Laidlaw and Rosemary Robertson

Photography: Craig Mauzy, Marie Mauzy, and Chronis Papanikolopoulos

#### Previously published volumes in the excavation series:

Keos I	Coleman, John E. 1977. Kephala: A Late Neolithic Settlement and Cemetery. Princeton: American School of
	Classical Studies.

Keos II Caskey, Miriam Ervin. 1986. The Temple at Ayia Irini. Princeton: American School of Classical Studies.

Keos III Cummer, W. Willson, and Elizabeth Schofield. 1984. Ayia Irini: House A. Mainz on Rhine: Philipp von Zabern.

Keos IV Bikaki, Aliki Halepa. 1984. Ayia Irini: The Potters' Marks. Mainz on Rhine: Philipp von Zabern.

Keos V Davis, Jack L. 1986. Ayia Irini: Period V. Mainz on Rhine: Philipp von Zabern.

Keos VI Georgiou, Hara S. 1986. Ayia Irini: Specialized Domestic and Industrial Pottery. Mainz on Rhine: Philipp von Zabern.

Keos VII Overbeck, John C. 1989. Ayia Irini: Period IV. Mainz on Rhine: Philipp von Zabern.

Keos VIII Petruso, Karl. 1992. Ayia Irini: The Balance Weights. An Analysis of Weight Measurement in Prehistoric Crete and the Cycladic Islands. Mainz on Rhine: Philipp von Zabern.

Keos IX Wilson, David E. 1999. *Ayia Irini: Periods I–III. The Neolithic and Early Bronze Age Settlements*. Mainz on Rhine: Philipp von Zabern.

Keos X Schofield, Elizabeth. 2011. Ayia Irini: The Western Sector. Darmstadt: Philipp von Zabern.

#### Library of Congress Cataloging-in-Publication Data

Names: Morgan, Lyvia, author.

Title: Wall paintings and social context: the Northeast Bastion at Ayia Irini / by Lyvia Morgan.

Description: Philadelphia: INSTAP Academic Press, 2020. | Series: Keos; volume XI | Includes bibliographical references and index.

Identifiers: LCCN 2019039887 (print) | LCCN 2019039888 (ebook) | ISBN 9781931534970 (hardback) | ISBN 9781623034214 (pdf)

Subjects: LCSH: Ayia Irini Site (Kea Island, Greece) | Mural painting and decoration, Minoan—Greece—Kea Island. | Excavations (Archaeology)—Greece—Kea Island. | Minoans—Greece—Kea Island. | Kea Island (Greece)—Antiquities. | Bronze age—Greece—Kea Island.

Classification: LCC DF221.K36 M67 2020 (print) | LCC DF221.K36 (ebook) | DDC 939/.15—dc23

LC record available at https://lccn.loc.gov/2019039887

LC ebook record available at https://lccn.loc.gov/2019039888

Copyright © 2020 INSTAP Academic Press and Lyvia Morgan Philadelphia, Pennsylvania All rights reserved Printed in the United States of America To the people of Kea, past and present, and to Doan, who has lived all his life with this book.

## Table of Contents

List of Tables and Figures in the Text	xv
List of Plates	xxi
Preface	xxv
Acknowledgments	xxxi
List of Abbreviations	xxxiii
Prologue. Perception and Interpretation: The Process	1
Art in Context, Art as Text	2
Experiencing Wall Paintings	2
Images and Memory	4
A Personal Journey	6
Visualization: Reconstructing the Fragmentary	9
PART I: THE PLACE	
Chapter 1. Ayia Irini and the Northeast Bastion	17
Kea and the Aegean Islands	17
The Fortified Town of Ayia Irini and Its Surroundings	22
The Northeast Bastion	28
Contexts and Chronology of the Northeast Bastion Paintings	36

Wall Paintings at Ayia Irini	38
Part IIA: Miniature Frieze	
Chapter 2. Human Figures: Body and Society	43
The Gendered Body	43
Individuality, Movement, and Gestures	46
Dressing the Body	53
Social Roles of Gender	69
Occupations and Actions	70
Community, Status, and Role	
Summary	
Catalog of Human Figures	78
Chapter 3. Vehicles: Ships and Chariot.	91
Ships	91
Chariot	99
Summary	109
Catalog of Vehicles	109
Chapter 4. Buildings: Urban Space	113
Comparative Images.	115
Scale and Spatial Organization	118
Facades and Walls	120
Doorways and Windows	124
Rooftops	
Shipsheds?	
Summary	
Catalog of Buildings	138
Chapter 5. Animals: Hunting and Herding	149
Deer	150
Dogs.	156
Goats, Sheep, and Unidentified Animals	158
Horses	160
Summary	164
Catalog of Animals.	165
Chapter 6. Landscape, Seascape, and The Sky	171
Miniature Landscape and the Ambiguity of Blue	171
Plants and the Land.	172
Rocks and Hills.	173
Marsh and Streams.	177
River, Reeds, and Grasses.	179
Sea and Sky	

Summary and Conclusions	
Catalog of Landscape	186
Chapter 7. Visualizing the Past: The Composition of the Miniature Frieze	225
Figure 7.1: Town by a River	226
Figure 7.2: Buildings	
Figure 7.3: Women and Buildings	
Figure 7.4: Thistles and Descending Rocks	
Figure 7.5: Building and Plants	232
Figure 7.6: Horse and Building	233
Figure 7.7: Herder with Goat	235
Figure 7.8: Cauldrons and Ships Scene	236
Figure 7.9: Paddlers	241
Figure 7.10: Chariot	241
Figure 7.11: Procession of Men	
Figure 7.12: Men by River	
Figure 7.13: Men by Rocks or Sea	
Figure 7.14: Men by Rocks	
Figure 7.15: Fragments of Men	
Figure 7.16: Hunter with Prey	
Figure 7.17: Deer and Dogs	
Figure 7.18: Sea and Rocks with Men, or Sky and Descending Rocks	
Figures 7.19–7.24: Marsh Landscape with River and Sea	
Figure 7.25: Rocky Landscape.	262
Figure 7.26: Cauldrons and Ships Scene with Rocky Landscape	
Figures 7.27 and 7.28: A View of the Room with the Miniature Frieze	
Conclusions: Structure and Meanings	270
PART IIB: PLANT PANELS	
Chapter 8. Plant Panels	275
The Plant Panels in Their Architectural Setting.	275
Bramble and Myrtle	
Grasses, Reeds, and Leaves	
Visualizing Room N.18	299
Summary and Conclusions	
Catalog of Plant Panels	
Part III: Technique and Color	
Chapter 9. Materials, Techniques, and Pigments	329
Plaster and the Surface of the Wall	
Paint to Plaster: Fresco versus Secco.	
Pigments Used in the Paintings	

Pigments Found on the Site	
•	
Chapter 10. Color and Artistic Performance: The Process of Painting	
Color	
Planning the Scenes.	
Applying the Paints.	
Choosing and Using the Colors	
, , , , , , , , , , , , , , , , , , ,	330
PART IV: PAINTINGS AS CULTURAL SIGNIFIERS	
Chapter 11. Intercultural Connections: The Aegean World.	359
Miniature Paintings and Architectural Space	360
Craft and Visual Planning	
Iconography	
Cultural Interrelationships	
The Social Role of Miniature Wall Paintings.	
Artists and Patrons	
The Power of Paint: Community and Trade	
Summary.	388
Chapter 12. Feasts, Festivals, and Social Context.	389
Feasting and Social Dynamics in the Ancient World	389
Iconography of Feasts, Festivals, and Gift Exchange	391
Feasting and Social Context at Ayia Irini: The Iconographic Program	395
Inside and Outside the Northeast Bastion	399
Drink, Food, and Vessels	
Participants: Hosts and Guests	
Summary.	408
Epilogue. Wall Paintings and Memory	409
Festivals and Ritualized Action.	409
Pageantry and Paintings	410
Landscape and Memory	.411
Concluding Thoughts	412
Appendices and Concordances	
Appendix A. Miscellaneous Fragments and Border Bands	417
Appendix B. Scientific Analysis of Painted Plasters from Ayia Irini	423
Background to the Sampling, by Lyvia Morgan and Ellen Davis <sup>†</sup>	423
Analytical Data and Results, by Vassilis Perdikatsis	
Concordance A. Fragments of the Miniature Frieze by Context	427

Concordance B. Fragments of the Miniature Frieze by Catalog Number	451
Concordance C. Past and Present Catalog Numbers	469
References	475
Index	.515
Plates	

## List of Tables and Figures in the Text

Figure 1.1.	Map showing sites mentioned in the book	18
Figure 1.2.	Map of northern Kea	18
Figure 1.3.	View of Ayia Irini and the bay, looking south	19
Figure 1.4.	Ayia Irini in Period VI (LC I/LM IA), showing the locations of wall paintings	24
Figure 1.5.	Site plan of Ayia Irini showing the locations of representational wall paintings in Period VII (LC II/LM IB).	25
Figure 1.6.	Northern Sector in Periods V and VI: (a) Period V, Phase 1; (b) Period V, Phase 2; (c) Period VI.	27
Figure 1.7.	Northeast Bastion: (a) version of upper floor plan with proposed windows; (b) version of upper floor plan with hypothetical dividing wall and cupboards; (c) ground floor with surviving walls.	29
Table 1.1.	Archaeological contexts and counts of the cataloged wall painting fragments	37
Figure 2.1.	Details from the Miniature Frieze, Room 5, West House, Akrotiri: (a) Meeting on the Hill, north wall; (b) women with a pot, north wall; (c) men meeting across a river, south wall	45
Figure 2.2.	Fragments of the Miniature Frieze, Ayia Irini, Kea (2, 6, and detail of 67)	45
Figure 2.3.	Fragment of a miniature painting showing a man's leg, Phylakopi, Melos	45
Figure 2.4.	Men in the Tylissos miniature painting	45

Figure 2.5.	Seal impression from Hagia Triada (LM I)	49
Figure 2.6.	Sealstone (a) and seal impression (b): (a) Vapheio (LB I–II); (b) Knossos (LM I)	57
Figure 2.7.	Sealstones (a, b) and ring impression (c): (a) Knossos(?) (LB I–II); (b) Vapheio (LB I–II); (c) Hagia Triada (LM I)	68
Figure 3.1.	Schematic reconstruction drawing of one of the Kea ships: (a) without oars or paddles; (b) with oars (but without oarsmen)	. 92
Figure 3.2.	Flagship, detail from the south wall of the Miniature Frieze, Room 5, West House, Akrotiri, Thera.	92
Figure 3.3.	Early Cycladic depiction of a boat on a ceramic pan	94
Figure 3.4.	Seal impression from Knossos (LM I–II)	97
Figure 3.5.	Reconstruction of the Kea chariot (cf. Fig. 7.10:a), with parts of the chariot labeled	100
Figure 3.6.	Scenes of chariots on rings and a sealstone: (a) gold ring from Shaft Grave IV (LH I); (b) clay impression from a ring found in Delta 18b at Akrotiri (LM I); (c) sealstone from Vapheio (LB I–II); (d) gold ring from Aidonia, Corinthia (LB I–II)	100
Figure 3.7.	Reconstruction of a wall painting from Knossos.	100
Figure 4.1.	Details of buildings in the Ayia Irini Miniature Frieze: (a) from Figure 7.1; (b, c) from Figure 7.2	114
Figure 4.2.	View of Chora, Kea	. 114
Figure 4.3.	Details of buildings in the Thera Miniature Frieze, Room 5, West House, Akrotiri, Thera: (a) Town II building and man, north wall; (b) Town II, north wall; (c) Town II at coast, north wall; (d) Town I, west wall; (e) Town III buildings and river, east wall	. 116
Figure 4.4.	Departure Town (Town IV), detail from the south wall of the Miniature Frieze, Room 5, West House, Akrotiri, Thera	117
Figure 4.5.	Arrival Town (Town V), detail from the south wall of the Miniature Frieze, Room 5, West House, Akrotiri, Thera	117
Figure 4.6.	Town Mosaic faience plaques from Knossos, visualized as a group by C. Palyvou	126
Figure 4.7.	Silver Siege Rhyton, Shaft Grave IV at Mycenae, detail of the town	126
Figure 4.8.	Ivory plaque from the Royal Road, Knossos	126
Figure 4.9.	Fragment of a building from the Tylissos Miniature Frieze.	126
Figure 4.10.	"Master Impression" sealing from Chania (LM I)	. 133
Figure 4.11.	Seal impression from Zakros (LM I)	133
Figure 4.12.	Hittite clay model from a vase, from Boğazköy	. 133
Figure 4.13.	Syrian fortifications, Tomb of Amenmose (TT 42), Thebes	. 133
Figure 4.14.	Details of a house on Kea with projections on the roof: (a) seen from the front; (b) seen from an angle.	. 133
Figure 4.15.	Reconstruction of Building P at Kommos	. 136

Figure 5.1.	Color drawings of Deer and Dogs, reconstructed from fragments 178–181 (right) and 182, 183 (left)	150
Figure 5.2.	Details of deer from the Miniature Frieze, Room 5, West House, Akrotiri, Thera: (a) deer in riverine landscape, east wall; (b) deer on hilltop, south wall	150
Figure 5.3.	Sealstone (a) and seal/ring(?) impressions (b-d) with deer and dogs: (a) Knossos, Hogarth's tombs, LM I-II; (b) Pylos, LB I-II; (c, d) Akrotiri, Thera, LM I	153
Figure 5.4.	Herding scene, detail from the north wall of the Miniature Frieze, Room 5, West House, Akrotiri, Thera	159
Figure 6.1.	Reeds and stream, details from the Reed Bed painting, Xeste 3, Akrotiri	178
Figure 6.2.	A view toward Ayia Irini through coastal reeds	179
Figure 7.1A.	Visualization of Town by a River	228
Figure 7.1B.	Outlines of fragments from Town by a River	229
Figure 7.2.	Visualization (top) and outlines (bottom) of Buildings	230
Figure 7.3.	Visualization (top) and outlines (bottom) of Women and Buildings	231
Figure 7.4.	Visualization (top) and outlines (bottom) of Thistles and Descending Rocks	233
Figure 7.5.	Visualization (top) and outlines (bottom) of Building and Plants	234
Figure 7.6.	Visualization (top) and outlines (bottom) of Horse and Building	235
Figure 7.7.	Visualization (top) and outlines (bottom) of Herder with Goat	235
Figure 7.8.	Visualization (top) and outlines (bottom) of the Cauldrons and Ships scene	238
Figure 7.8:detail.	Overlapping men (59) in the Cauldrons and Ships scene	240
Figure 7.9.	Paddlers (63)	241
Figure 7.10.	Chariot: (a) simple box type, curved; (b) simple box type, straight; (c) dual type; (d) outlines	242
Figure 7.11.	Visualization (top) and outlines (bottom) of Procession of Men	243
Figure 7.12.	Visualization (top) and outlines (bottom) of Men by River	244
Figure 7.13.	Visualization (top) and outlines (bottom) of Men by Rocks or Sea	246
Figure 7.14.	Visualization (top) and outlines (bottom) of Men by Rocks	247
Figure 7.15.	Fragments of men: (a) Man with Upraised Arms (18); (b) Man Wearing Kilt or Shorts (47)	248
Figure 7.16.	Hunter with Prey (44)	248
Figure 7.17A.	Visualization of Deer and Dogs	250
Figure 7.17B.	Outlines of fragments from Deer and Dogs.	251
Figure 7.18.	Visualization of alternative orientations of scene with rocks: (a) Sea and Rocks with Men; and outlines (center); (b) Sky and Descending Rocks	252

Figure 7.19A.	Visualization of Marsh A: descending rock, river, marsh, and sea with inlets	254
Figure 7.19B.	Outlines of fragments from Marsh A	255
Figure 7.20.	Visualization (top) and outlines (bottom) of Marsh B: river, marsh, and sea with spray	257
Figure 7.21.	Visualization (top) and outlines (bottom) of Marsh C: river, marsh, and sea	259
Figure 7.22.	Visualization of Marsh landscape (Figs. 7.19–7.21 joined)	260
Figure 7.23.	Visualization (top) and outlines (bottom) of Marsh D: marsh and grasses	261
Figure 7.24.	Visualization (top) and outlines (bottom) of Marsh E: marsh and sea	261
Figure 7.25.	Visualization (top) and outlines (bottom) of Rocky Landscape	263
Figure 7.26.	Visualization of the Cauldrons and Ships scene with Rocky Landscape	265
Figure 7.27.	Visualization of the way Room N.20 might have looked, viewed toward the southeast	266
Figure 7.28.	Rooms N.18 and N.20, showing the angle of viewing for Figure 7.27	266
Figure 8.1A.	Visualization of Bramble and Myrtle A	282
Figure 8.1B.	Outlines of fragments from Bramble and Myrtle A	283
Figure 8.2A.	Visualization of Bramble and Myrtle B	286
Figure 8.2B.	Outlines of fragments from Bramble and Myrtle B	287
Figure 8.3A.	Visualization of Bramble and Myrtle C	290
Figure 8.3B.	Outlines of fragments from Bramble and Myrtle C	291
Figure 8.4.	Visualization (left) and outlines (right) of Bramble and Myrtle border	292
Figure 8.5.	Visualization (top) and outlines (bottom) of Blue and Yellow Reeds with Red Stream	294
Figure 8.6.	Visualization (top) and outlines (bottom) of Blue Reeds with Grasses	295
Figure 8.7.	Visualization (top) and outlines (bottom) of Yellow Grasses and Blue Leaves	297
Figure 8.8.	Fragments of leaves from the panels of Grasses and Reeds	298
Figure 8.9.	Visualization of the way Room N.18 might have looked, viewed toward the southeast	300
Figure 8.10.	Rooms N.18 and N.20, showing the angle of viewing for Figure 8.9	300
Figure 10.1.	Diagram of the proposed process of painting using a detail of the Cauldrons and Ships scene (67)	350
Figure 10.2.	Diagram of the proposed process of painting using detail of men in robes (6, 13, 32)	351
Figure 11.1.	Miniature Frieze of Akrotiri Thera: (a) north wall; (b) east wall; (c) left half of south wall (d) right half of south wall.	361
Figure 11.2.	Plans showing relative scale: (a) proposed first floor of the Northeast Bastion, Ayia Irini as seen in Figure. 1.7:b; (b) existing first floor of the West House, Akrotiri	363

Figure 11.3.	Comparative distribution of paintings in: (a) the Northeast Bastion at Ayia Irini; (b) the West House at Akrotiri	363
Figure 11.4.	Plan of House A at Tylissos	366
Figure 11.5.	Miniature Frieze of Tylissos	366
Figure 11.6.	Plan of part of the northwest section of the palace of Knossos showing the Early Keep, with the area in which the miniature paintings were found outlined in red	
Figure 12.1.	The cauldron scene fragment <b>67</b> : (a) original and (b) reconstructed, detail from Figure 7.8.	392
Figure 12.2.	Seal impressions from Knossos.	392
Figure 12.3.	Cooking in cauldrons at the harvest festival in Plougoulm, Brittany, 2009	398
Table B.1.	Scientific analyses of painted plasters from Ayia Irini	425

### List of Plates

- Plate 1. Women in the Miniature Frieze (1–5).
- Plate 2. Men in the Miniature Frieze (6-15).
- Plate 3. Men in the Miniature Frieze (16–31).
- Plate 4. Men in the Miniature Frieze (32–41).
- Plate 5. Men in the Miniature Frieze (42–54).
- Plate 6. Men in the Miniature Frieze (55–66).
- Plate 7. Men in the Miniature Frieze (67).
- Plate 8. Ships in the Miniature Frieze (68–74).
- Plate 9. Ships (75–80) and chariots (81–86) in the Miniature Frieze.
- Plate 10. Buildings in the Miniature Frieze (87–92).
- Plate 11. Buildings in the Miniature Frieze (93–103).
- Plate 12. Buildings in the Miniature Frieze (104–121).
- Plate 13. Buildings in the Miniature Frieze (122–132).
- Plate 14. Buildings in the Miniature Frieze (133–152).
- Plate 15. Buildings and plants in the Miniature Frieze (153–177).
- Plate 16. Deer and dogs in the Miniature Frieze (178–183).

- Plate 17. Deer and dogs (184–191) and unidentified animals (192–201) in the Miniature Frieze.
- Plate 18. Unidentified animals in the Miniature Frieze (202–216).
- Plate 19. Horses (217–219, 221–223) and unidentified animals (220, 224–232) in the Miniature Frieze.
- Plate 20. Plants in the Miniature Frieze (233–246).
- Plate 21. Plants in the Miniature Frieze (247–266).
- Plate 22. Rocks in the Miniature Frieze (267–273).
- Plate 23. Rocks in the Miniature Frieze (274–280).
- Plate 24. Rocks in the Miniature Frieze (281–291).
- Plate 25. Rocks in the Miniature Frieze (292–299).
- Plate 26. Rocks in the Miniature Frieze (300–309).
- Plate 27. Rocks in the Miniature Frieze (310–323).
- Plate 28. Rocks in the Miniature Frieze (324–326).
- Plate 29. Rocks in the Miniature Frieze (327–337).
- Plate 30. Marsh elements in the Miniature Frieze (338–349).
- Plate 31. Marsh elements in the Miniature Frieze (350–362).
- Plate 32. Marsh elements in the Miniature Frieze (363–379).
- Plate 33. Marsh elements in the Miniature Frieze (380–392).
- Plate 34. Marsh elements in the Miniature Frieze (393–404).
- Plate 35. Marsh elements in the Miniature Frieze (405.1–416).
- Plate 36. River and plants in the Miniature Frieze (417–426).
- Plate 37. River and plants in the Miniature Frieze (427–435).
- Plate 38. River and plants in the Miniature Frieze (436–446).
- Plate 39. River and plants in the Miniature Frieze (447–454.1).
- Plate 40. Sea and land in the Miniature Frieze (455–462).
- Plate 41. Sea and land in the Miniature Frieze (463–473).
- Plate 42. Sea and land in the Miniature Frieze (474–484).
- Plate 43. Sea and land in the Miniature Frieze (485–495.1).
- Plate 44. Sea and land(?) in the Miniature Frieze (496–502).
- Plate 45. Sea in the Miniature Frieze (503–512).
- Plate 46. Sea in the Miniature Frieze (513–523).
- Plate 47. Sea in the Miniature Frieze (524–531).
- Plate 48. Sea in the Miniature Frieze (532–539).
- Plate 49. Sea in the Miniature Frieze (**540–552**).
- Plate 50. Sky in the Miniature Frieze (553–562).

LIST OF PLATES xxiii

Plate 51.	Sky in t	he Miniature	Frieze	(563 - 575)	
-----------	----------	--------------	--------	-------------	--

- Plate 52. Plant Panel fragments: Bramble and Myrtle (611–622).
- Plate 53. Plant Panel fragments: Bramble and Myrtle (623–636).
- Plate 54. Plant Panel fragments: Bramble and Myrtle (637–646).
- Plate 55. Plant Panel fragments: Bramble and Myrtle (647–658).
- Plate 56. Plant Panel fragments: Bramble and Myrtle (659–668).
- Plate 57. Plant Panel fragments: Bramble and Myrtle (669–674).
- Plate 58. Plant Panel fragments: Bramble and Myrtle (675–682).
- Plate 59. Plant Panel fragments: Bramble and Myrtle (683–692).
- Plate 60. Plant Panel fragments: Reeds with Red Stream (693–703).
- Plate 61. Plant Panel fragments: Reeds and Grasses (704–715).
- Plate 62. Plant Panel fragments: Grasses and Leaves (716–728).
- Plate 63. Plant Panel fragments: Leaves (729–745).
- Plate 64. Miscellaneous fragments (930–950).
- Plate 65. Miscellaneous fragments (951–959).
- Plate 66. Miscellaneous fragments of bands (960–963).
- Plate 67. Miscellaneous fragments of bands (964).
- Plate 68. Cross sections of painted plaster samples.
- Plate 69. Planning stages of the painting process (Miniature Frieze: a, b, g; Plant Panels: c–f).
- Plate 70. Application and preservation of paints on fragments with heads (women: a, b; men: c–h).
- Plate 71. Application and preservation of paints (Miniature Frieze: a–g; Plant Panels: h–j).
- Plate 72. Chart of colors produced by drawing with pigments found at Ayia Irini.
- Plate 73. Some of the pigments found at Ayia Irini.
- Plate 74. Pigments from Ayia Irini and photos from their possible source, the Trypospilies ocher mine in northern Kea.

#### **Preface**

This book presents the results of my study of the wall paintings from the Northeast Bastion at Ayia Irini, situating them within the wider social context of the island of Kea and the Aegean world. Like the spectacularly well-preserved town of Akrotiri on Thera, with which these paintings are contemporary, Ayia Irini thrived three-and-a-half-thousand years ago. But unlike Akrotiri, Ayia Irini was not protected by a layer of volcanic ash. When the site was excavated, the paintings had long since collapsed, fracturing into thousands of small pieces and becoming mixed with stones, broken pottery, and accumulated debris. This study attempts to bring the wall paintings back to life through the best-preserved fragments. Within the Northeast Bastion was a miniature frieze and, in the adjacent room, large-scale panels of plants. Human action set within townscapes, landscapes, and the sea presents a vivid account of the social life and environment of the people for whom this harbor town was vital within the trading network of the time. In this book I explore the social implications of the fascinating and often unique iconography, whose setting within a fortification wall is quite extraordinary.

Ayia Irini, excavated by the University of Cincinnati under the auspices of the American School of Classical Studies at Athens in the 1960s–1970s, was a small but crucially important settlement. "Kea" (Τζιά in demotic Greek) is the modern name of the island. "Keos" is the Classical name and the form used in the series title of the excavation reports. What the island was called during the Bronze Age is unknown. The wall paintings from Ayia Irini were first studied by Katherine Abramovitz Coleman and presented in her doctoral thesis and two articles. In the 1980s, Elizabeth Schofield, then director of the site, invited me (along with

<sup>1</sup> Coleman 1970, 1973; Abramovitz 1980. She wrote under her married name (Coleman) in the 1970s and subsequently under her maiden name (Abramovitz).

the late Ellen Davis) to work on the wall paintings for final publication. As my focus I chose the Northeast Bastion.<sup>2</sup>

In the way of large projects, this book has a history, yet longer and more layered than some. I began work in the mid 1980s with several summers of fieldwork on the island, during which time the study drawings, drafts of the reconstructions, and the photographs were undertaken. Teaching and other projects then intervened, as did the captivating childhood of my son. Such an enormous undertaking as this needed a focused period of work to bring it to a conclusion. It was not until 2007 that I was ready to resume work on Kea. Photographs and drawings were digitized, graphic editing was started, and in the ensuing years I developed and painted new reconstructions—visualizations, as I prefer to call them—in the midst of the long process of writing. By the time it was all finished, preparation of the book had taken more than ten years of concentrated work spread over a period of three decades.

The book is organized in three main parts, preceded by a prologue, which provides the framework for what follows, and followed by an epilogue, which draws some broad conclusions.

The Prologue defines my methodology, both in the intellectual journey that leads to interpretation, and, more briefly, in the process of reconstructing fragments into pictures. The first part defines my approach to contextual analysis within the framework of reflective awareness. The central precept is the symbiotic relationship between wall paintings, architecture, and human action and response. Through their structure and context, images play a role in sociocultural memory. Following these underlying principles, I attempt to situate my own intellectual development and theoretical positions that led to the method of iconographic interpretation that I practice, delineating how the structure of the book reflects the process of interpretation and chronicling the path that led from fragments to the visualization of scenes.

Part I sets the scene physically and culturally. Chapter 1 (which stands alone) situates the wall paintings within their geographic, sociological, and architectural contexts, raising the central issues of "Minoanization," interisland trade, and cultural dynamics, looking at the structure of the town of Ayia Irini, then focusing on the Northeast Bastion and the archaeological, architectural, and chronological contexts of the wall paintings (Figs. 1.1–1.7; Table 1.1). The chapter ends with a summary of the other paintings from the site, situating them in relation to those from the Northeast Bastion in terms of date and content.

Part II forms the core of the book with the presentation and discussion of the wall paintings. The first section deals with the Miniature Frieze; the second, shorter section deals with the Plant Panels. Each chapter ends with a summary, for ease of reference. The various elements of a painting are, of course, inextricably interconnected, yet from an archaeological position and through an iconographer's lens, in aiming to understand the culture through the texts of its images it is necessary to analyze those elements before interpreting the whole. As such, prior to presenting the visualizations of the scenes, Chapters 2–6 examine the individual elements of the Miniature Frieze—human figures, vehicles, buildings, animals, landscape—discussion being followed by the respective catalogs (see Figs. 2.1–6.2;

<sup>2</sup> Preliminary publications: Morgan 1990, 1995b, 1998, 2013; Marinatos and Morgan 2005. Ellen Davis, sadly, died before she was able to complete her work on the Ayia Irini paintings, which focused on House A. In a preliminary article she discussed the brushwork of fragments from House A and Building M (Davis 2007). Publication of the paintings of Ayia Irini outside the Northeast Bastion will follow future study. An overview of their contents is given in Chapter 1, pp. 38–40, based on a survey of the material that we undertook in the 1980s.

PREFACE xxvii

Pls. 1–51). The human figures have been given precedence as Chapter 2, since human figures drive the narrative and define the "social." It is figures—their gestures, clothing, actions, and interactions—that vividly reveal the social life of the time. Vehicles and buildings (Chs. 3, 4) are structures that shape aspects of human action and signal status, place, and occasion, as, in different ways, do animals (Ch. 5). Landscape (Ch. 6) provides the environmental context for the action, is crucial in setting the scene, and establishes the threads that link and separate the scenes. Landscape also occurs as a subject in itself, and its importance for establishing meaning within the paintings cannot be underestimated. By far the largest number of fragments are of land and sea. It was in this order that I studied the fragments, since how the environment holds everything together only becomes clear after seeing what surrounds the individual elements, thereby enabling one to bring pieces together into compositions.

Chapter 7, "Visualizing the Past," brings together the various elements of the Miniature Frieze in considering composition. Here, 25 illustrations (Figs. 7.1–7.25) are offered as visualizations of how parts of the paintings might have looked, each discussed in some detail. They range from single fragments of figures, through small groups of figures or buildings, to large scenes such as the Town by a River, Cauldrons and Ships Scene, Men by a River, Deer and Dogs, the Marsh, and the Rocky Landscape. Each illustration distinguishes the fragments from the reconstruction and is accompanied by a visual record of those fragments used. "Cauldrons and Ships with Rocky Landscape" (Fig. 7.26) brings together two of the scenes in a watercolor painting that suggests how the action may have been integrated in its setting. In "A View of the Room of the Miniature Frieze" that follows, a visualization of how room N.20 might have looked is presented, and suggestions are made for how the various scenes are likely to have been related to one another (Figs. 7.27, 7.28). The concluding part of the chapter considers how the frieze might have been situated on the walls and what form of narrative structure might have been in play.

In Chapter 8, the focus shifts to the Plant Panels of room N.18, located adjacent to the room with the Miniature Frieze. The paintings are first considered within their architectural setting, followed by individual consideration of the Bramble and Myrtle and the Grasses and Leaves (Pls. 52–63). Significance of the plants from a social perspective is central to the discussion. In a somewhat different order from the chapters on the Miniature Frieze in Part IIA (in which the visualizations form a separate chapter), the discussion is followed directly by presentation of the eight illustrations reconstructing sections of the Plant Panels (Figs. 8.1–8.8), along with a visualization of how the room might have looked (Figs. 8.9, 8.10), followed by the catalog.

Miscellaneous fragments not included in the previous chapters are cataloged in Appendix A (Pls. 64-67).

Part III is about the process of production of the wall paintings. In Chapter 9, "Materials, Techniques, and Pigments," the constituents and application of plaster are examined (Pls. 68–74), the long-standing debate on *fresco* versus *secco* technique is aired and some conclusions are offered.<sup>3</sup> The pigments used in the paintings are then discussed, based in particular on the results of the analyses

<sup>3</sup> The appellation "Fresco" for specific Aegean paintings (as in "Procession Fresco," "Spring Fresco") has been retained in this book only because it is now part of the common language of Aegean studies.

of Vassilis Perdikatsis (App. B and Table B.1) and related to what is known of the use of pigments in contemporary sites. The chapter ends with comments on some pieces of ocher found on the site.

Chapter 10, "Color and Artistic Performance," offers insights into the process of painting and the choices made by the artists as they built the images. It begins with a discussion on the important issue of color; then it examines the planning of the scenes through guide lines and organization of the surface of the wall, the sequence in which the paints were applied, and the use of colors in creating the composition (Figs. 10.1, 10.2).

Part IV, "Paintings as Cultural Signifiers," broadens the perspective to examine the implications of my analysis of the wall paintings in terms of the wider Aegean world and social context. Chapter 11, "Intercultural Connections," begins with an inquiry into the phenomenon of miniature paintings in the Aegean, focusing on the relationship of paintings to architectural space in an attempt to understand the functions of the rooms in the different locations in which miniature paintings occur (Figs. 11.1–11.6). This is followed by a review of craft and iconography as discussed in the book, here focusing on what they reveal about intercultural relations. The broad picture of interrelationships in the Aegean is then examined, revealing insights into the crucially significant social role of miniature paintings. This is followed by thoughts on the artists of the Ayia Irini paintings, along with the elusive question of commission, and what it was that gave rise to the building of the Northeast Bastion with its rich iconographic cycle.

Chapter 12, "Feasts, Festivals, and Social Context," builds on this investigation to focus on the social significance of the wall paintings. The importance of feasts and festivals in the social dynamics of the ancient world and the allusive nature of the iconography of feasting provide a conceptual framework for interpreting the cumulative evidence of wall paintings, architecture, artifacts, and cultural geography at Ayia Irini (Figs. 12.1–12.3). The socially cohesive role of feasts, festivals, and gift exchange at Kea is considered in terms of the broader network of Aegean Bronze Age relations.

In the Epilogue, "Wall Paintings and Memory," the wall paintings in their social context are seen as a catalyst and chronicler of elite cohesion and as a stimulus for sociocultural memory.

This is a long book, in which presentation of new material is combined with discussion and ideas of interest to a wider audience. Much of the central part of the book is for specialist reading, which those who are interested will explore. Those who wish to follow the intellectual journey are referred to the Prologue; those concerned with the visualizations will find explanatory text in the Prologue and Chapters 7 and 8. For those who want the crux of the matter, I recommend the following: Part I, Chapter 1, which sets the scene; the summaries at the end of each of the analytical chapters on the wall paintings in Parts II and III, along with the illustrations in Chapters 7 and 8; and Part IV, which broadens the discussion, situating the paintings in terms of intercultural connections (Ch. 11) and social context (Ch. 12 and the Epilogue).

Illustrations are presented as photographs, drawings, and paintings, each shown at a specific scale. The plates at the back of the book present the most significant fragments at 1:1 scale, arranged according to subject in the order of the chapters and within each category according to placements within the reconstructions. In the catalogs, photographs of all the fragments included in the book appear at 1:2 scale, paired (in the case of the miniatures) with the study drawings. The visualizations appear at 1:3 in Chapters 7 and 8, the largest scale that would fit

PREFACE xxix

the book page in the case of the larger illustrations. Each is accompanied by outlines of the fragments with their identifying numbers to enable the reader to locate them with ease.

Numbers in bold in the text correspond to the catalog entries and run continuously through the chapters. The contexts of the fragments are given in the catalog entries and in Chapter 7 with the visualizations. Since the methodological approach involves analyzing the elements in the fragments prior to presentation of the visualizations, the figure numbers for Chapter 7 appear in the text of Chapters 2–6 after the catalog number only when the discussion touches on aspects that are clarified through the visualizations.

Concordances A and B list all of the Miniature Frieze fragments studied, ordered, respectively, by context and catalog numbers, accompanied by brief descriptions of their subject matter, plate numbers, and Chapter 7 figure numbers, and an indication of whether the fragment belonged to an edge of the wall paintings. These concordances make it possible for the reader to see at a glance into which (if any) of the visualizations in Chapter 7 a particular fragment has been placed. Concordance C correlates the catalog numbers used in the present work with those of the earlier publications of Abramovitz Coleman.

At the time of writing, the fragments are housed in the storerooms of the Archaeological Museum in Chora on Kea. The painted plasters from the rest of the site, also stored there, are briefly discussed in Chapter 1. It is envisaged that they will be the subject of a future study.

### Acknowledgments

In the way of long projects, there are many who have paved the way, advised, encouraged, and supported me in the process. To all these people, I offer my profound thanks, those listed here and any that I may have inadvertently missed.

The Department of Classics of the University of Cincinnati is the driving force of the Kea publications, and I would like to thank its members and staff for their support, in particular Getzel Cohen<sup>†</sup>, who arranged for the funding of a research assistant, Cecelia Granstrom, who typed my notebooks while I was teaching at the University of Manchester in the 1990s, and William Johnson, Peter van Minnen, and Jack Davis, successive directors of record for the excavations. For financial support of field trips in the 1980s and early 1990s, I am most grateful to Lloyd Cotsen<sup>†</sup> and to the National Endowment for Humanities. Harvard University generously digitized the original photographs in 2007 while I was there as M.A. Willcomb Visiting Lecturer on Ancient Egyptian Civilization. Since 2008, The Institute for Aegean Prehistory (INSTAP) has provided valuable financial support toward the illustrations and field trips, as well as taking on the publication of a book with considerable demands for full color reproduction of images. This is greatly appreciated, both by myself and by the Department of Classics at the University of Cincinnati. It is thanks to the generosity of Malcolm Wiener and IN-STAP that the book appears in this form.

For facilitating my study in Greece I am indebted to the Greek Archaeological Service and the respective ephors of the Cyclades, Evi Touloupa in the 1980s and Marisa Marthari in the 2000s; to the American School of Classical Studies; and, at the Kea Archaeological Museum in Chora, to Lefteris Lepouras, the chief guard for many years, and in recent years, Eleutheria Morfoniou, Katerina

Mantonanaki, and conservator Eleni Tsiogka. For photography of the plates my thanks go to Craig Mauzy, Marie Mauzy, and Chronis Papanikolopoulos.

For interesting discussions, helpful information, and encouragement, I am happy to thank Erhan Acar, Manfred Bietak, Aliki Bikaki,† John Bennet, David Blackburn, Christos Boulotis, Hariclia Brecoulaki, Cyprian Broodbank, Miriam Caskey, Joanne Cutler, Oliver Dickinson, Christos Doumas, Emily Egan, Susan James, Robert Koehl, Xenia Kravchenko, Toula Marketou, Marisa Marthari, Marco Massetti, Christine Morris, Wolf-Dietrich Niemeier, Irini Papageorgiou, Mark Peters, Ingo Pini, Lefteris Platon, Stephen Quirke, Joanna Rees, Joseph Shaw, Maria Shaw, Iris Tzachili, Andreas Vlachopoulos, Peter Warren, Irene Winter, and James Wright. For permission to reproduce the Thera miniature paintings, I am grateful to Christos Doumas.

For their perceptive comments and "bird's-eye view," I am most grateful to the anonymous readers for INSTAP. For their constructive comments on the manuscript my thanks go to Anne Chapin, Jack Davis, Iphigenia Tournavitou, and Doan Morgan Vassaf. For their helpful comments on chapters, I am grateful to Rodney Fitzsimons and Evi Gorogianni (Ch. 1), Joost Crouwel (Ch. 3), Richard Jones, Effie Photos-Jones, and Vassilis Perdikatsis (Chs. 9, 10), Nanno Marinatos (reconstructions and discussions), and Clairy Palyvou (Ch. 4 and reconstructions).

All thanks are special, but some go deep into the fabric of the work: special thanks to John Caskey† for his encouragement when I visited Ayia Irini as a student in the 1970s; to Elizabeth Schofield† for inviting me in the 1980s to work on the paintings from Ayia Irini; to Jack Davis as long-time Kea friend; to Stella Bouzaki for paving the way through her expert conservation; to Ellen Davis<sup>†</sup> with whom I started the study of the Kea wall paintings; to Lefteris Lepouras for his indispensable support at the Chora Museum; to Evi Gorogianni and Rodney Fitzsimons for lively discussions and navigation around the Northern Sector; to Carol Hershenson for information from the Kea Archives and her unflagging enthusiasm; to Rosemary Robertson for the maps, her skilled graphic editing and understanding of how to utilize the original drawings, and the photograph of the Brittany feast; to Stuart Laidlaw<sup>†</sup> of the Institute of Archaeology in London for generously sharing his expertise and his incredible patience with graphic editing in the light of the seemingly endless revisions I made to the illustrations; to Nicola Math for miraculously generating virtual rooms from my imaginings and to Clairy Palyvou for her architectural advice; to Philip Betancourt, Malcolm Wiener, and the Institute for Aegean Prehistory for their generous, invaluable support; and for their patience and considerable expertise, to Priscilla Keswani (copyeditor), Hilary Sperling and Molly Kaplan (designers), and to my editors Susan Ferrence and Sarah Peterson at INSTAP Academic Press.

Finally, I give my heartfelt thanks to Gündüz Vassaf and our son Doan Morgan Vassaf, who have lived with my Kea project for longer than any of us could have imagined.

## List of Abbreviations

avg.	average	LH	Late Helladic
ca.	approximately	LM	Late Minoan
cat.	catalog	m	meter(s)
cm	centimeter(s)	MBA	Middle Bronze Age
CMS	Corpus der minoischen und	MC	Middle Cycladic
	mykenischen Siegel	MM	Middle Minoan
col.	color	m asl	meters above sea level
EC	Early Cycladic	no(s).	number(s)
EDX	energy dispersive X-ray analysis	opp.	opposite
esp.	especially	SEM	scanning electron microscopy
frag.	fragment	SEM-EDX	scanning electron microscopy-energy
km	kilometer(s)		dispersive X-ray analysis
H.	height	th.	thickness
LB	Late Bronze	TT	Theban Tomb
LBA	Late Bronze Age	W.	width
LC	Late Cycladic	XRD	X-ray powder diffraction