

**BRONZE AGE AEGEAN RITUAL WATERCRAFT IMAGERY:  
AN ICONOGRAPHIC ANALYSIS**

by

Jacquelyn C. Hewett

May 2022

Director of Thesis: Dr. David Stewart

Major Department: Program in Maritime Studies of Department of History

The importance of watercraft to the Bronze Age Aegeans is undeniable, especially in terms of subsistence and maritime exchange. A relatively understudied aspect, however, is their importance relating to religious rituals. The study of these ritual watercraft is limited to iconography, but that does not diminish their analytical potential. This research, therefore, aims to better understand a particular subset of Bronze Age Aegean watercraft imagery. Twelve linear and glyptic images from Crete, Akrotiri, and the Greek mainland dating from roughly 1700 to 1100 B.C. have been selected for this study. Utilizing prehistoric iconographical analysis, these images not only meet this study's criteria of classifying attributes depicting ritual ship imagery, but also comprise a subcorpus of images depicting a unified iconographic theme of a female figure and tree in a boat. After comparing this subcorpus to Near Eastern Bronze Age imagery and textual evidence dating roughly 2300 to 1000 B.C., this study suggests that the referent in these Aegean images is an important Aegean deity with qualities similar to the Levantine goddess identified as Asherah in the Iron Age. The implications of this study lead to a more well-rounded understanding of the elites who promoted the iconography of this Aegean deity.



**BRONZE AGE AEGEAN RITUAL WATERCRAFT IMAGERY:  
AN ICONOGRAPHIC ANALYSIS**

A Thesis

Presented to the Faculty of the Program in Maritime Studies of Department of History

East Carolina University

In Partial Fulfillment of the Requirements for the Degree

Master of Arts in Maritime Studies

by

Jacquelyn C. Hewett

May 2022

© Jacquelyn C. Hewett, 2022

**BRONZE AGE AEGEAN RITUAL WATERCRAFT IMAGERY:  
AN ICONOGRAPHIC ANALYSIS**

By

Jacquelyn C. Hewett

APPROVED BY:

Director of Thesis

---

David Stewart, Ph D.

Committee Member

---

Helen Dixon, Ph D.

Committee Member

---

Nathan Richards, Ph D.

Chair of the Department of History

---

Jennifer McKinnon, Ph D.

Dean of the Graduate School

---

Paul J. Gemperline, Ph D.

## ACKNOWLEDGEMENTS

There are several people who have my utmost gratitude for their assistance on this journey. First and foremost, my thesis director and mentor, Dr. David Stewart, deserves special recognition. I will always be grateful for his knowledge, guidance, and attention to detail, as well as organizing the study abroad to Crete which provided the opportunity for me to personally visit Minoan sites. I am also extremely grateful to my committee members, especially Dr. Helen Dixon's guidance and enthusiasm for my topic, as well as the skills and expertise Dr. Nathan Richards brings to every project. A big thank you goes out to the remaining faculty and staff of the Maritime Studies Program, who have graciously imparted their wisdom.

Thank you to my cohort and classmates who have provided support in and out of the classroom, including many fond memories of friendship. Mackenzie, Bethany, Tyler, Will, and Amelia – thank you for freezing on quarry dives, braving the insects of Portsmouth, jazz walking at Kommos, and everything in between.

Special thanks goes to both Shawn Jessup and my friends at the Charles H. Stone Memorial Library in Pilot Mountain who were kind enough to give me quiet places to study, research, and write during the pandemic.

Last but not least, I thank my family, without whom I would not have been able to complete this research. Thank you to my parents for their unconditional love, support, and confidence. Thank you to my mother-in-law and grandmother-in-law for giving me the time and space I needed to focus. Many thanks to my loving husband, Bradley, who has always been my rock, 我爱你. And a big thank you to my incredible daughters, Eleanor and Josephine, who tried their hardest to get a passport to “thesis-land”. This is for you.

## TABLE OF CONTENTS

ACKNOWLEDGEMENTS .....	iv
LIST OF TABLES .....	x
LIST OF FIGURES .....	xi
CHAPTER ONE: INTRODUCTION.....	1
The Minoans.....	1
Minoan Rituals .....	5
Minoans and the Sea .....	8
Dataset and Research Questions .....	12
Theory and Methodology .....	13
Glossary.....	16
CHAPTER TWO: HISTORY OF RESEARCH.....	20
Overview of Archaeological Research in the Aegean .....	20
Studies of Minoan Religion .....	26
Studies of Minoan Ships .....	33
Conclusion .....	35
CHAPTER THREE: DATASET .....	37
Introduction .....	37
Mochlos Ship Cup .....	41
Mochlos Ring .....	45

Makrygialos Seal .....	48
Candia Ring .....	50
Tiryngs Ring .....	52
Stathatos Seal .....	56
Ring of Minos .....	58
Ship Procession Fresco .....	61
Anemospilia Seal .....	69
Ayia Triada Sealing .....	73
Tsivanopoulos Seal .....	74
Khania Sealing .....	76
Conclusion .....	78
<b>CHAPTER FOUR: LITERATURE REVIEW .....</b>	<b>80</b>
Wedde's Definition of Ritual Ship Imagery .....	80
Mochlos Ship Cup .....	84
Mochlos Ring .....	90
Makrygialos Seal .....	97
Candia Ring .....	102
Tiryngs Ring .....	105
Stathatos Seal .....	111
Ring of Minos .....	115



Ship Procession Fresco .....	118
Remaining Ritual Ship Images .....	128
Conclusion .....	130
CHAPTER FIVE: RITUAL THEORY AND ICONOGRAPHIC METHODOLOGY .....	132
Ritual Archaeology .....	132
Iconography .....	136
Conclusion .....	145
CHAPTER SIX: ICONOGRAPHIC ANALYSIS.....	147
Defining the Theme .....	147
Nonsalient Features.....	149
Landscape .....	149
Floating Objects .....	150
Classifying Attributes .....	152
<i>Akrostolia</i> , Stern Device, and <i>Ikria</i> .....	153
Ship Decorations, Nonsalient.....	158
Paddling .....	163
Ritual Gestures and Clothing .....	164
Identifying Attributes .....	175
Trees .....	177
Added Decorative Motifs .....	179

Fantastical Hulls .....	184
Human Figures .....	186
Identification of the Theme .....	186
Interpretation of the Theme .....	189
Mesopotamia .....	194
Inanna .....	194
Ishtar .....	201
The Levant .....	204
Anat .....	206
Astarte .....	210
Asherah .....	215
Future Research .....	227
Conclusion .....	229
CHAPTER SEVEN: CONCLUSION .....	231
Review .....	231
Inanna-Ishtar or Asherah? .....	237
Implications for Minoan Ritual Imagery .....	241
Suggestions for Future Research .....	243
Final Thoughts .....	244
REFERENCES CITED .....	247



## LIST OF TABLES

TABLE 1.1. Comparison of Near Eastern chronology and Cretan chronology .....	5
TABLE 3.1. Overview of dataset .....	41
TABLE 3.2. Ship Procession fresco ship decoration information .....	68
TABLE 6.1. An overview of the motifs depicted in each image .....	149
TABLE 6.2. An overview of the images with classifying attributes .....	153
TABLE 6.3. An overview of the images with identifying attributes .....	176
TABLE 6.4. An overview of the images with salient motifs .....	177
TABLE 6.5. Overview of goddesses mentioned in iconographical analysis .....	193

## LIST OF FIGURES

FIGURE 1.1. Relative chronology of Crete .....	3
FIGURE 1.2. Map of the Aegean Sea .....	18
FIGURE 1.3. Map of the Near East .....	19
FIGURE 3.1. Unrolled frieze of the Mochlos Ship Cup .....	41
FIGURE 3.2. Photograph of the Mochlos Ship Cup .....	42
FIGURE 3.3. Photograph of the Mochlos Ring .....	45
FIGURE 3.4. Drawing of the Makrygialos Seal .....	48
FIGURE 3.5. Photograph of the Candia Ring .....	50
FIGURE 3.6. Photograph of the Tiryns Ring .....	52
FIGURE 3.7. Drawing of gold ring from Tiryns, CMS I, 179 .....	53
FIGURE 3.8. Drawing of the Stathatos Seal .....	56
FIGURE 3.9. Photograph of the Reproduction of the Ring of Minos .....	58
FIGURE 3.10. Drawing of the Ship Procession Fresco, Left Side .....	61
FIGURE 3.11. Drawing of the Ship Procession Fresco, Right Side .....	61
FIGURE 3.12. Color Photograph Detail of Ship 614, Ship Procession Fresco .....	61
FIGURE 3.13. Drawing of the Anemospilia Seal .....	69
FIGURE 3.14. Photograph of the Anemospilia Seal .....	69
FIGURE 3.15. Carnelian lentoid sealstone, CMS VS1B, 058 .....	72
FIGURE 3.16. Agate half cylinder sealstone, CMS V, 672 .....	73

FIGURE 3.17. Drawing of the Ayia Triada Sealing .....	73
FIGURE 3.18. Drawing of the Tsivanopoulos Seal .....	75
FIGURE 3.19. Drawing of the Khania Sealing .....	77
FIGURE 4.1. Sealing from Phaistos, CMS II-5, 245.....	82
FIGURE 4.2. The “Temple Repository” Sealing .....	82
FIGURE 4.3. Sealing from Pylos, CMS IS, 193 .....	83
FIGURE 4.4. Agate Seal from Knossos, CMS VS1A, 075 .....	87
FIGURE 4.5. Fragment of the Epidauros Rhyton .....	89
FIGURE 4.6. Four-sided Prism, Example of CHIC 040, CMS II-6, 178.....	89
FIGURE 4.7. Gold Ring from Pylos, CMS I, 292.....	99
FIGURE 4.8. Ivory Pyxis from Mochlos .....	105
FIGURE 4.9. Black steatite seal, CMS VI, 468.....	107
FIGURE 4.10. Ivory Half Cylinder Seal from Knossos .....	110
FIGURE 4.11. Sealing from Knossos, CMS II-8, 135 .....	122
FIGURE 4.12. Gold Ring from Kalyvia, CMS II-3, 114 .....	124
FIGURE 4.13. Pear-shaped Rhyton from Candia .....	124
FIGURE 4.14. Gold Ring from the Griffin Warrior Tomb, Pylos .....	130
FIGURE 6.1. Gold Ring from Archanes .....	151
FIGURE 6.2. Shield Ring Sealing, CMS II-6, 002.....	152
FIGURE 6.3. Gold Shield Ring from Khania, CMS VI, 278 .....	152

FIGURE 6.4. Detail of Ships 613 and 614, Ship Procession Fresco .....	154
FIGURE 6.5. <i>Ikrion</i> Fresco from Room 4, West House, Akrotiri .....	156
FIGURE 6.6. Offering Table from Room 5, West House, Akrotiri .....	156
FIGURE 6.7. Steatite Lentoid Seal, CMS XII, 264.....	157
FIGURE 6.8. Detail of a Chlorite Rhyton from Kato Zakros .....	160
FIGURE 6.9. Detail of Ship 613, Ship Procession Fresco .....	161
FIGURE 6.10. Detail of the model ship of the Ayia Triada sarcophagus .....	162
FIGURE 6.11. Detail of Ship Fresco from Room 64, Palace of Nestor, Pylos .....	162
FIGURE 6.12. Reconstruction of Ship Fresco from Agia Irini, Kea .....	163
FIGURE 6.13. Bronze Figurine .....	165
FIGURE 6.14. Gold Ring from Knossos, CMS VI, 281 .....	165
FIGURE 6.15. Detail of Two Women in the Ship Procession Fresco .....	166
FIGURE 6.16. Shield Ring Sealing from Knossos, CMS II-8, 256 .....	167
FIGURE 6.17. Gold Ring from Poros .....	168
FIGURE 6.18. Gold Ring from Thrace, CMS XI, 028.....	168
FIGURE 6.19. Agate Sealstone from Naxos, CMS V, 608.....	168
FIGURE 6.20. Clay Sealing from Ayia Triada, CMS II-6, 013 .....	169
FIGURE 6.21. Clay Sealing, CMS II-6, 026 .....	170
FIGURE 6.22. Steatite Seal from Knossos, CMS II-3, 008 .....	171
FIGURE 6.23. Detail of Short Side of Ayia Triada Sarcophagus .....	172

FIGURE 6.24. Gold Ring from Anthia, CMS VS1B, 137 .....	173
FIGURE 6.25. Steatite Seal from Central Crete, CMS II-4, 055.....	173
FIGURE 6.26. Carnelian Amygdaloid Sealstone, CMS III, 339.....	174
FIGURE 6.27. Carnelian Triangular Prism Sealstone, CMS XI, 020a .....	175
FIGURE 6.28. Steatite Seal, CMS II-3, 327.....	175
FIGURE 6.29. Rock Crystal Lentoid Seal from Idaean Cave, CMS II-3, 007.....	178
FIGURE 6.30. Sardonyx Lentoid Sealstone, CMS V, 184a .....	180
FIGURE 6.31. Detail of Fresco, Room 3, Xeste 3, Akrotiri .....	180
FIGURE 6.32. Painted Amphora from Tylissos .....	183
FIGURE 6.33. Akkadian Cylinder Seal from Mesopotamia Depicting Inanna .....	196
FIGURE 6.34. Akkadian Cylinder Seal from Mesopotamia Depicting Inanna .....	196
FIGURE 6.35. Akkadian Cylinder Seal from Mesopotamia Depicting Inanna .....	197
FIGURE 6.36. Neo-Sumerian Cylinder Seal from Mesopotamia Depicting Inanna .....	197
FIGURE 6.37. Old Babylonian Cylinder Seal from Mesopotamia Depicting Inanna .....	197
FIGURE 6.38. Late Uruk-Jemdet Nasr Cylinder seal from Tell Billa, Mesopotamia .....	199
FIGURE 6.39. Mural Painting from Palace of King Zimri-Lim at Mari .....	204
FIGURE 6.40. New Kingdom Stela from Egypt Depicting Anat .....	209
FIGURE 6.41. Ugarit Ivory Panel from Ras Shamra Depicting Anat or Asherah .....	209
FIGURE 6.42. Stela from Minya, Egypt Depicting Astarte .....	213



FIGURE 6.43. Gold pendant from Minet el-Beida	
Depicting Astarte, Anat, Qedeshet, or Asherah .....	213
FIGURE 6.44. Winchester Stela from Egypt Depicting Anat-Astarte-Qedeshet .....	218
FIGURE 6.45. Gold Pendant from the Uluburun Shipwreck Likely Depicting Asherah .....	219
FIGURE 6.46. Seal from Lachish Likely Depicting Asherah .....	220
FIGURE 6.47. Gold Pendant from Ugarit Likely Depicting Asherah .....	221
FIGURE 6.48. Gold Plated Bronze Figurine Ugarit Likely Depicting Asherah .....	222
FIGURE 6.49. Bronze Figurine from the Uluburun Shipwreck Likely Depicting Asherah .....	222
FIGURE 6.50. Ceramic Ewer decorations from Lachish .....	224
FIGURE 6.51. Chlorite Cylinder Seal from Tel Batash .....	224
FIGURE 6.52. Figurine from Revadim Likely Depicting Asherah .....	225

## CHAPTER ONE: INTRODUCTION

The impetus for this study began with a longstanding interest in Minoan culture and iconography. A small group of Minoan images depicting a tree in a boat was particularly intriguing to me, especially because full grown trees are not often depicted in boats in maritime contexts. Interpretations of these images range from an emblematic copy of an Egyptian motif from the *Book of the Dead* to an elaborate mythological scene involving a goddess transporting a sacred tree to a coastal sanctuary by means of her magical boat (Sourvinou-Inwood 1989:97; Davaras 2004:4). Unfortunately, it is difficult to offer much other than speculation since the subcorpus is so small. The three motifs depicted together is limited to only two contemporaneous artifacts discovered in Mochlos and Makrygialos. This study, consequently, aims to better understand these two images in conjunction with the remaining images selected for this study by suggesting that ritual ship images with related iconographic motifs would have been included in the same overall scheme to an emic viewer. Furthermore, any potential meaning cannot be derived from the images alone. In order to facilitate an understanding of the meaning behind these images, therefore, this study will also utilize a method in the study of prehistoric iconography that compares the images and textual evidence of cultures that were in contact with the Minoans from roughly 2300 to 1100 B.C..

### **The Minoans**

Early settlements on Crete demonstrate that Minoan culture extends as far back as the Neolithic, and possibly even earlier during the Pleistocene, especially at Knossos as evident during the first habitation layers (ca. 7000-3100 B.C.). The Early Bronze Age, or Early Minoan I-IIB (EM I-IIB) period on Crete (3100-2000 B.C.), is initially characterized by an influx of

foreign settlers and trade to Crete, followed by the marked interregional flow of goods and the beginnings of social hierarchy (Watrous 1994:699,703-705; Wilson 2008:98-99). In the next phase of Minoan culture from EM III to Middle Minoan IA (MM IA) (2000-1900 B.C.), the major urban centers of Knossos and Phaistos significantly developed; the first script, termed Cretan Hieroglyphics, appears at Phaistos; and concrete evidence for direct and continuing contact with the eastern Mediterranean exists (Manning 2008:110). Beginning in MM IA, Minoan maritime exchange increasingly reached farther than the Aegean, with evidence of contact with the Near Eastern in addition to Egyptian contacts established in the Early Bronze Age (Watrous 1994:749; Manning 2008:115). The first “palaces”, or large complexes for communal gatherings which later developed into central administrative sites, were built in the next phase from MM IB to MM II (1900-1850 B.C.). Beginning in this period, state-level polities maintained their own spheres of influence over ideology, economics, and culture, and complex regional and foreign trading networks were strengthened (Manning 2008:111).

Following the fire destruction levels at the end of MM II (1850-1720 B.C.), the Minoans shifted from decentralized to centralized administration with Knossos at the top and smaller “palatial” sites with secondary and tertiary regional control beginning in the MM III period (1720-1650 B.C.) (Younger and Rehak 2008b:177). This centralized administration reflected extreme social stratification, with the palatial elite likely maintaining economic and religious control over Crete (Marinatos 2010; Younger and Rehak 2008b:178). Despite the management of Knossos, analysis of ceramics reveals distinct regionalism in production and distribution relating to geographic boundaries, suggesting that local cultural practices were also preserved (Oddo 2019:20-22). The elite Minoans also maintained complex trading networks, and even extended their administrative and cultural influences into the Cyclades and Anatolia. This period, deemed the Neopalatial or

New Palace period (Figure 1.1), is considered the apex of Minoan civilization, and comes to an end at the close of the Late Minoan IB (LM IB) period (1525-1450 B.C.) with significant destruction events occurring at every major site except for Knossos (Younger and Rehak 2008a:140).

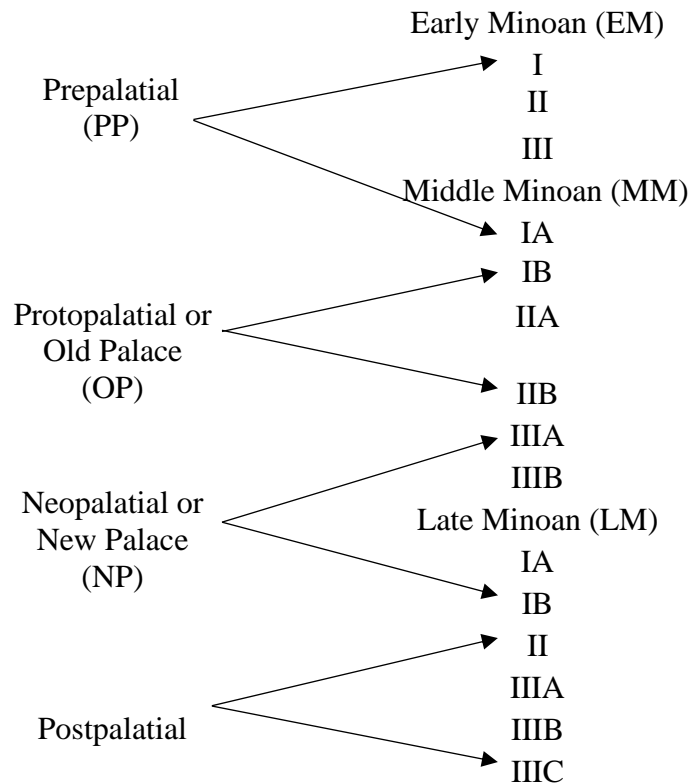


FIGURE 1.1. Relative chronology of Crete (adapted from Kyriakidis 2005a:3).

It is at this point, beginning around the LM II period (1450-1400 B.C.), that an elite group with Greek “mainland-derived cultural practices” assumed administrative control of Knossos, and therefore Minoan Crete (Preston 2008:312). This group has been traditionally labeled Myceneans after the mainland site at Mycenae, but may not have been as ethnically distinct as scholars once believed. These distinctions were initially created from over-simplified

cultural boundaries drawn from correlations of artifact and language groupings (Preston 2008:311-312). The elites at Knossos maintained relative power in Mycenaean-controlled Crete until about 1400 B.C., when secondary sites like Ayia Triada and Khania increased in wealth (Preston 2008:316). During LM IIIB (1315-1190 B.C.), Khania became the most prominent urban center on Crete, with evidence of extensive trading and the only known Linear B archive of the period. The collapse of the Minoan civilization is generally dated to around 1190 B.C., though it did not occur simultaneously throughout the island. Across the Aegean and Mediterranean at this time, sites were destroyed or abandoned, with some relocated to naturally defensible positions (Preston 2008:318). This ultimate collapse coincides with the end of the Late Bronze Age, approximately 1070 B.C., and ushers in the Greek Protogeometric period (ca. 1070-900 B.C.). See Table 1.1 for an overview of the Bronze Age Cretan chronology as compared to Mesopotamia, the Levant, and Egypt.

Year, B.C.	Southern Mesopotamia	Northern Mesopotamia	Levant	Egypt	Crete	Year, B.C.
2200						2200
2100	Third Dynasty of Ur (2168-2050)				EM III (2200-2000)	2100
2000						2000
1900				Middle Kingdom (2116-1795)	MM IA (2000-1900)	1900
1800	Old Babylonian Period (1950-1651)	Old Assyrian Period (2025-1350)	Middle Bronze I (2000/1900-1750)		MM IB (1900-1850)	1800
1700			Middle Bronze II (1750-1650)	2nd Intermediate Period (1795-1540)	MM II (1850-1720)	1700
1600		[Mitannian kingdom (1500-1350)]	Middle Bronze III (1650-1540)		MM III (1720-1650)	1600
1500	Middle Babylonian (Kassite) Period (1651-1157)		Late Bronze I (1540-1400)		LM IA (1650-1525)	1500
1400			Late Bronze IIA, El Amarna (1400-1330)		LM IB (1525-1450)	1400
1300			LB IIB Post-El Amarna (1330-1150)	New Kingdom (1540-1070)	LM II (1450-1400)	1300
1200		Middle Assyrian Period (1350-1000)	LB III/IA IA (1150-1100)		LM IIIA1 (1400-1360)	1200
1100					LM IIIA2 (1360-1315)	1100
1000					LM IIIB (1315-1190)	1000
					LM IIIC (1190-1070)	
1000						1000

TABLE 1.1. Comparison of Near Eastern and Cretan absolute chronology, 2200-1000 B.C. Chronology for Crete follows the low chronology with the Late Bronze Age modified to fit the 1560 B.C. Thera eruption date (Black and Green 1992:22; Shelmerdine 2008:5, Wedde 2000:fig. 4, Manning 2012:23; Sharon 2013:45-62).

### Minoan Rituals

Researchers have identified several features of Minoan religion and rituals that have roots in the Early Bronze Age, beginning with tholos tombs and rectangular house tombs. Evidence for rituals distinct from funerary activities, yet taking place in or around tombs, appears in the

archaeological record around 2600 B.C. These rituals used recurring objects and symbols, such as tripod offering tables, triton shells, bull rhyta, and double axes, and were pervasive throughout Minoan religion for the following 1200 years (Younger and Rehak 2008b:165). Ritual activities are relatively consistent in Minoan culture from the Middle Bronze Age onward. Even with regional differences in phases of ceramic usage, ritual activities are persistent throughout the regions. Many locations and practices central to Minoan ritual activities, such as terracotta and bronze votive offerings at peak sanctuaries, were in use beginning around 1900 B.C. through the Minoan collapse around 1190 B.C. (Rutkowski 1986:12; Younger and Rehak 2008b:165). Ritual practices were intertwined with the general socio-political structure, particularly at Knossos during the height of Minoan power from around 1700 B.C. to 1450 B.C. (Evans 1935; Marinatos 2010). Some ritual objects and prevalent iconography, such as tripod offering tables or marine motifs, were even incorporated into Mycenaean rituals and art after they took control of Knossos around 1425 B.C., though the media or themes were more Mycenaean in style (Rehak and Younger 1998:164; Crowley 2008:279).

As with most agrarian cultures, Early Minoan period rituals seem to have been focused on fertility and the seasonal cycle (Lupack 2012:251; Younger and Rehak 2008b:165). The peak sanctuary on Mount Juktas began to be utilized around the same period, with other peak sanctuaries appearing later around 2200 B.C. These sanctuaries generally do not produce significant architectural finds, with the exception of Juktas, but rather have an abundance of clay votive offerings of human body parts and animals, hinting at ritual activities involving an appeal for assistance in fertility and health. Later, during the Middle and Late Bronze Ages, peak sanctuaries were intimately associated with the large palaces as indicated by their orientations as well as the presence of palatially manufactured goods, for example, suggesting that the social

and administrative elite-controlled aspects of ritual activities (Kyriakidis 2005a:113, 124-127; Lupack 2012:252-253; Rutkowski 1986:11-12; Younger and Rehak 2008b:166).

In the Middle Bronze Age, earlier rituals and places of cult activity persisted with the addition of more diverse sanctuary locations and the adoption of Late Bronze Age standard cult symbols. Cave and domestic sanctuaries began to be used around 2000 B.C., and each likely had different functions. Ritual activities in the former usually took place deep within the caves, whereas the latter sanctuaries were accessible from within buildings as well as exterior courtyards. Cave sanctuaries show evidence of libations and feasting, as well as male and female bronze figurines, suggesting specialized rituals (Lupack 2012:253-254; Marinatos 1993:124). Domestic sanctuaries commonly included a bench altar, libation tables, double axes, horns of consecration, bull and bird objects or images, triton shells, sea pebbles, and animal figurines (Lupack 2012:254-255; Rutkowski 1986:12-14; Younger and Rehak 2008b:165). Additional locations initially used in the Middle Bronze Age are lustral basins in public and private buildings and pillar crypts in public spaces and tombs, both of which contain ritual objects and images, such as bull's head rhyta and double axes (Lupack 2012:257; Rutkowski 1986:15).

The same Minoan general ritual practices and cult symbols and objects of earlier periods continued into the Late Bronze Age. Beginning towards the end of the Middle Bronze Age around 1700 B.C., the expansion and reconstruction at major palatial sites, especially Knossos, in conjunction with the consolidation of peak sanctuaries and the concentrations of artifacts found there, suggests that the main administrative and redistribution centers also maintained religious control (Lupack 2012:255; Marinatos 1993:38, 74-75, 116). Despite this control, there was still diversity among ritual objects, indicating the popularity of local cults, such as the cache of sealings depicting human-animal hybrid creatures found at Zakros during this period (Younger



and Rehak 2008b:165-166, 170). The use of peak sanctuaries, cultic symbols and ritual objects also spread outside of Crete during the Late Bronze Age to the Cycladic islands (Younger and Rehak 2008b:168). Most of the ritual objects found on Crete and elsewhere were portable and usually stored in small rooms. Tripartite shrines, for example, are commonly depicted in religious iconography, but rarely found in the archaeological record. This supports the theories they were either constructed of materials that do not survive deposition, or that they were meant to be temporary, and potentially frequently moved, structures (Lupack 2012:256; Younger and Rehak 2008b:167). Religious iconography in the form of engraved sealstones, rings, ceramics, and frescoes, can provide insight into the locations and activities of rituals as well as the performers or deities, aside from the lack of corroborating evidence for the existence of tripartite shrines. The exact nature of their usefulness is debatable because of artist and interpreter subjectivity, but most researchers nevertheless tend to agree that the images depict at least one goddess central to Minoan religion, if not a larger pantheon (Lupack 2012:258; Marinatos 1993:243; Rutkowski 1986:16-17; Younger and Rehak 2008b:167). Ultimately, most locations and symbols of Minoan religion fell out of use after the Myceneans assumed control Knossos around 1425 B.C. The horns of consecration and double axes, among other symbols, were still commonly used, suggesting some form of ritual continuity after the influx of the Myceneans (Lupack 2012:259-260; Rehak and Younger 1998:164).

### **Minoans and the Sea**

The importance of the sea, as evident in Minoan depictions of ships and marine life, is another facet of Minoan culture that seems to persist throughout their existence. As a result of tectonic activities that formed the Aegean, each island within it had its own unique microclimate

and resources, creating an environment where certain items were only attainable elsewhere, thus facilitating an exchange network reliant on the sea. For example, Crete itself is devoid of the key minerals that drove exchange in the Bronze Age, such as copper, tin, or obsidian, but Aegean sources were readily available. The neighboring Cycladic islands of Melos and Giali have large deposits of obsidian, Kythnos has relatively significant deposits of copper, and Lavrio on the southern tip of Attica is a primary source of silver and lead (Wilson 2008:83, 86; Broodbank 2013:68-69). Counterclockwise current and wind patterns and seasonal variations, prominent natural landmarks of tall, rocky coastlines, and sheltered natural harbors would have greatly aided local navigators in utilizing the Aegean for exchange. The approximately 4,500 miles of coastline in the Aegean results in a peppering of islands in such a way that land would have rarely been out of sight to a navigator (Broodbank 2013:73-75). Additionally, the rocky terrain of the Aegean islands, and especially Crete, would have made routine, intra-island exchange much easier by means of ships (Betancourt 2008:209). This confluence of forces made the Aegean an ideal location in the development of maritime technology.

Consequently, seaborne trade was the main method of both economic and cultural exchange for the Cretan inhabitants at least as early as the Early Bronze Age, if not before. This reliance on, and apparent fascination with, the sea and ships particularly, has been preserved in a diverse array of media, such as frescoes or boat models, in a variety of locations in the Aegean throughout the Bronze Age. Based on the available artifacts, it seems ships held more significance in Minoan culture than purely the economic distribution of goods and services. The intersection of religion and ships is an aspect of the Minoan archaeological record that is present, but rarely studied. Few scholars have provided an in-depth analysis of Minoan ships, and even fewer have analyzed their presence in Minoan religion. One obvious reason for that deficiency is

the lack of preserved Minoan shipwrecks. This dearth should not, however, dissuade researchers from realizing the importance of ships in Minoan culture.

Iconographic evidence for seafaring with paddle driven vessels in the Aegean exists as early as the 3rd millennium B.C., during the Early Bronze Age, from three lead ship models and rock pecking ship depictions from Naxos (Wachsmann 1998:69; Broodbank 2013:327-328). The iconography continues through the Bronze Age, and the first sailing ships of the Aegean are depicted on Cretan seals from around 2000 B.C. (Broodbank 2013:353). The most extensive iconographical evidence for Minoan vessels and an Aegean harbor comes from the ship procession frieze at Akrotiri, dating to before the Thera eruption, which occurred sometime around 1560 B.C. (Pearson et al. 2020:8414). These scenes running along the top register of one room in the West House, are singular in their depictions of 24 vessels of three different sizes under a variety of propulsion methods. The frescoes also uniquely depict the layout and activities of two harbors bookending the procession of ships, giving additional insight into maritime activities of the Bronze Age Aegean (Wachsmann 1998:86; Broodbank 2013:357). Minoan material culture depicting marine life especially flourished in the Late Bronze Age, with detailed depictions of octopuses, argonauts, seaweed, and rippling water on pottery, and was even popular enough to be imitated by potters outside of Crete (Younger and Rehak 2008a:153-154). Additionally, Minoan material culture, sailing vessels, and motifs are depicted on wall paintings in Miletos on the Anatolian coast, Alalakh in Syria, Tel Kabri in Israel, and Thebes in the Late Bronze Age during the height of Minoan influence at Knossos, attesting that the Minoans were part of a complex system of multicultural exchange throughout the eastern Mediterranean, if not the entire Mediterranean (Younger and Rehak 2008a:157).

The iconography of Minoan ships ranges from simple line drawings to elaborate frescoes, from fragmentary to complete models, and from carved stone seals to intricate gold rings. They can be categorized into graphic images, which were drawn or painted on ceramics or walls, ship models in terracotta or metals, and glyptic images, which are small images incised or stamped on stone or metal. Most ship images have been discovered on Crete, and of those, the highest proportion have been glyptic images from the Late Bronze Age (Wedde 2000:14). Graphic depictions have been mostly found in domestic and palatial contexts, as well as cave paintings; ship models have been found at peak sanctuaries, domestic sanctuaries, and within tombs; and glyptic representations have been found relatively indiscriminately in most contexts (Wedde 2000:303-304).

Of the scholars who have studied the ritual function of ships in Minoan society, few have done so in great depth. Most have based their interpretations around a few ship images or one image in isolation. Ignoring the corpus of ship images and the contexts in which they were found can unfortunately lead to potentially biased conclusions. Shelley Wachsmann (1998), Michael Wedde (2000), and Costis Davaras (2004) are a few notable scholars who have successfully created hypotheses regarding ritual ship imagery within a broader scope of Aegean ship iconography. These combined with Lyvia Morgan's (1988) iconographic analysis of the frescoes at the West House in Akrotiri have laid some of the foundations for this study. The lack of comparable interpretations likely stems from the proportionally small number of ship representations in the archaeological record, and even rarer ritual ship imagery. Less than 400 examples of ship imagery have been documented, which is a paltry number compared to the millions of artifacts recovered from Minoan sites, and less than 20 of those 400 examples

possibly relate to maritime rituals. Regardless, the recurrence of ships presented in a context other than economic warrants further study.

### **Dataset and Research Questions**

Ultimately, this study is aimed at better understanding a small subset of images that were produced and used during the Late Bronze Age on Crete and depict a female figure and tree in a boat. Since it is extremely difficult to draw any conclusions on such a small dataset, this study will cast a wider net, so to speak, in order to discover associations that will assist in analysis. Other images that depict related motifs and are considered to represent ritual images, therefore, have been included in this study to attempt more verifiable conclusions. Though the dataset has grown from two to twelve Late Bronze Age Aegean ship images, this subcorpus still constitutes a small sample of Minoan iconography, and so any conclusions can still be subject to review. In order to better understand the female figure and tree in a boat imagery, this study will attempt to answer the following questions:

- Are these images actually ritualistic in nature? Do they depict a religious subject or one considered more economic, political, or militaristic?
- Are the images related to each other iconographically or contextually? What can the iconography or context elucidate about the meaning behind the images?
- Do they relate to other ship images that are not overtly ritual or do they relate to other images in Aegean iconography? If so, how does that affect the underlying meaning of the images?

- How do they fit within the context of Minoan culture or Minoan maritime culture? Can they provide more insight to the Minoan culture or maritime culture of the Late Bronze Age?
- Can cross-cultural comparisons be made with the cultures in contact with Minoans during the Late Bronze Age, specifically those across the Near East? Are there any similar images or textual evidence? What can those comparisons elucidate about the Aegean ritual ship images and how the Aegeans fit within the broader sphere of interconnections in the Mediterranean?

### **Theory and Methodology**

This study utilizes theories in both ritual archaeology and iconography to better understand the selection of Minoan ship images. The repeated depiction of ships in contexts that contain motifs with ritual associations, such as a tripartite shrine, or motifs that are supernatural in appearance, such as the hippocampus-shaped hull, have led scholars to suggest ritual significance for these images (Wachsmann 1998; Wedde 2000; Davaras 2004). These images, therefore, suggest that Minoan ships are not merely engaged in everyday activities, but rather that they are participating in or related to a ritual that reinforced the worldview of the participants. A utilitarian object can be made significant by its constructed relationship to the supernatural world, making contextual clues essential to understanding meaning (Gazin-Schwartz 2001:278). Conversely, ritual can be discerned in prehistoric societies through the observed repetition of specialized objects that were intentionally produced, a designated space for performance, or the depiction of ritual actions (Renfrew 2018:14). One approach is not necessarily more applicable than the other in this study, and so a balanced approach to

interpreting ritual significance in iconography will be utilized. The intent of this study is to understand the relationship Late Bronze Age Minoans had with a set of beliefs involving the supernatural that governed their actions of this world. Any reference to ritual, therefore, does not include habitual practices, especially since the selected images suggest the iconography is depicting actions that are out of the ordinary. Furthermore, this study will not attempt to distinguish between cultic boats, namely those employed in communication with deities and used by religious authorities, and ritual boats, or those depicting a recurrent role of the vessel in specific rites and used by worshippers (Wedde 2000:174). Especially in this instance, strong corroboration of the archaeological record with iconographic depictions is necessary for the identification of Minoan cultic ships. At present, there is not enough evidence to conclude that certain types of ships or images of those types were undoubtedly used in cultic contexts. Until further proof warrants such a label, this study will refer to these depictions as ritual watercraft, ritual ships, or a similar permutation.

As the study of visual subject matter, iconography encompasses both the theory and methodology necessary for understanding the ritual nature of the images in this subcorpus. Cultural conventions dictate the form of the image as well as any meaning behind it, and so images will inevitably have multivalent meaning depending on the artisan's intent or the viewer's own cultural background, for example (Knight 2013:56). A swastika, for instance, is a repeated Minoan motif in wall paintings and textiles, but has markedly different connotations in the post-WWII era (Shaw and Chapin 2016:108-110). Despite intent, representational imagery is inherently some form of symbolic display. It is possible, therefore, to also apply theories of cognitive archaeology to the study of these images (Knight 2013:15). Especially for prehistoric archaeology, iconography provides a unique opportunity to understand the forms of the images

as well as the cultural models that affect the material and imaginative realities of a member of a cultural group (Knight 2013:18-20).

This study will utilize Vernon James Knight, Jr.'s (2013) method for analyzing prehistoric iconography. Knight's method begins by defining an iconographic theme, then using those definitions to identify a subcorpus of images comprised of that theme. The third step involves iconographic analysis, the best method of which for prehistoric societies is to conduct cross-cultural comparisons and historical homology of iconographic and textual evidence. This analysis is meant to create and test an iconographic model, but this study will not take that final step in the process. Knight also details 18 principles in prehistoric iconography that give the researcher the tools and foundations in order to perform analysis. Several principles are integral to this study. In accordance with the first principle, namely that not all representational imagery is art, this study avoids any reference to art, especially due to the subjectivity, aesthetic qualities, and intended functions inherent in the label (Knight 2013:4). Without the seventh principle, an analyst would not be able to reasonably infer the referent of an image, rendering analysis impossible (Knight 2013:64). Similarly, the eighth principle allows for the possibility that not all motifs need to be present in order to belong to the same subject, since some iconographic systems allow for the inclusion or exclusion of certain motifs to cumulatively refer to a recognizable subject (Knight 2013:71). Other principles are designed to limit the analyst from making inferences without considering cultural models governing the creation of images. Principle nine, for example, reminds the analyst that a motif's meaning in one culture may not be the same in another, even if the motif was transmitted across physical boundaries or through time (Knight 2013:76).



While keeping these principles in mind, this study will seek to understand the ritual ship imagery of this subcorpus from a context that also includes cross-cultural relatively contemporaneous textual and iconographic comparisons from Mesopotamia and the Levant. The results of this study should, therefore, not be considered definitive or an exact equation of the Aegean to the Near East, but it could suggest a possibly similar context for these ritual images of a female figure and tree in a boat.

## **Glossary**

A more extensive overview of iconographic terminology will be in the Theory and Methodology Chapter, but it is worth a brief overview of terms in this chapter as well. The following are terms commonly used in this study. They include both iconographic terms and Classical Greek maritime jargon that has been traditionally applied to Bronze Age Aegean images. All iconography terms are adapted from Knight (2013:175-177) and Greek maritime terms are adapted from Wedde (2000:215-218), and Davaras (2004:5-6).

**Classifying attribute.** An element within the composition that indicates the general category of referent.

**Composition.** A bounded image usually meant to be understood as a coherent visual image.

**Filler motif.** An element within the composition that is used to fill unoccupied compositional space, but generally does not contribute to the identification of an iconographic theme.

**Identifying attribute.** An element within the composition that indicates a specific referent.

**Medium.** The physical material from which an object is made.

**Motif.** A discrete element within the composition that is not dependent on any organization of forms and can appear in more than one thematic context.

**Narrative of reference.** A conventional folktale, myth, legend, or composition that is referenced by the imagery.

**Nonsalient feature.** An element of the composition that is dictated by stylistic conventions but does not contribute to the identification of the referent, such as a filler motif.

**Salient feature.** An element of the composition that contributes to the identification of the referent. These can be discrete salient features, which are self-contained and can be added or subtracted to the image, or nondiscrete salient features, which are integral to the composition of the image.

**Style.** Cultural models which govern the form of created images. These models can govern the visual expression of more than one genre, are generally shared among a group of creators and viewers of the image, and can rapidly change throughout space and time, even within a culture.

**Symbol.** The arbitrary association of two items, which can be culturally conventional or personally dictated.

**Theme of reference.** A discrete subject that is directly reference in the imagery, usually culturally controlled.

**Visual theme.** A formal unit, or grouping of motifs, defined in relation to an assemblage of compositions that reasonably depict a common referent.

***Ikrion* (pl. *ikria*).** A stern cabin, generally appearing to be of light, collapsible and temporary construction. It is usually thought to have been ornately decorated in accordance with recovered frescoes.

***Akrostolion* (pl. *akrostolia*).** An ornament added to the prow of Classical Greek ships. The stern ornamentation was called the *aphlaston*, but that term has not been utilized for Bronze Age ship

imagery. This ornament is also referred to in other scholarship as the *fleur-de-lys*, hook device, pronged ornament, swallow or bird device, or bifurcation.



FIGURE 1.2. Map of the Aegean Sea labeled with major sites mentioned in this study (Courtesy of Google Earth Pro, accessed by the author 17 March 2022).



FIGURE 1.3. Map of the Near East labeled with major sites mentioned in this study (Courtesy of Google Earth Pro, accessed by the author 17 March 2022).

## **CHAPTER TWO: HISTORY OF RESEARCH**

As a topic often studied in Minoan archaeology, an abundance of ritual objects has been found throughout the Minoan timeline, providing testimony to the importance of religion and ritual to the Minoans on the whole. The intersection of religion and ships, however, is an aspect of the Minoan archaeological record that is present, but rarely studied. Few scholars have provided an in-depth analysis of Minoan ships, and even fewer have analyzed their presence in Minoan religion.

This study attempts to rectify this gap of scholarship. Before delving into the study, it is essential to provide a foundational knowledge of previous archaeological research of the Minoans, their religion, and their ships.

### **Overview of Archaeological Research in the Aegean**

In many ways, the history of Bronze Age archaeology in the Aegean corresponds with the development of the field of archaeology in Europe as a whole. Before the emphasis on systematic, scientific procedure promoted in the 19th century, excavations were accidental or focused on proving various aspects of classical texts. At the turn of the 20th century, excavations were more regular and scientifically regulated, but focused on artifact recovery. Once a large enough body of evidence had been amassed, the emphasis turned towards theoretical frameworks designed to interpret those datasets.

Unearthing aspects of Bronze Age culture, whether on purpose or not, has been occurring since the Archaic period (ca. 800-480 B.C.). A cache of Mycenaean ivories was discovered on Delos in a foundation deposit for a late 8th century B.C. sanctuary of Artemis. These Archaic Greeks intentionally collected these artifacts that were already a few hundred years old at the time, indicating at least an appreciation for the past cultures in their area

(Shelmerdine 2008:7). The classical Greeks, especially, felt an affinity for the peoples of the “Heroic” Age. During an accidental discovery of a tomb at Delos, the Athenians claimed it was Theseus’s remains and transported them “back” to Athens (Rutkowski 1986:1). Additionally, the grotto on Mount Ida thought to be Zeus’s tomb was the site of pilgrimages from the Archaic through Roman periods (Rutkowski 1986:2). The importance placed on Bronze Age cult sites and objects as early as even a few hundred years after the collapse of the Minoans and Myceneans indicates both an ancient interest in prior cultures and perpetuation of the myths associated with those places and artifacts.

The records of the myths enabled scholars of the Renaissance through the 19th century to utilize increasingly scientific methods to uncover their validity. Travelers visiting Crete in the Renaissance tried to logically identify the labyrinth from where Theseus escaped the Minotaur, or studied the classical texts to find where Minos met his divine father, for example (Rutkowski 1986:2-3). During the Romantic period, there was a renewed interest in classical texts, and several scholars attempted to discover the exact location of the cave of Eileithyia from the Odyssey, or the location of Zeus’s tomb, for example. Systematic excavations pioneered by the Antiquarians assisted 19th century scholars, such as Henrich Schliemann at Troy and Mycenae, in the interest of using archaeological research to discover pre-Greek sites (Rutkowski 1986:3). The forerunners of modern archaeologists essentially tried to characterize and compartmentalize their finds into the context of Homer’s view of the Bronze Age (Shelmerdine 2008:1). The first major excavations on Crete began in the late 19th century, with Knossos in 1878 and the Mount Ida cave in 1886. It was not until Sir Arthur Evans’s excavations at Knossos in 1900, however, that the intense scientific, modern scholarship of the Minoan civilization began (Rutkowski 1986:4-5).

The work of the archaeologists at the turn of the 20th century established the most basic foundations of Minoan archaeology, and set the tone of future research, the influences of which still echo into current studies. Around the same time Evans was excavating at Knossos, Italian archaeologists led by Federico Halbherr broke ground at Phaistos, British archaeologists led by David G. Hogarth excavated Palaikastro and Zakro, and American archaeologist Harriet Boyd Hawes began surveying and excavating at Kavousi and Gournia (Matz 1962:20; Gesell 2004:4-6). Many of these investigations were geared towards finding the site that typified the “Golden Age of Crete”, which created intense competition resulting in a large repository of artifacts (Rutkowski 1986:1; Gesell 2004:5). The early large-scale excavations also ultimately set the precedent in which schools maintained a presence at specific sites, resulting in different site management for each of the “palaces” as well as non-palatial sites. Even the initial relative chronology, which Evans divided into Early Minoan (EM), Middle Minoan (MM), and Late Minoan (LM), still persists though further evidence and later discoveries demonstrate more of an overlap between the periods than he originally thought (Dickinson 1994:2; Kyriakidis 2005a:3; Shelmerdine 2008:3).

Early excavations in the first quarter of the 20th century were exhaustive, but not always as careful in employing the same scientific methods that were later seen as standard by archaeologists of the last quarter of the 20th century. Publications and records keeping were generally not as important, but there was still a “gradual but steady enrichment of ideas” (Rutkowski 1986:5-6). Initial hypotheses put forth by Evans and his contemporaries have essentially remained valid, but have been enhanced through new methods and discoveries (Rutkowski 1986:1). Evans’s model of a priest-king atop a “hierarchical theocratic power structure” influenced the interpretations of Minoan socio-political structures so much that is has

endured as one of the field's the main paradigms (Manning 2008:105). Evans also understood the Minoans to be European migrants with influences from Near Eastern cultures, especially the Egyptians, adhering to a diffusionist model of cultural evolution (Dickinson 1994:2; Manning 2008:106; Schoep 2018:13-15). This model was accepted and expounded upon by other early Minoan scholars, especially V. Gordon Childe, who perceived the Minoans as highly civilized with an "occidental feeling for life" and unbound to the superstitions of autocratic rulers in the Near East (Childe 1925:29; Schoep 2018:12). These European-dominant opinions were unfortunately all too common in early 20th century scholarship. As uneasy as they may be to digest for modern scholars, their inclusion is essential to understanding the foundations from which subsequent, less-biased theories grew.

Most of the early Minoan archaeologists were focused on the big-ticket excavations of large palatial structures, cemeteries, or ritual centers that yielded artifacts in large quantity or high quality. Excavations were exhaustive but not careful with field techniques often less than satisfactory, and little importance was attached to final publications (Rutkowski 1986:6). Their goal, however, was twofold: to collect a large dataset upon which hypotheses could be eventually tested, and to satisfy their financial supporters' desire for precious artifacts. The resulting corpus of artifacts has been extremely helpful to current archaeologists, but the focus on flashy items as the main part of Minoan culture was only amended with archaeological theories later in the 20th century. Boyd Hawes was one of the lone voices whose attention was not always on the palaces. Though she initiated large-scale excavations at Gournia, Boyd Hawes also understood the importance of surveying an area in order to discover more about the relationships of the sites in relation to each other throughout time and space. To Boyd Hawes, the sites were not isolated



entities, but rather part of a larger context consisting of the entire landscape. Her theories were about 60 years ahead of her time (Dickinson 1994:2; Gesell 2004:15).

In the second quarter of the 20th century, major excavations continued with a more comprehensive approach, but archaeologists also began to synthesize their finds and placed greater emphasis on publications (Matz 1962:20). Evans's theory of a Minoan theocracy with influences from the Near East persisted, and the scholarship that characterized this period was focused on explaining the function of religion within Minoan society (Rutkowski 1986:1, 6). John Pendlebury used art to reconstruct Minoan social organization, whereas Gustave Glotz used burial customs (Dickinson 1994:3). Pendlebury's main contribution, however, was the concise synopsis of archaeology performed in the Aegean published in 1939 (Rutkowski 1986:1, 6). Though the focus was still on the excavations of areas that could yield the most artifacts, Carl Blegen, famous for excavating Troy and mainland Greek sites, argued in 1940 for a shift to systematic surveys that could elucidate the smaller sites awaiting discovery (Shelmerdine 2008:9).

A third phase in Minoan archaeology began in 1951 and essentially continued through the end of the 20th century. There has been a steady increase in the number of sites and artifacts discovered, an emphasis on large-scale surface surveys, and the application of new research methods in conjunction with systematic use of sciences such as geology and botany, to understand Minoan society within their physical landscapes (Rutkowski 1986:7; Dickinson 1994:5). The deciphering of Linear B by Michael Ventris in 1952 aided Bronze Age studies and the understanding of Mycenaean and, by extension, Minoan societies (Matz 1962:21; Dickinson 1994:4; Shelmerdine 2008:11). The increased application of surveys with aims to estimate a picture of settlement patterns of an area through time, however, has significantly affected the

perceptions of population distribution and land-use, as well as the usefulness of smaller sites in providing a more comprehensive understanding of Minoan culture (Dickinson 1994:5; Manning 2008:106; Shelmerdine 2008:8).

This new generation of archaeologists, partly due to the new emphasis on survey work, rejected Evans's diffusionist model and argued for more internal processes driving cultural evolution on Crete (Manning 2008:106). Yet the significance that Evans and his generation of archaeologists placed on identifying the larger sites as palaces was still reflected in the new subcultural divisions promoted by Nikolaos Platon in the 1960s as Prepalatial, Protopalatial, Neopalatial, and Postpalatial, which roughly correspond to the EM, MM, and LM divisions (Kyriakidis 2005a:3). Processual archaeology dominated the theoretical framework in the 1970s and 1980s. This framework, which heavily emphasized surveys, looked beyond the artifacts and attempted to highlight the people who made and used them by scientifically testing hypotheses about human behavior. Postprocessualists reacted in the 1980s, emphasizing individual agency of past humans, and self-reflection of the researcher's cultural biases (Shelmerdine 2008:2).

Bronze Age archaeologists of the 21st century, however, have introduced new data and scholarship that undermine the standard views of the previous generation. Elements of social and economic complexity evident in the Protopalatial, or MM IB, period also appear in the Prepalatial period. The greater emphasis on regionalism within Crete has led to new insights about the ways different areas exhibit cultural complexity. Generally, the trend has shifted away from archaeological theories based on functionalist economics, and towards political economy and ideology (Manning 2008:106). And a re-visitation of Evans's cultural diffusion theory has led to the concept of mutual influence and emulation of many Bronze Age cultures around the Aegean and the Near East – a Mediterranean cultural *koine* (Marinatos 2010:10). Overall, there

are many diverse theories that attempt to explain various aspects about the lives of past humans, each with their own merits and unique applications.\*\*\*

### **Studies of Minoan Religion**

The study of Minoan religion and ritual escalated in much the same manner as general Minoan archaeology. In the first half of the 20th century, scholars were mostly formulating their own theories in response to the increasingly abundant material. Scholars of the second half of the 20th century branched out from making sweeping generalizations and focused more on concentrated research of specific topics, related studies, and detailed reconstructions (Kyriakidis 2005a:7-8).

Sir Arthur Evans and later scholars who responded to his theories created the foundations for later understandings of Minoan religion. Though he was not necessarily the first, Evans was certainly the most prolific publisher of Minoan ritual, which he then thought to be Mycenaean. The first 25 years of extensive excavations on Crete helped expound the main characteristics of Minoan religion, largely thanks to Evans's publications (Rutkowski 1986:1). Evans began with *The Mycenaean Tree and Pillar Cult and its Mediterranean Relations*, the "first major archaeological reference to Minoan rituals" (Kyriakidis 2005a:4). In this work, Evans analyzed the iconography from sealstones to draw conclusions about the nature of cults on Crete. He equated Classical Greek and Egyptian myths to the objects and events depicted on Minoan sealstones, claiming they held similar use and function for the Minoans as the former cultures. Though his correlation of customs separated by time and space have been largely discounted as naïve, or as harsh as being illegitimate, it can be rectified with more inward analysis and an understanding that his conclusions were drawn from a lack of comparable data. His observations that the Neopalatial dynasty at Knossos was more theocratic than its predecessors have been re-

evaluated, and have been hypothesized as plausible. Evans laid the groundwork for later theories that developed from his earlier cultural diffusion models, such as the hypothesis that a form of the Mediterranean *koine* that existed in the Classical Greek period was also prevalent in the Aegean Bronze Age (Rutkowski 1986:4; Marinatos 1993:8; Kyriakidis 2005a:5; Marinatos 2010:6-10; Schoep 2018:22-23).

Evans and other archaeologists of the early 20th century initially believed Minoan cult places were located away from towns and villages because of local ethnological research and the belief that natural cult places were favored over constructed sanctuaries. This idea coupled with 19th century practices of searching for the mythical locations of Zeus's birthplace and tomb led archaeologists to excavate caves and peaks, two areas which are extremely important for Minoan cult activities. Palace and domestic sanctuaries were also investigated in this early period of Minoan archaeology. Though those early cave, peak, domestic, and palace sanctuary excavations were not necessarily up to modern scientific standards, and though most of the researchers did not publish detailed reports, their research directed interest towards the diverse array of Minoan cult areas and activities (Rutkowski 1986:4-6).

In the second quarter of the 20th century, scholarship of Minoan religion centered around synthesizing results, which was again similar to Minoan archaeology as a whole. Archaeologists utilized the increased amount of evidence to theorize about the function of religion in society. In 1927 Martin Nilsson published his work, *The Minoan-Mycenean Religion and its Survival in Greek Religion*, which was a turning point in studies of Minoan religion. His work is descriptive and analytical, especially of the aspects which he found important, such as idols, sacral dress, and divine epiphanies. The divine epiphany, which is a motif commonly depicted in Minoan iconography, features a deity smaller than other human figures within a composition as floating

above the scene and sometimes interacting with the other figures. His coinage of the term and interpretation of the iconographic theme has led to refined hypotheses involving the epiphany as central to Minoan ritual practices (Lupack 2012:258). Nilsson focused mostly on artifacts, but did not pay attention to cult sites. Unlike Evans, he avoided making connections that were not valid from the evidence found within the Aegean record, and did not compare evidence from different time periods or areas. He contributed a systematic, encyclopedia-like classification of the religious data uncovered, with influences from extant folk religions. In keeping with the times, his main goal was to uncover the “primitive” origins of classical Greek religion, thereby molding his evidence to fit a theory that Bronze Age religion survived through the centuries while at the same time pejoratively describing Minoan rituals. Future generations of archaeologists have since distanced themselves from appraisals with the negative connotations of earlier 20th century archaeologists. Regardless of his intentions, Nilsson was instrumental in his contributions to Minoan archaeology. He presented a methodological study of the fundamental elements of the Bronze Age cult, categorized the available data, and coined the familiar phrase of Minoan religion is a “picture book without the text” (Nilsson 1927:7; Rutkowski 1986:6; Marinatos 1993:9; Kyriakidis 2005a:5).

Another early influential scholar of the synthesizing phase of Minoan religion research is Axel Persson with his 1942 publication, *The Religion of Greece in Prehistoric Times*. His ideas centered around magic, fertility, and vegetation, and were still formed from the formerly common bias that pre-classical Greek religions came from primitive origins. He nevertheless provided an important description of the iconography of signet rings with precise details. Working from the hypothesis that Greek myths originated in the Bronze Age, he used the scenes on signet rings to reconstruct Minoan religion from the same system as Classical Greek religion.

Like Evans, he compared Minoan rituals with Babylonian and Egyptian; but unlike Evans, he was able to root his hypotheses more firmly within Crete because of the increasing amount of material for comparison, and he avoided making any conclusions that he deemed unsubstantiated in available evidence (Rutkowski 1986:6; Marinatos 1993:9-10; Kyriakidis 2005a:6-7).

A third scholar focusing specifically on Minoan is Charles Picard, who published his *Les religions préhelléniques (Crète et Mycènes)* in 1948. This study was extremely important to the development of theories regarding Minoan religion. Not only was Picard the first to dedicate an entire chapter to Minoan rituals, emphasizing its separation from the Mycenaean mainland rituals, but he also discounted the pervasive theory that Minoan religion was a cult of mysteries. This later revelation was supported by his analysis of the repeated iconography and archaeological sites featuring open-air, public ceremonies, something overlooked by previous scholars who were adamant that the mysteries of the Greek cults had their roots in Minoan cults. He also doubted the common misconception that Greek myths were directly correlated to Bronze Age religious iconography, preferring instead to elevate the essential character of the Minoan iconography. His review of prior scholarship and the available material related to rituals raised awareness for the requirement of a clear methodology for interpreting Minoan religion (Rutkowski 1986:6; Kyriakidis 2005a:7).

With the shift towards large-scale surface surveys, new research methods were applied to the study of Bronze Age religions in the second half of the 20th century. New theoretical approaches were used to examine existing finds, and previously overlooked sites were given better attention. In general, scholars tended to avoid the same broad interpretations on rituals and religion as the prior generation, but instead focused on individual elements in comparatively short articles or well-researched books. Based on influences from the prevailing archaeological

theories, studies on religion generally focused on statistics and the quantifications of data to produce solid results (Rutkowski 1986:1, 7; Marinatos 1993:10; Kyriakidis 2005a:7-8).

The more specialized studies were not limited to similar subject-matter, and each contributed a significant interpretation of various aspects of Minoan cult objects and sites. Several works focused on cult objects or images, such as the goddess with upraised arms by Stylianos Alexiou (1958), the tree-cult by Bogdan Rutkowski (1984), baetylic rituals by Peter Warren (1990), or the seated goddess by Paul Rehak (1997). Others analyzed cult sites or the utilization of spaces in rituals, such as peak crypt sanctuaries by Platon (1954), or peak and cave sanctuaries by Paul Faure (1963). Especially important in progressing the research of peak sanctuaries was Platon's publication in 1951. He increased the number of known peak sanctuaries from four to twelve sites by establishing the first definition and describing the finds from more than one site. Subsequent research at peak sanctuary sites by Stelios Alexiou, Costis Davaras, and Alan Peatfield, among others, advanced the field by improving the quality of excavations and reports. John Cherry (1986) also published a chapter in his book edited with Colin Renfrew that became important to a multi-tiered interaction politics and religion, opening a new dimension to the study of rituals not related to religious interpretations (Rutkowski 1986:7; Kyriakidis 2005a:8-9, 14).

Some of the more in-depth and influential studies on Minoan religion were also published in the second half of the 20th century, and focused on analysis from the archaeological record. Rutkowski (1986) provided a necessary update for the collection of cult site material evidence as well as cautious speculations on social order, Geraldine Gesell (1985) thoroughly examined domestic shrines in various contexts, Warren (1986) focused solely on archaeological material to provide a synthesis of trends in Minoan religion, and Nanno Marinatos (1993) combined modern

theoretical approaches, archaeological data, and comparative material from other cultures to develop her own insights to Minoan religion (Marinatos 1993:10-11; Kyriakidis 2005a:8-9). Marinatos (2010) additionally updated her theories on Minoan religion in *Minoan Kingship and the Solar Goddess: A Near Eastern Koine* by primarily examining cult iconography through the lens of Near Eastern historical and symbolic contexts, offering her somewhat unsubstantiated explanation for the practices and beliefs of Minoans as similar to Near Eastern traditions.

Colin Renfrew's *The Archaeology of Cult*, published in 1985, is also extremely important for the study of religion and ritual, not just for his Aegean area of expertise. He was the first to construct a clear methodology for how to recognize a cult space in archaeology (Kyriakidis 2005a:8). Renfrew (1985:12) specifies that ritual practices can be reconstructed on the basis of verbal testimony, direct observation of expression, non-verbal records of mythical events or cult practices, and the remains of symbolic objects and materials. He also asserts that cross-cultural comparisons can also be helpful in determining if a frequent practice is ritual in nature (Renfrew 1985:16).

As the cross-cultural applicability of Renfrew's scholarship attests, archaeologists studying Minoan religion and rituals were not operating solely within an Aegean bubble. Many of their theories mirror the trends in the archaeology of ritual and religions in general. The early 20th century archaeologists that sought to demonstrate the origins of Classical Greek religions as having evolved from Minoan religion, for example, fit within the influences of Darwinism on archaeology in the 19th century. John Lubbock's *The Origin of Civilisation and the Primitive Condition of Man*, which was clearly influenced by the English Antiquarians and Darwinism, lays out an interpretation of the evolution of religion as beginning with atheism and progressing to ethical monotheism as the pinnacle of civilization (Insoll 2004:43-44).



The evolutionary approaches to the archaeology of religion were largely rejected by the Processualists as oversimplifying a complex and complicated aspect of culture (Insoll 2004:47). Processual archaeology beginning in the 1960s, in which Lewis Binford has been credited for advocating religion as a factor essential for consideration within archaeology, has been influential in shaping the framework for systematically analyzing past rituals and religions (Insoll 2004:48). Somewhat antithetical to both the evolutionary theories and processualism are those scholars who take a Marxist perspective on the archaeology of religion, such as Childe or Parker Pearson (Insoll 2004:52-54). Modern approaches to the archaeology of ritual, therefore, draw from a number of theoretical approaches, and usually favor a certain theory depending on the geographic location and time period of study (Insoll 2004:67). Post-processual philosophies, specifically contextual archaeology, interpretive archaeology, and ethnographic analogies, have gained traction more recently as the theories allow for multiple interpretations and individual agency (Insoll 2004:70, 79).

In general, the earliest scholars of Minoan religion heavily drew upon external references that were not contextually applicable because of large geographical and temporal gaps. Later scholars were more critical of this deficiency, but it can be easily understood due to previous research in the Aegean as well as the lack of comparable datasets from the burgeoning field. Once enough data had been collected, the next generation of scholars focused on compiling all the evidence to make generalizations about Minoan religion which drew upon theories prevalent in mainstream archaeology of religion and Classical archaeology, while still making some of the same naïve references as their predecessors. Subsequent scholars chose to take a more inward approach, focusing on the development of individual symbols and motifs to explain internal processes. Researchers of Minoan religion in the 21st century, as a consequence of their place

within the larger field of archaeology as well as almost 120 years of extensive excavations and prolific publications, have a large dataset of archaeological material as well as a wide array of theories to guide their hypotheses. They recognize their own inherent biases while understanding that the mindset of prehistoric peoples' view of themselves can never be fully known (Shelmerdine 2008:2). The danger in swaying too far in favor of the purely scientific analyses, unfortunately, can be that the human element gets lost in the minutia of ceramic classifications, for example (Marinatos 1993:10). It is important, therefore, to study religion as a way of understanding one facet of ancient culture that is integral to understanding it as a whole.

### **Studies of Minoan Ships**

Compared to the study of Minoan religion, the study of Minoan ships has received barely any attention. There are few researchers who have made significant contributions to the understanding of Minoan ships. This can be attributed to the relative lack of data as well as the relatively short academic history of the maritime archaeology field. Very few Bronze Age shipwrecks have been discovered, and even fewer can be absolutely attributed to the Minoans themselves. Consequently, most of the information about Minoan ships comes from the iconography of seals, sealings, and frescoes, as well as clay and metal models. Making definitive conclusions from images and representations is problematic, and therefore few have undertaken the task of tentative interpretations. The Bronze Age depictions of ships are not actual ships, but rather representations thereof as seen through the “eyes, culture, schooling, mental attitudes, and skills of their creators” (Wachsmann 1998:5). Furthermore, these representations are seen through the culture, biases, and potential ignorance of those analyzing them. For those untrained in maritime archaeology, or without basic knowledge of the construction and utilization of ships, cursory analyses could lead to incorrect assumptions about Minoan maritime culture.

Before the major developments in the field of maritime archaeology in the 1960s, there were few general references published regarding ancient Aegean ships. Sypridon Marinatos (1933) and G. S. Kirk (1949) both contributed articles regarding pre-classical Greek ships, and some overviews of the history of sailing and the evolution of watercraft by James Hornell (1946), Romola and R. C. Anderson (1963), and Lionel Casson (1971) contain brief mentions (Bass 1998:ix). Additionally, Dorothea Gray (1974) and Lucien Basch (1987) both are not necessarily considered foremost experts on Bronze Age ships, but their research nevertheless covers long timeframes and improve upon earlier catalogues in terms of amount of data and variety of iconographical interpretations (Wedde 2000:9). Lastly, several pieces of scholarship from J. H. Betts (1968; 1973) provided meaningful analysis of ships depicted on seals regarding hull morphology, seal typology, and the significance of Minoan ship images. His works not only helped to expand the catalog of ship images by identifying diagnostic features and dispelling long-standing misconceptions, but they also helped formulate opinions of future scholarship by suggesting that Minoan ship depictions had symbolic meaning.

Until Shelley Wachsmann (1998) compiled his extensive textbook on Bronze Age seafaring in the eastern Mediterranean, however, there was not a body of work that referenced all the available evidence and presented it in a concise manner. Wachsmann used textual, archaeological, and iconographical evidence of Egyptian, Canaanite, Cypriot, Minoan, and Mycenaean ships to present an interesting analysis of each culture's maritime development. He sometimes compares traditions outside the geographic and temporal context of the Bronze Age Aegean in order to prove a few of his hypotheses, but overall, *Seagoing Ships and Seamanship in the Bronze Age Levant* is an important addition to the growing Minoan maritime archaeology corpus.

The second major research which updates the extant information of Minoan ships is *Towards a Hermeneutics of Aegean Bronze Age Ship Imagery* by Michael Wedde (2000). Wedde uses the theoretical advances in archaeology from the second half of the 20th century to provide future scholars the initial step in analyzing ship imagery while also compiling an essential and unbiased catalogue of all Minoan ships collected to date. His material is subdivided between location, date, and mode or medium. The latter is subdivided further into three groups: three-dimensional models, graphic or linear images painted on ceramics or frescoes, and glyptic images incised on seals or rings. He additionally uses the ships' primary and secondary features, such as the shape of the hull and propulsive means, respectively, to group them into typological clusters with spatial and temporal proximity (Wedde 2000:18). Altogether, Wedde compiled and categorized 370 images, mostly constituting glyptic and linear ship images from Crete during the Late Bronze Age. He is careful to avoid creating paradigms or drawing conclusions from unique representations. Therein lies the value of Wedde's catalogue, especially compared to Wachsmann's book: Wedde stays true to his goal and merely lays the foundations for future analysis of Minoan ships. More recently, Aleydis Van de Moortel (2017) proposed an excellent alternative typology to that proposed by Wedde, focusing more on ship construction traditions and overall hull shape rather than iconographic motifs. This newly proposed typology provides a more nuanced insight into Bronze Age Aegean ships based on a developmental split between flat and round-bottomed ships.

## **Conclusion**

Archaeological research of the Minoans has a relatively lengthy history. The amassing of a large database as well as scholarship originating some of the fundamental theories relevant to modern archaeology puts Bronze Age Crete in a unique place for current researchers. The field

as a whole has been able to create a solid framework for interpretations, but there are still so many unanswered questions about the Minoans, and more continue to arise. One such aspect of Minoan culture that has not been analyzed is the maritime component. As an island culture, albeit a large island, the Minoans must have relied on seafaring in order to achieve the prosperity evident in the archaeological record. Additionally, religion seems to have played a prominent part in Minoan culture to a varying degree depending on the era and region. In understanding the significance of ships as they relate to the rituals and religion of the Minoans, the goal of this research is to better understand an important yet understudied aspect of Minoan culture.

## CHAPTER THREE: DATASET

### Introduction

The ritual use or symbolism of Bronze Age Aegean ship depictions has been debated amongst scholars, especially depending on a specific image or group of images. Wedde (2000) prefers to label only 15 glyptic and linear depictions as ritual or cult, whereas Betts (1973:334) concludes that almost all ships in Minoan art have ritual, symbolic significance. The reality is likely to be somewhere in the middle. This study will examine 11 individual images and 1 grouping of Minoan ship images as they relate to ritual use or symbolism. As context is essential for a more complete understanding of the depictions, this chapter will focus on not only provenience, but also the compositional content of each artifact in order to shed more light on their place within Minoan rituals or religion.

These images have been selected based on their iconography related to the symbolism linking a female figure, tree, and boat in a ritual setting. Only the Mochlos ring and Makrygialos seal explicitly depict a female figure and tree in a boat, but the other 10 artifacts also share the same or similar elements of ritual craft iconography. All the artifacts depict one or more of the following motifs: a figure in a boat; elements added to the hull that heighten ritual significance, such as an *ikrion* or decorations; and fantastical hull shapes, such as a hippocampus. Wedde (2000:198) has identified these three criteria as recognizable attributes of Aegean Bronze Age ritual crafts. Other scholars have linked two or more of these depictions together to support their analyses of Minoan maritime rituals (Evans 1935; Morgan 1988; Sourvinou-Inwood 1989; Marinatos 1993; Wachsmann 1998; Davaras 2004; Galanakis 2009; Soles 2012; Tartaron 2013; Tully 2016).

Though Wedde's (2000) catalog initially formed the foundation for the decision to consider artifacts beyond the two examples that overtly depict the female figure, tree, and boat symbolism, this study's database differs from Wedde's ritual craft in two main approaches. The first is the exclusion of five artifacts he included in his list of ritual craft due to lack of corroborating evidence with this study's database. For example, Evans (1935:952) considered a sealing discovered at the "Temple Repositories" at Knossos to be an early depiction of Scylla (Figure 4.2). Consequently, his influential hypothesis has been cited as an iconographic example linking the Ship Procession fresco to a reenactment of a deathly fight between a vegetation deity and sea monster (Wachsmann 1998:116), or the Minoan version of the Near Eastern storm god (Marinatos 2010:177-178). Wedde (2000:339), however, does not believe there is enough evidence to support the creature being a sea monster, but still includes the depiction as an example of ritual craft because it satisfies his criteria of a narrative scene with the inclusion of human figures (Wedde 2000:175-180). For the purposes of this study, this sealing includes neither the female figure, tree, and boat symbolism nor the additional ritual craft criteria that explicitly link it to the other examples in this corpus. Though there is a possibility the sealing may relate to the Ship Procession fresco as Wachsmann suggests, there is not enough context within the composition to use as a basis for comparison. The same logic applies to the other four images Wedde includes in his ritual subcorpus, as also discussed in the Literature Review chapter.

The second approach includes the addition of other artifacts Wedde excluded from his ritual subcorpus based on iconographical similarities. The Ship Procession fresco is the most significant difference. Though the ships within the fresco meet Wedde's three criteria for ritual vessels, he does not include them in his subcorpus. Furthermore, due to the fact that the fresco

has the best preserved depictions of Aegean ships, Wedde consistently uses them as a litmus test for comparing various ritually significant motifs in other artifacts (Wedde 2000:173-199). Since the ships fit within Wedde's criteria for cultic craft, and because they are frequently referenced as ritual or ceremonial, they are included in this study (Marinatos 1984; Morgan 1988; Wachsmann 1998; Davaras 2004). The Mochlos Ship cup, which is another addition to Wedde's ritual subcorpus, was not included in Wedde's study because it was discovered during the final stages of publication for *Towards a Hermeneutics of Aegean Bronze Age Ship Imagery*.

The majority of the artifacts from this study are from LM I contexts on Crete, some of which can be more specifically dated to LM IA or LM IB. The Anemospilia seal and Mochlos Ship cup have been contextually dated to around 1700 B.C. and 1500 B.C., respectively, but the majority of selected artifacts can only be dated by relative ceramic phases due to lack of context during excavation or less precise excavation methods (Sakellarakis and Sapouna-Sakellarakis 1981:208; Davaras 2004:3). Aside from the unknown site of the Tsivanopoulos seal, all of the images in this study have relatively reliable finds contexts. The Candia ring and Ring of Minos were both given to Sir Arthur Evans by third parties, and so their provenience is more suspect than those discovered during excavations with reliable records (Evans 1935:947-948; 953-954).

The majority of the artifacts in this study can be considered Minoan cultural artifacts since most were found on Crete before the major destruction event at the end of LM IB, which ushered in the period of administrative control of Knossos by an elite group with Greek "mainland-derived cultural practices" (Preston 2008:312). For the artifacts in this study excavated from Greek mainland or contexts traditionally considered Mycenaean, assigning a specific cultural label as purely Minoan or Mycenaean is more complex. Though there is a cultural shift that occurred throughout the Aegean beginning in LM II, those in control may not



have been as ethnically distinct as scholars have once believed (Preston 2008:311-312). Nanno Marinatos (2010:6), for example, believes the elites of Mycenae and Crete began forming alliances and merging administrative and cultural practices towards the end of the LM I period, resulting in more of a gradual fusion than only a hostile takeover in LM II. Before the Thera eruption at the end of LM IA, there is evidence at Akrotiri for a mixture of Minoan, Mycenaean, and vernacular Thera architecture, artistry, and iconographic influence, furthering a hypothesis of mutual cultural exchange and gradual fusion (Morgan 1988:171). Additionally, many seals and signet rings discovered in traditionally Mycenaean contexts have shared motifs and manufacturing techniques with those from Minoan contexts, causing many scholars to determine their iconography as virtually indistinguishable (Marinatos 2010:9). Furthermore, some ritual symbols associated with the Minoans, especially the horns of consecration and double axes, were still commonly used in the LM II-III periods, suggesting some form of ritual continuity after the prominence of the Myceneans (Lupack 2012:259-260; Rehak and Younger 1998:164).

Consequently, although the Tiryns ring, Stathatos seal, and Tsivanopoulos seal are labeled as Mycenaean or coming from Greek mainland contexts, they have still been selected for this study of Minoan ritual ship iconography. The ethnic identities and cultural affiliations may have been more in-flux than was originally assumed, especially due to the regularity of contact and exchange in the Aegean throughout the Bronze Age facilitated by maritime trade routes. As the ritual context of ship iconography transcends cultural labels that modern scholars have ascribed, the inclusion of both Minoan and Mycenaean examples is relevant to the interpretation of the female figure, tree, and boat symbolism.

Artifact	Date	Location	Representation Type	Artifact Type
Mochlos Ship cup	LM IB	Crete, Mochlos	linear	ceramic cup, pale brown clay with dark brown slip decorations
Mochlos ring	LM IB	Crete, Mochlos	glyptic	bronze core/gold plated signet ring
Makrygialos seal	LM IB	Crete, Makrygialos	glyptic	gray serpentine sealstone
Candia ring	LM I	Crete, Candia*	glyptic	gold shield ring
Tiryns ring	LH II-III	Greece, Tiryns	glyptic	lead core/gold plated signet ring
Stathatos seal	MM IIIB – LM I	Greece, Thebes	glyptic	gray hardstone sealstone
Ring of Minos	LM IA	Crete, Knossos*	glyptic	gold signet ring
Ship Procession fresco	LM IA	Thera, Akrotiri	linear	polychrome wet plaster fresco
Anemospilia seal	MM III	Crete, Anemospilia	glyptic	black and white agate sealstone
Ayia Triada sealing	LM IB	Crete, Ayia Triada	glyptic	gray clay seal impression from signet ring
Tsivanopoulos seal	LH II	Unknown*	glyptic	gray sardonyx sealstone
Khania sealing	LM IB	Crete, Khania	glyptic	gray clay seal impression from lentoid seal

TABLE 3.1. Overview of dataset. The asterisk denotes artifacts that are not from excavated contexts (Wedde 2000:320-322, 337, 339-340; Barnard et al. 2003:47; Davaras 2004:3).

### Mochlos Ship Cup

Date: LM IB

Finds Location: Crete, Mochlos, Artisans' Quarter

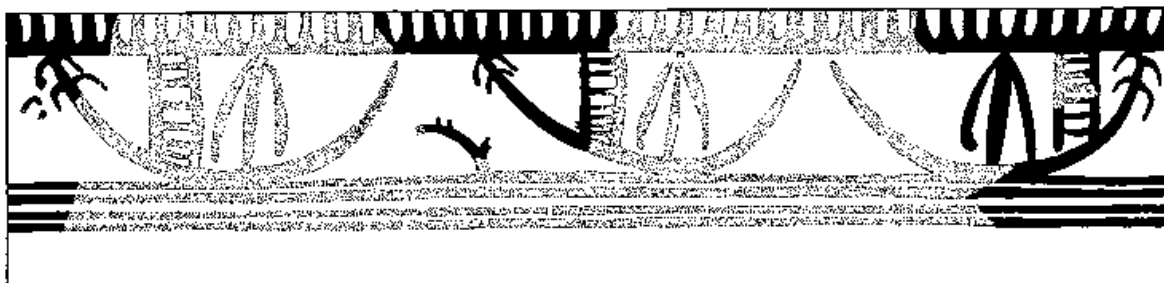


FIGURE 3.1. Ceramic cup with dark brown and white slip decorations from Mochlos, LM IB.

Unrolled frieze of Ship Cup with stippling to represent the reconstructed aspects (Davaras 2004:figure 1.B).



FIGURE 3.2. Ceramic cup with dark brown and white slip decorations from Mochlos, LM IB. Photograph of Ship Cup, reassembled with reconstructed areas present (Barnard et al. 2003:plate 7, IB.202).

#### *Provenience*

Room 2 of Building A was a multipurpose, interior room which was entered from roof or from an opening in the wall, but lacking a door. The room's many uses include: storage of ceramics and cold foodstuffs, food preparation area, workroom for finishing bronze objects manufactured in the same building, as well as possible living and sleeping quarters. The Ship Cup was found in the southern half of the room stacked with rounded cups and various other types of pottery, which were likely stored on a shelf before it collapsed. Over 700 balls of pumice were also stored in the room, probably for the purpose of burnishing bronze or other finishing activities. The main function of the room seems to have been cup storage. It is interesting to note, however, that the depositional pattern in Room 2 was unique compared to the rest of the building. This was the only room with an unclean floor, which accumulated about 0.25 m of material over several years, including an infant burial (Soles 2003:23-26).

### *Description*

The cup was likely imported from Knossos or North Central Crete judging by shape and decoration, along with 17 other delicate cups stored together on the same shelf (Soles 2003:25; Barnard et al. 2003:104). The cup is rounded, one-third extant, and reconstructed from 16 pieces (Barnard et al. 2003:47; Davaras 2004:14, n.1). It is decorated in dark brown and white slip, and the surface is burnished. The decoration on the surface is divided into upper, middle, lower registers. The upper exterior rim band has a row of pendant added white dots, and the lower register has at least two brown bands with added white line in between. The middle register is a frieze of three crescent-shaped ships, partly preserved but with enough detail to create a reconstruction (Barnard et al. 2003:47-48; Davaras 2004:3).

Beginning to the right of the handle, or the left side of Figure 3.1, the first ship is the least well-preserved with only the left extremity of the ship extant. An oblong object rises from the lower register in between the first and second ship. The second ship is opposite the handle with the left extremity and *ikrion* surviving. The third ship is the best preserved with a palm tree in the center of the hull and an *ikrion* placed at the right extremity, which is touching the handle. All preserved ends have the double ornament of downward pointing parallel crescents, described by some to be a bird device, swallow-shaped bow decoration, or an *akrostolion*, which was a prow device common in Classical Greek ships. All three ships are reconstructed to have a double *akrostolia* at one end, a palm tree in the center, and an *ikrion* between the two features (Davaras 2004:3).

The preserved end of the ship opposite the handle rises at a shallower angle than the other two extant ship ends, respectively at 45° and 80° (Davaras 2004:3). Since none of the three ships are fully preserved, it is difficult to ascertain the reason for the differences. It could be

unintentional, meant to highlight or compliment the object rising from below, or to differentiate the sterns from the bows. Though discovered too late to include in the final catalog, the hull shape seems to be congruent with Michael Wedde's (2000) Type IV ship type, which includes the ships from the Ship Procession fresco, among others. Type IV ships feature the attenuated crescent-shaped hull with a more sharply rising stern section (Wedde 2000:320-321). The ships on this cup are also consistent with Aleydis Van de Moortel's (2017:267) Type C2 hulls that usually depict an asymmetrically curved hull with the stern rising more sharply. If this logic is applied to the Ship Cup, then the ship to the right of the handle, farthest left in Figure 3.1, is traveling in a different direction compared to the other two ships.

If that is the case, the reconstruction has incorrectly depicted the direction of travel of the three ships. The best preserved ship, which is to the left of the handle and farthest to the right in Figure 3.1, has been reconstructed as traveling in an opposing direction to the other two ships. This is based on the assumption that the *akrostolion* is only depicted at the bow (Davaras 2004:4). The Stathatos seal, however, depicts the *akrostolion* at the bow and stern. Amending the reconstruction to include *akrostolia* at both ends of all the ships therefore decreases the potential to identify the directionality based on motifs. Instead, it forces an identification based on the construction of the ship, if the angles of the extremities were intentionally and accurately represented.

Direction of travel notwithstanding, the reconstruction is also problematic in terms of the *ikrion* motif. If it is accurate, then it calls into question either the identification of the ladder-like object as an *ikrion* or the rule that the *ikrion* primarily exists at the stern (Wedde 2000:192). Only half of the middle ship's *ikrion* is extant, and so it is possible that the reconstruction has been too liberal and the motif was meant to represent something other than an *ikrion*. The horizontal lines

of the motif in the middle ship do not neatly end at the vertical line as it does in the more complete *ikrion*, indicating the two “*ikria*” could in fact represent different objects. The awnings on the large ships of the Ship Procession Fresco also have a boxy, ladder-like construction similar to the extant portion of the object in the middle ship of the Ship Cup. It is possible, therefore, that they could both refer to similar objects. Regardless of potential analyses, the Mochlos Ship Cup is singular in that it is the first LM I ship image to have been discovered painted on pottery (Wedde 2000:349).

### **Mochlos Ring**

Date: LM IB

Finds Location: Crete, Mochlos, Prepalatial cemetery area



FIGURE 3.3. Gold signet ring from Mochlos, LM IB. Photograph of the Mochlos ring, CMS II-3, 252 (Platon and Pini 1984:no.252).

### *Provenience*

The ring was discovered in one of three shallow bronze bowls near the surface above Tomb IX, which dates to the EM period. Richard Seager identified the deposit as an LM I burial (Seager 1912:89). Based on other similar burials in the area, the ring may have been buried with a young child (Soles 2012:188). An amygdaloid hematite seal was the only other object found with the burial. Seager (1912:91) initially believed the intaglio represented a stylized lion mask, but it has since been identified as a papyrus plant (Platon and Pini 1984:no. 252).

### *Description*

The signet ring is a bezel shape with a length of 1.9 cm, and breadth of 1.0 cm. Seager believes the ring was similar to other LM signet rings in that it was probably manufactured in the usual method of a bronze core with gold overlay, but his hypothesis was not tested because the ring was stolen from the Heraklion Museum not long after it was excavated in 1908 (Seager 1912:91; Wedde 2000:339; Soles 2012:198). The ring may have been imported from Central Crete because of the iconographic similarities to other rings discovered in that area (Wedde 2000:191; Soles 2012:188).

The main subject of the composition appears to be the female figure seated in a fantastical boat. The small boat is curved with the left extremity in the shape of a protome facing inwards, and the right extremity in a fan shape extending out of a ball. The protome has been described as a dog (Seager 1912), horse (Sourvinou-Inwood 1989; Wedde 2000), a Babylonian dragon (Davaras 2004; Galanakis 2009), and hippocampus/seahorse (Evans 1935; Davaras 2004; Soles 2012; Tully 2016). Seager (1912) believed the right extremity resembled a fish tail, but now most scholars agree it more closely resembles a bundle of papyrus branches. The papyrus bunch combined with horizontal lines along the hull seem to suggest the vessel is constructed of

reeds (Wedde 2000:339). There is some debate as to which extremity is the bow and which is the stern, most of it centered on interpreting the scene as the boat arriving or leaving the shore.

Instead of attempting to decipher the scene, a better method for determining the bow versus stern is to compare to other Minoan ship depictions. More often in Aegean depictions of asymmetrical crescent hulls, the stern rises more sharply than the bow, which is the case for the Mochlos ring (Van de Moortel 2017:264, 267). Furthermore, stepped shrines and *ikria* are more often depicted at the stern. Therefore, it seems logical that the protome is at the stern, and the papyrus branches are at the bow.

Forward of the protome is a two-tiered construction that is similar to other depictions of stepped shrines in Minoan ritual iconography. It appears to be a schematic version of a stepped pillar shrine with a fig tree emerging from the top, which is another common feature in ritual iconography. The female figure, which is at the center of the composition, has one hand resting at the base of the stepped shrine and the other raised in a gesture towards the right side of the scene. She is wearing a simplified version of a flounced skirt and possibly an open bodice, though there is not enough detail to definitively discern the latter adornment (Seager 1912:90; Wedde 2000:339; Galanakis 2009:124).

Beneath the vessel, along the bottom edge of the bezel, there are decorative lines and circles to indicate a land and seascape. On the far right side of the bezel is a square construction disappearing into the edge of the composition, likely referring to a seaside shrine (Seager 1912:90; Wedde 2000:339; Davaras 2004:5; Galanakis 2009:124; Tully 2016:6). In the aerial space between the seaside shrine and the fig tree are three floating objects. Near the top of the bezel in the center above the female figure is a straight vertical line with four short horizontal lines, described as a double axe on its side or a “rayed object” (Seager 1912:91; Platon and Pini



1984:no. 252; Kyriakidis 2005b:140). The middle object is less clearly defined and is more likely damage to the ring, but it has nevertheless been identified as a possible chrysalis object (Platon and Pini 1984:no. 252, Kyriakidis 2005b:141). The object nearest the seaside shrine most resembles a double baetyl with five lines trailing behind it, but has also been called two squill bulbs, a flaming figure-8 shield on its side, and a “sacred heart” motif (Seager 1912:91; Wedde 2000:339; Kyriakidis 2005b:142; Galanakis 2009:124).

### **Makrygialos Seal**

Date: LM IB

Finds Location: Crete, Makrygialos, Plakakia (near western edge of modern village)



FIGURE 3.4. Serpentine amygdaloid sealstone from Makrygialos, LM IB. Drawing of Makrygialos seal, reversed to represent view of seal, CMS VS1A, 055 (Pini 1992:no.55).

#### *Provenience*

The seal was discovered by Costis Davaras during his 1973 excavation of the LM IB villa, labeled as a “cult villa” because of the many religious elements discovered throughout the

labyrinthine building (Davaras 1997:119). The seal was found with a bronze female figurine near an altar at the northern end of the central court of the villa (Davaras 1997:120, 126). A stone anchor that was likely never used was also ritually deposited near the villa, further suggesting the maritime importance of the villa (Davaras 1980:70-71).

### *Description*

The sealstone is amygdaloid in shape, measuring 1.84 cm in length and 1.2 cm in breadth, with a hole drilled through the center lengthwise. The serpentine stone is of an anthracite-gray color, and the incised decoration fills one side. The hull is crescent-shaped, with the right side of the vessel slightly higher than the left. Though the ends of the boat are not identical, both are pointed. The right side of the vessel appears to have a bifurcation at the extremity, and a sheer running to the palm tree amidship. The left side of the vessel appears to have four notches indicating a design, and a thick oblique line extending above and below the vessel. There are 14 short parallel lines along the hull, depicting either ribs, oars, or decoration (Wedde 2000:339; Galanakis 2009:124).

Inside the hull, the creator has depicted three objects: a female figure, a tree, and an *ikrion*. All objects are stylized and not very detailed, but are nevertheless recognizable. The female's skirt is decorated with three vertical lines, the style of which is echoed in other ritual iconography, and she either wears an elaborate headdress or hairstyle that extends the silhouette of her head. She stands facing the tree and *ikrion* with one hand at her breast and the other touching her head in a gesture of adoration. A palm tree at the center of the composition features oblique lines drooping downward from the top of the vertical trunk. On the other side of the palm tree is the *ikrion*, which is of square construction with latticework depicted by four crossbars

connecting three uprights, and possibly a fourth visible in the background to indicate depth (Sourvinou-Inwood 1989:99-100; Wedde 2000:339; Davaras 2004:4; Galanakis 2009:124).

In the absence of an obvious propulsion method, it is difficult to discern which ends of the vessel are the stern and bow. Similar to the Mochlos ring, the reasonable conclusion can be deduced from iconography. Typically, the *ikrion* or stepped shrine is located at the stern, as is evident from the Ship Procession fresco. Bifurcations appear at both ends in Minoan ship depictions, and largely depends on the ship type (Wedde 2000). Based on the pictorial format similarities, it stands to reason that the *ikrion* is at the stern and the female figure is at the bow.

### **Candia Ring**

Date: LM I

Finds Location: Crete, near Candia, possibly from Amnissos



FIGURE 3.5. Gold shield ring from Candia, LM I. Photograph of Candia ring, CMS VI, 280 (Pini and Müller 2009:no.280).

### *Provenience*

The context of the Candia ring is less certain. It was acquired “by an archaeological visitor” in 1927, and subsequently given to Sir Arthur Evans (Evans 1935:954, n.1). Though the find’s location is often given as Candia, Evans believes it was found at Amnissos, the harbor associated with Knossos (Evans 1935:953-954). Consequently, it is also referred to as the Amnissos ring (Galanakis 2009; Tully 2016).

### *Description*

This gold shield ring measures approximately 1.3 cm in length and 0.7 cm in breadth. The scene occupies the entire bezel, without overt reference to the landscape. The composition includes multiple human figures, a ship, a tree, marine animals, and a possible pillar or baetyl. Viewing the ring from above, the ship and associated figures occupy the left two-thirds of the composition, with the two standing figures on the far right. The hull of the ship is flat with a slightly curved sheer and curved, pointed extremities with the left slightly higher. Both extremities appear to have a slight bifurcation. There is a zig-zag pattern along the bottom of the hull, indicating either waves or decoration. Six schematic figures sit in the vessel, appearing to face left though it is difficult to discern. A seventh schematic figure grasps an oar or pole and stands at the right end of the vessel. Three fish or dolphins swim below the hull, giving a hint of a seascape along the bottom of the ring (Evans 1935:954; Wedde 2000:339; Galanakis 2009:124-125).

The tree, which resembles a fig tree, floats above the ship in the upper left register of the bezel. A floating figure in a skirt, resembling the motif of an epiphany goddesses descending

from the sky in other Minoan ritual iconography, appears to be the subject of the composition as she is situated in the center. She has one hand on her hip and the other extended towards the two largest human figures, which stand on the invisible ground. Between the epiphanic figure and the large male figure is an unidentifiable floating sphere. The male figure gestures towards the floating figure while holding the hand of the female figure behind him. The female figure, who is wearing a flounced skirt, has her free hand on her breast. Behind the female figure is an object which has been variously interpreted as a pillar representing a baetylic shrine, a pithos, or a shield, though it is hard to tell because it is only partially depicted (Evans 1935:954; Wedde 2000:339; Galanakis 2009:124).

### **Tiryns Ring**

Date: LH II-III

Finds Location: Greece, Argolis, Tiryns



FIGURE 3.6. Gold plated shield ring with lead core from Tiryns, LH II-III. Photograph of Tiryns ring, CMS I, 180 (Sakellariou 1965:no.180).

*Provenience*

Information about the finds context is somewhat conflicting. Wedde (2000:340) states the ring was discovered in a bronze cauldron in a ditch near the modern village of Nea Tiryntha. Evans (1928:245), however, attests this ring was discovered in a hoard containing a diverse range of objects, including another signet ring with the seated goddess and procession of genii, which is the term given to the iconography of hybrid creatures specifically resembling the Egyptian goddess Taweret. This processional signet ring (Figure 3.7) is the largest Mycenaean signet ring yet discovered (Sakellariou 1964:no.179).



FIGURE 3.7. Gold shield ring from Tiryns, LH II-III. Example of Minoan genii in procession, split rosette motif, and headdress signifying status. CMS I, 179 (Sakellariou 1965:no.179).

Despite the discrepancy of subsequently published records, the initial excavation of the cauldron from which the ring was retrieved was overseen and originally recorded in December 1915 by the Greek archaeologist Apostolos Arvanitopoulos (Maran 2006:129). According to his records, the Tiryns ring was in fact discovered inside a bronze cauldron along with bronze tools and vessels, unworked ivory, iron tools, gold jewelry and beads, faience and amber beads, and a Hittite cylinder seal (Maran 2006:132-133). The cauldron was placed on top of two swords and

two bronze firedogs in a stone-lined pit which also contained a Cypriot bronze tripod and bronze ingot (Maran 2006:134). The pit, which was located in the southeastern part of the Tirynthian Lower Town, was dug in the 12th century B.C. into parts of an older wall (Maran 2006:129,133). The artifacts, which were intentionally deposited in their respective locations, span from Early Mycenaean to LH IIIC (Maran 2006:130). The Tiryns ring was located in the upper part of the cauldron with the two other finger rings, and other gold and amber high-status objects (Maran 2006:132, n.16). Overall, the collection seems to have been memorabilia handed down through a family in order to emphasize their status in the post-palatial period, and may have either been a ritual dedication or a hidden *keimelia* (Maran 2006:141).

### *Description*

The signet ring features a lead core plated with gold, and measures 3.4 cm in length and 1.95 cm in breadth (Wedde 2000:340). The surface is relatively flat compared to the curved surface of other signet rings, and the subject of the composition can be discerned by the deeper intaglio designs as shown in photographs in raking light. Furthermore, as is one of the conventions in Minoan iconography, the persons of higher status are symbolically made larger to emphasize their importance (Wedde 2000:191).

Viewing the ring, the ship occupies the lower register of the right half of the bezel. With the presence of modes of propulsion, the directionality of the vessel is more apparent. The hull is curved with the stern rising more sharply than the bow, which is at the edge of the bezel. There are crescent-shaped lines along the length of the hull to the extremities, possibly indicating decoration or construction materials. The largest figure of the composition stands at the stern and faces towards the left half of the scene. A smaller figure stands forward of the first, facing the bow, and possibly grasping a steering oar in a stance similar to the helmsmen of the Ship

Procession fresco. A double-outlined awning is forward of amidships, and is bisected by a mast with lines running fore and aft. One of the lines and the top of the mast is decorated with small, oblong globules. Beneath the awning sit two figures facing each other. Four diagonal lines extend from the bottom of the hull, possibly to indicate oars. The steering oar and additional line at the stern are at an angle that mirrors the “oars”. Five small globules beneath the hull possibly indicate marine life. The ship and associated figures and decorations are not as deeply engraved as the figures on shore, but appear to be deeper than the designs along the top register of the bezel (Wedde 2000:340; Galanakis 2009:125).

There are a series of indiscernible embellishments above the ship along the top curve of the ring. These are the most shallow of the engravings, possibly to indicate depth of field or to illustrate reduced importance. The designs are a series of straight lines and ovals, floating above the main scene. Some look architectural with rocks at the base, and some appear to be groupings of rocks or a possible tree. The floating designs are unlike other floating objects in Minoan ritual iconography, and therefore have been likened to a landscape setting (Galanakis 2009:126).

The four figures on the left of the ring are engraved the deepest, and therefore stand out the most. The male figure standing opposite the ship, seemingly interacting with the man at the stern, is the second largest figure in the scene. He has one hand raised, with the arm bent at the elbow, and the other arm straight behind him. He is adorned with a belt, and two parallel lines at each knee and ankle, possibly indicating greaves. Below the male, between him and the ship, is a slightly smaller female figure wearing a flounced skirt, indicated by the vertical lines bisected by two chevrons and the belt around her waist. She gestures towards the male with one arm raised above her head, and the other at her hip, reminiscent of other female figures in Minoan ritual iconography described as dancing. The remaining two figures face each other and are framed



underneath a distinct architectural element, possibly indicating a doorway. The male figure wears a belt, and appears to point to the female figure's chin in a posture mirroring the larger male on shore. The female figure wears the same skirt as the other woman, and has one arm crossing her waist to touch an object, possibly a jug, below the man's elbow. Though it is unclear based on the depiction, it has been suggested that both sets of the male and female figures are expressing farewells (Evans 1935:954, n.3; Mylonas 1945:566; Galanakis 2009:125).

### **Stathatos Seal**

Date: MM IIIB – LM I

Finds Location: Greece, Boeotia, Thebes

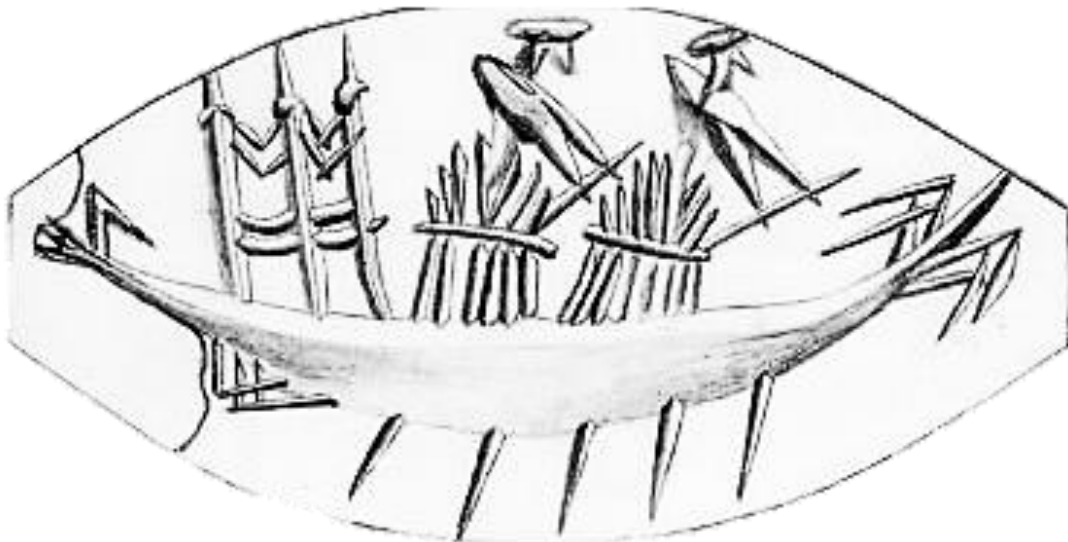


FIGURE 3.8. Gray hardstone with black veins amygdaloid sealstone, possibly from near Thebes, MM IIIB – LM I. Drawing of Stathatos seal, reversed to represent view of seal, CMS IS, 167 (Sakellarakis 1982:no.167).

#### *Provenience*

The finds context for this artifact is unclear. It was allegedly found near Thebes with several gold objects, including a ring (Wedde 2000:340). No further information is provided.

#### *Description*

This artifact has been mistakenly referenced as a signet ring, though it is a sealstone (Davaras 2004:5). The amygdaloid sealstone measures 3.96 cm in length and 2.01 cm in breadth; and is made of a gray hardstone with black veins. It is referred to as both the Thebes seal and Stathatos seal, the latter name referring to its collection at the Athens National Archaeology Museum (Wedde 2000:340). Since the finds context is uncertain, it will henceforth be called the Stathatos seal in this scholarship. The composition is incised onto the stone and fills the workable surface area. It features a ship with additional decorations and two figures.

The ship is crescent-shaped with pointed extremities. Both ends feature a *akrostolia*; the extremity on the right has the motif doubled, but only one appears on the left extremity. The propulsion method, the placement of the *ikrion* at the stern, and the stern device below the hull lead to the identification of the bow as the extremity with the double *akrostolia* and the stern as the extremity with the single *akrostolion* (Wedde 2000:186, 192, 340). The hull itself is smooth and does not appear to have any decorations. Five oblique parallel lines extend below the hull at an angle toward the stern, giving the impression of oars. At the stern, a schematized *ikrion* is included. Three vertical poles each capped with a short, pointed device form the shell of the *ikrion*. The poles are bisected twice: near the middle by two sets of two roughly parallel straight lines; and at the base of the caps of the poles by two double chevrons. A stern appendage, which is in a doubled 'L' shape, is also depicted under the *ikrion* (Wachsmann 1998:111; Wedde 2000:340). The iconography of the ship has been compared to the vessels on the Ship Cup and the Ship Procession fresco, especially because of the parallels of the *ikrion* and stern device (Morgan 1988:69; Wachsmann 1998:111; Wedde 2000:186; Davaras 2004:5).

Two human figures in the ship stand forward of the *ikrion* and each grasp a long implement with straight arms, giving the impression they are standing while paddling the vessel.

The figures have been identified as women due to the grass-like skirts they wear (Wachsmann 1998:111; Wedde 2000:340). Their awkward stance, however, has caused some to identify the figures as birds (Galanakis 2009:125). There is not a comparable example in Minoan iconography for the skirt, which is depicted as several vertical lines sinched together by one horizontal line and hidden by the hull towards the bottom. The female figures also wear a tubular headdress or diadem, which is comparable to those depicted on other examples in Minoan ritual iconography.

### **Ring of Minos**

Date: LM IA

Finds Location: Crete, Knossos area



FIGURE 3.9. Gold signet ring from near Knossos, LM IA. Photograph of reproduction of Ring of Minos (Galanakis 2009:129).

### *Provenience*

The ring was discovered by a local boy beside a vine at a small rock-girt glen near the Kairatos stream, south of the Palace at Knossos. The ring was later purchased by a priest, who apparently lost it. Before it was lost, Émile Gilliéron, who was the chief restorer for Sir Arthur Evans at Knossos, created a replica from a cast of the original (Evans 1935:947-948).

Fortunately, the original ring has resurfaced, and has been on display at the Heraklion museum since 2002 (Krzyszkowska 2005:336).

### *Description*

The bezel of the gold signet ring measures 2.5 cm in length and 1.6 cm in breadth (Wedde 2000:340). The intaglio design features a complicated composition containing five human figures, three shrines, two trees, and a fantastical boat. All scenes have themes and motifs similar to other Minoan ritual iconography. Some have interpreted the scenes as interconnected in a narrative fashion, though they may be forming separate vignettes (Evans 1935:950).

Viewing the ring, the scene on the left features a female figure, and a tree growing out of a shrine with two baetyls at its base. The naked woman with emphasized hips and breasts reaches towards a fig tree while scaling a stepped shrine with two baetyls at its base. She looks over her shoulder and points, with her elbow bent, away from the shrine. The stepped shrine depicts ashlar masonry construction, and presumably continues off the scene. The fig tree growing from the shrine curves towards the center of the composition with the curve of the ring (Evans 1935:951).

The central scene is atop a promontory overlooking the sea. A shrine constructed of four pillars with a domed roof is supported by three large baetyls at the pinnacle. Another fig tree

grows out of the top of this pillar shrine. This tree, however, is being pulled by a smaller male figure who is adorned with a belt and long hair. He stretches to reach the branches with one leg straight behind him as his left knee rests on one of the baetyls. In his other hand, he holds either a fruit or small rhyton behind him while looking up at the tree, mimicking the position of the first female (Evans 1935:951).

The scene on the right of the bezel is a female sitting atop a stepped shrine with an epiphanic figure descending towards her. The stepped shrine mirrors the other with its ashlar masonry, but it features a 'horns of consecration' at the top instead of a tree. The female figure is wearing flounced pants, as seen in other examples of Minoan ritual iconography. She is wearing a necklace and short-tasseled diadem. One hand rests on the shrine and the other touches her right shoulder. The epiphanic figure in the sky at top right, which appears to be female because of the similar flounced pants, descends towards her right hand. The floating figure gestures with her left hand towards the seated figure, while resting her right hand on her hip (Evans 1935:951).

The water scene occupies the lower portion of the bezel under the baetyl and shrine scenes. In the center of the water, there is a female figure holding a steering oar behind her back and standing at one end of a fantastical boat. She is wearing the same flounced pants as the other female figures, and grasps the oar with one hand raised above her head as she rests the other on the oar with a straight arm behind her.

The vessel is more identifiable as a hippocampus with its long snout and stick-ridged back. It faces towards the craft, just as with the Mochlos ring. The decorative shoulder of the sea-horse terminates along the hull between the two levels of a stepped shrine located at the stern, which contrasts with the smooth surface of the rest of the hull. The stepped shrine on the vessel is of pillar-like construction with an abacus and 'horns of consecration' atop each level. While

the stern is more sharply rising, the bow section is flatter and terminates in a three-pronged fork (Evans 1935:951; Wedde 2000:340).

### Ship Procession Fresco

Date: LM IA

Finds Location: Thera, Akrotiri, West House

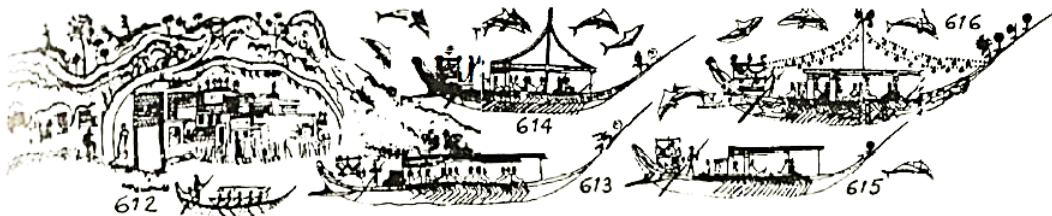


FIGURE 3.10. Multi-colored fresco from Akrotiri, LM IA. Drawing of Ship Procession fresco, left side, with Wedde's catalog numbers assigned to each ship (Wedde 2000:plates 612-616).

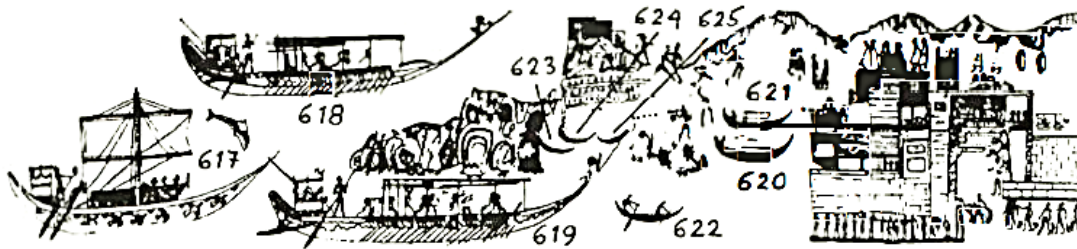


FIGURE 3.11. Multi-colored fresco from Akrotiri, LM IA. Drawing of Ship Procession fresco, right side, with Wedde's catalog numbers assigned to each ship (Wedde 2000:plates 617-619).



FIGURE 3.12. Multi-colored fresco from Akrotiri, LM IA. Color photograph of best preserved ship in the Ship Procession fresco, ship 614 (Morgan 1988:color plate C).

### *Provenience*

The West House was excavated under the leadership of Spyridon Marinatos between 1967 and 1974. The ship frescoes, located in Room 5 on the south wall, were found in what is considered the main living areas of the house on the second story. Room 5 is only accessible from Room 3, and forms a distinctive compartment with adjoining Rooms 4 and 4a. This compartment is the most luxurious of the house in both decoration and design. Room 3 is considered the main hub of activity for the home, and was likely added in a traditional Cretan style with a central column after seismic activity destroyed parts of Akrotiri in the beginning of LM IA. Several loom weights indicative of weaving were excavated from Room 3, which is the largest of the 16 rooms in the house (Morgan 1988:2-3; Palyvou 2005:50, 182; Berg 2017:224).

Upon entering Room 5, the first fresco on the right would have been a full-length fisherman on the north wall. In the northern corner on the east wall is an entrance to a small lobby or antechamber along the north exterior wall, which contained a cupboard, between Rooms 5 and 6. Above the windows on the north wall in Room 5 was the Shipwreck and Meeting scenes. It is postulated there existed a miniature frieze above the windows on the west wall, but nothing definitive has been found due to extensive damage. Another full-length fisherman, though less well-preserved, was in the south corner of the east wall. The Ship Procession fresco was along the top of the south wall. Above the doorways into Room 5 on the west wall was the Landscape scene. On the east wall in the door jamb into Room 4 was the full-length Priestess fresco. In Room 4, three *ikria* decorated the east wall, with two *ikria* each on the

north wall and south partition wall, and one *ikrion* on the west wall. The window on the west wall was decorated with red lilies in painted marble vases. Both rooms had dado decorations painted to look like wood and stone in various locations (Morgan 1988:3-4; Palyvou 2005:50-51).

The two interior walls of Room 5, the east and south walls, were divided into five cupboards with doors beneath the miniature friezes. In Room 5, excavators discovered imported pottery from Crete along with fragments of the miniature frescoes, a stucco offering table with decorations of reeds and dolphins, and a black serpentine bird's-nest bowl. In Room 4, there were two plain bowls, a pyxis-strainer decorated with spirals and Theran crocus flowers, and a clay lioness-head rhyton. Room 4a may have been used as a bathroom based on the bathtub fragments and lavatory installation on the west wall, which included a built-in seat with clay pipes connected to the town's sewer system. A bronze tripod-cauldron, a hearth, two large jars filled with plaster and two grinding pebbles, and a bowl with red pigment were also found in Room 4a, suggesting it was undergoing reconstruction and decoration at the time of destruction (Morgan 1988:3; Palyvou 2005:51).

### *Description*

At the West House, there are 24 ships along the north and south walls, depicted in the Shipwreck and Ship Procession scenes, respectively. The Shipwreck scene encompasses only a portion of the frieze on the north wall, of which only about a meter survived because most of the fresco fell outside during the destruction event. The Ship Procession scene is better preserved, however, because it was on an interior wall. The extant scene is about 3.9 m long and 42 cm tall; and was created using the wet fresco technique typical of Minoan frescoes (Morgan 1988:4; Berg 2019:185).



Within the Ship Procession scene, 14 ships are depicted in approximately three different sizes corresponding to the level of elaborations in the decoration. For ease of description, the ships will be referred to by their catalog numbers from Wedde (2000) as seen in Figures 3.10 and 3.11. Ship 612 is the farthest left in the composition, and ship 625 is the farthest right. The seven larger ships, numbers 613-619, are between 59.5 and 77.8 cm long, and all but one are shown being paddled. The three medium-sized ships, numbers 612, and 620-621, are between 15.0 and 33.3 cm in length and are all rowed. The four small ships, numbers 622, and 623-625, are between 8.3 and 14.6 cm. Only one is visibly paddled (Wedde 2000:320-322). The scene is vibrant, lively, and colorful, emphasizing red, blue, and yellow hues.

The composition begins on the left with a small townscape, featuring a few buildings with human figures in and around both watching the procession and going about their day. The town is surrounded by a river and hills dotted with trees, animals, shepherds, and small singular buildings. The majority of the ships are depicted at regular intervals between the town on the left and the town on the right. Dolphins interspersed between the vessels further the impression that they are moving swiftly through the water. The second townscape on the right has a more elaborate harbor area with a rocky alcove and small set of buildings on and around the promontory. The main area of the town is set apart by an inlet or harbor, and features larger and more ornate buildings. This town is more populated and the wider variety of people pay more attention to the ships in procession. Tall mountains rise above the town, but there is less of the wildlife and wilderness of the town on the left.

All of the 14 ships in this fresco have the same general shape. They are a curved hull with a pointed bow and more sharply rising stern section. Ship 612 is below the town on the left: it is medium in size, rowed by four oarsmen under an awning, and steered by a helmsman standing at

the stern in front of a figure sitting in a structure built up over the sheer strake. The other two medium ships, 620 and 621, appear to be moored in the harbor of the town on the right. They are not as detailed as 612, but both appear to have a passenger at the stern and possibly an awning amidships. The largest of the small vessels, 622, is in the foreground in the harbor on the right, and is being paddled by two figures. The other three small ships are in the background and are merely represented by crescent-shaped brown lines to indicate the form (Wedde 2000:320-322).

The larger ships, 613-619, are between the two towns, with 619 crossing under the rocky cove of the town on the right. All the large ships have the same general syntax of motifs, except for 617. Ships 613-616 and 618-619 are all paddled by paddlers awkwardly leaning over the hull with short paddles depicted in parallel lines. The paddlers are situated along the hull underneath the awnings, which are supported by vertical poles with a double crescent-shaped top. The top of the awnings are painted with similar candy cane stripes to the masts in other ships, suggesting that the masts have been unstepped to create the awnings. Under the awnings, passengers sit facing each other in compartment-like fashion separated by the vertical poles holding up the awnings. Ship 617 is under sail, and has neither an awning nor paddlers.

At the stern, all the large ships have an added horizontal stern device. They also have an *ikrion* decorated similar to the full-panel *ikria* in Room 4, though ships 617 and 619 are only recreated as such. Some of the *ikria* have surviving decorations in different combinations of bovine-skinned patterns on the panels, a helmet on the center upright, and crocus festoons draped between the three uprights. All the large ships also feature a helmsman standing in front of the *ikrion*, but the sailed ship again is singular with two helmsmen. The large ships also all have passengers under and aft of the awnings, except for the sailed ship (617) which features passengers sitting in a raised deck structure. One of the passengers in the sailed ship appears to

be manipulating the lines from the aft section of the structure. All the large ships are depicted with bow extensions, some with surviving added decorations. Ships 614 and 616 still have their masts stepped, unlike the other paddled large ships which are depicted without a mast. The top of ship 614's mast has five pairs of deadeyes with lines running through, connected to the top corners of the awning. Ship 616 has two butterflies at the mast head with highly decorated and festooned lines connected to the *ikrion* and the bow (Wedde 2000:321-322).

The medium and small vessels, 612 and 620-625, are all a reddish brown color and lack any decorations aside from a black painted sheer on the three medium vessels. The large ships, on the other hand, are all highly decorated. Though only ship 614 is almost fully extant, most of the hull, stern figure, and the decorations of the bow extensions of the other ships have been extrapolated in the restoration (Wedde 2000:320, 322).

The hull of ship 613 is painted white with blue and yellow dolphins, a yellow sheer, and a red motif of coastal rocks/vegetation creeping below the sheer. A bird and star, also resembling a rayed sun or flower, have been added as decorations to the bow extension. The stern figure has been restored as a female lion, based on the preserved paws at the stern. A helmet is also depicted above the center pole of the *ikrion* (Wedde 2000:321).

Ship 614's hull is painted white with a sheer painted yellow at the stern and black at the bow (Figure 3.12). A trim of black sea spirals on a blue background with a wavy brown line below separates the sheer from the white hull. Extra decorations include a crescent-shaped pole at the bow, and a helmet on the center pole of the *ikrion*. The bow extension has added decorations of a butterfly and star. The stern figure is a yellow lion perched and facing aft, as is standard with the other ships with stern figures in the Ship Procession fresco (Wedde 2000:321).

The hull of ship 615 is painted white with a yellow sheer. The bow section has not been preserved, aside from the far end of the extended bow, so it is unclear if there were any decorations. The stern figure, however, was well-preserved as a griffin with its body decorated with black spirals on a blue background (Wedde 2000:321).

Ship 616 is the most elaborately decorated. The hull is painted white with the sheer painted yellow at the stern and black at the bow, similar to the second large ship. Additionally, the hull decorations are varied, unlike the other ships. Beginning at the stern, two lions are painted running towards the stern, then four dolphins swim towards the bow, next is a wide vertical blue band framed by black-bordered yellow bands on either side with a yellow star in the center, and finally two more lions running towards the bow. The bow extension has four decorations that alternate between butterfly and star motifs, and the stern figure is a yellow lion. The ship also features additional decorations not present in the other large ships: the *ikrion* is decorated with waz lilies at the tops of the uprights, helmets hang from the uprights of the awning, the dresslines are festooned with yellow globules and pendant crocus flowers, and the masthead is decorated with two antithetic butterflies (Wedde 2000:321-322).

Ship 617, which is the sailed ship, is not as well preserved. The hull is painted white with a black sheer. Beneath the sheer are pendant crocus blossoms painted with blue pedals and a yellow stamen. Four blue birds in flight towards the bow have been preserved, with additional birds restored to take up the length of the hull. An *ikrion* has been added to the restoration, but there is no direct evidence for one. The bow section has not survived, but has been restored without the bow extension (Wedde 2000:322).

The hull of ship 618 is painted yellow with a yellow sheer. A blue sea spiral outlined in black, similar to the second ship's decoration, separates the yellow. The bow extension is

decorated by three yellow dolphins and a star. The griffin stern figure is elaborately painted with a white body and black, blue, and white striped patterns. The *ikrion* includes extra decorations of two helmets on the two forward uprights, with tassels on the top horizontal brace (Wedde 2000:322).

The last large ship, 619, is located underneath the rocky cove of the town on the right. Its hull is painted white, while the sheer is yellow with an irregular blue wavy pattern beneath. The stern figure is a griffin painted with a yellow body and black spiral patterns on its back. The bow extension is decorated with a star. Additional decorations include a helmet at the forward upright of the *ikrion*, three more helmets under the awning, and a crescent pole at the bow (Wedde 2000:322).

The table below outlines the major iconographic motifs that are definitive from the preservation. Any elements added for restoration are not included in the table.

<b>Ship no.</b>	<b>Propulsion Method</b>	<b>Stern Figure</b>	<b>Hull Decoration</b>	<b><i>Akrostolion</i></b>	<b>Bow</b>	<b>Bow Decorations</b>
612	Oar	No	Plain	Single	Plain	None
613	Paddle	Lion	Marine Rocks/Vegetation, Dolphins	Double	Extended	Bird, Star
614	Paddle	Lion	Sea Spirals	Triple	Extended	Butterfly, Star
615	Paddle	Griffin	UNK	UNK	Extended	UNK
616	Paddle	Lion	Lions, Dolphins, Framed Star Motif	Quadruple	Extended	Butterfly, Star, Butterfly, Star
617	Sail	UNK	Crocuses, Birds	UNK	UNK	UNK
618	Paddle	Griffin	Sea Spirals	Double	Extended	Three Dolphins, Star
619	Paddle	Griffin	Blue Waves	Triple	Extended	Star

TABLE 3.2. Ship Procession fresco ship decoration information (Wedde 2000:320-322).

## Anemospilia Seal

Date: MM III

Finds Location: Crete, Anemospilia



FIGURE 3.13. Black and white agate cushion seal from Anemospilia, MM III. Drawing of depiction on Anemospilia seal (Wedde 2000:plate 831).



FIGURE 3.14. Black and white agate cushion seal from Anemospilia, MM III. Photograph of Anemospilia seal (taken by author at Heraklion Museum, 5 July 2019).

### *Provenience*

The context of the Anemospilia seal is rather unique. The building in which it was discovered is of standard, square Minoan construction and is only made significant based on the location and recovered artifacts. Around 1700 B.C., it was destroyed by an earthquake and resulting fire. This building, which is at the foot of Mount Juktas, is connected to the peak sanctuary by road and was likely a temple that directly catered to the peak's ritual activities (Rutkowski 1986:234-235; Kiriakidis 2005a:90). During the initial excavations in 1979, the four main areas of a corridor and three chambers were uncovered. Within the corridor, east chamber, and central chamber archaeologists excavated over 400 pottery vessels full of ritual offerings, most of which were organized around a pair of clay feet on a pedestal that likely came from a wooden cult statue in the central chamber (Sakellarakis and Sapouna-Sakellarakis 1981:213-222).

Four skeletons were discovered in the building: one in the corridor and three in the west chamber. The skeleton in the corridor was the least well-preserved and likely died carrying a large and elaborate Kamares ware vessel, the sherds of which were scattered in 105 pieces. Of the three skeletons in the west chamber, a 28-year-old female was the least unique, only suffering from anemia. The 18-year-old male skeleton was laying in the fetal position on an altar. The bronze knife incised with a fantastical animal head, which was discovered on top of the skeleton, is thought to have been used in his sacrifice. The final skeleton was a 6'0" tall man in his late 30s, and is thought to have been a priest due to his stature and personal adornments, which would have set him apart from other Minoans (Sakellarakis and Sapouna-Sakellarakis 1981:213-222; Rutkowski 1986:235-236). At the very least, he would have likely had access to better nutrition than the average Bronze Age Aegean, as evident by his height and age (Berg

2017:53-55). He wore a silver ring plated in rare iron on his pinky and a distinctive seal on his wrist (Kyriakidis 2005a:88-89).

### *Description*

This cushion seal is a striking piece of black and white agate. Unlike other seals, however, the decoration does not fill the stone but instead seems to be dictated by it. The smooth, curved hull of the vessel is centered in the seal, with the bow and stern nearly touching the left and right sides, respectively. The pointed bow features an *akrostolion* and bow extension. A protome stern figure rises and curves in over the hull in what appears to be the head of a bird or griffin. At the stern, triangle-like construction is formed by a series of sketchy lines, resembling an *ikrion*. A human figure stands at the center of the boat, bent at the hips and grasping a vertical paddle with straight arms. There are traces of a faint, horizontal waterline on either side of the hull (Wedde 2000:337). The figure is generally described as a male due to indiscernible garments or physical features that usually indicate a woman in Minoan and Mycenaean iconography, such as a full skirt and overly emphasized breasts. Goodison (1989:38), however, argues that the lower shoulder more resembles a breast and that the figure is indeed wearing a skirt, suggesting the figure is actually a woman. The drawing of the seal (Figure 3.13) gives clear indication of legs and no skirt, but the photograph of the seal (Figure 3.14) is more ambiguous. It is possible the figure is wearing a skirt or undergarment pants similar to the figures in the Ring of Minos and other glyptic images, such as Figure 3.15, suggesting the figure in this boat is female.





FIGURE 3.15. Carnelian lentoid sealstone from Asine, LB I-LB II. Example of legs visible through skirt, similar to Anemospilia seal, CMS VS1B, 058 (Pini 1993:no.058).

The composition is made all the more remarkable by its placement in the agate stone. In beautiful symmetry, the material and incised decoration were likely carefully selected and produced in order to create the desired effect. This conscious compositional arrangement is not unique to the Anemospilia seal. A comparable example is an LH IIIB cylinder seal discovered in Thebes (Figure 3.16), wherein a griffin is incised in the center of a black vein in the agate surrounded by a white vein, framing the face and extended wings of the creature. The face of the Anemospilia seal stone is rectangular with a dark black vein running from top to bottom in a funnel or triangular shape. The white of the agate takes up the remainder of the face, only broken by an oblique black vein touching the terminus of the bow on the left, and two small light brown veins on the bottom corners. The majority of the boat was incised into the white portion, with the stern figure touching the black vein and the *ikrion* running along the border of the black and white areas on the right. The human figure as well as the portion of the hull directly under it is chiefly in the point of the black triangle. Even the action of paddling is confined to the black area, with only the bottom portion of the paddle in the white. The effect is to highlight the human

figure and its action while making the ship secondary in the composition, unless seen in raking light or impressed in a sealing. Unfortunately, this compositional context is entirely lost in recreated drawings of the seal.



FIGURE 3.16. Black and white agate half cylinder sealstone from Thebes, LH IIIB. Example of compositional arrangement within medium, similar to Anemospilia seal, CMS V, 672 (Pini et al. 1975:no.672).

### **Ayia Triada Sealing**

Date: LM IB

Finds Location: Crete, Ayia Triada, Villa Reale



FIGURE 3.17. Clay sealing from Ayia Triada, LM IB. Drawing of Ayia Triada sealing, CMS II-6, 020 (Platon et al. 1999:no.20).

### *Provenience*

This particular image is a drawing of one of the nearly identical 45 *noduli* of the same seal impression discovered together *in situ* at Villa Reale in Ayia Triada during the Italian excavations of 1902 and 1903 (Krzyszowska 2005:162, 168). They were found in the southwest section of the villa on a window ledge between corridor 9 and room 27, which was likely a storeroom. A tablet with Linear A inscriptions was found nearby, but no other artifacts (Krzyszowska 2005:170). In the northwestern part of the large villa, a deposit of 1,100 sealings was found along with roundels, tablets, and other high-status objects (Krzyszowska 2005:171).

### *Description*

The clay seal impression was likely produced from a gold signet ring (Platon et al. 1999:no.20). Lunettes below the hull partly obscure it but also give the impression of water, while ovals that line the bottom give the impression of rocks. The hull itself is in the shape of a bird, or possibly griffin, with the head forming the stern. The bird-like stern features include a long beak, a tuft of plumage from its head, and a wing tucked against its body forming hull decorations. The sheer is shaped to mimic the breast of the bird. At the bow, the tail is spread out in a fan of three feathers. There is a stylized human figure at the center of the vessel, in the midst of paddling. The bottom half of the figure is hidden by the hull, but the top half features long hair, a long conical headdress, and straight arms grasping a paddle (Wedde 2000:339).

### **Tsivanopoulos Seal**

Date: LH II

Finds Location: Unknown



FIGURE 3.18. Gray sardonyx lentoid sealstone of unknown provenience, LH II. Drawing of Tsivanopoulos seal, reversed to represent view of seal, CMS V, 184b (Pini et al. 1975:no.184b).

### *Provenience*

Provenience for this seal is unknown, which unfortunately highlights the lack of information that could have been acquired had this artifact come from a recorded context. It will, therefore, be referred to by its collection name at the Athens Numismatic Museum - Tsivanopoulos.

### *Description*

The gray sardonyx lentoid seal has been incised with decoration on two sides, but about a third has been damaged, partly obscuring the designs. Nevertheless, one side clearly depicts two male figures in a ship, though the hull is mostly lost. Only the pointed extremities, and a mast with one forestay and two backstays assist in identifying the ship. The stern on the right side of the composition is recognizable by an 'H'-shaped *ikrion* and the smaller male figure grasping a steering oar. The smaller male figure faces away from the viewer with his head turned left

towards the bow. With his legs bent at a 45 degree angle, he appears to be sitting or straining to steer the ship or hauling lines to raise sail. His facial features are identifiable, and his hair is pulled back or shaved into a tuft at the crown of his head. A straight line indicating a mast is visible between the smaller and larger figure, giving the impression the larger figure is at the bow. The larger figure kneels on the sheer strake with his left knee while he extends his left arm forward, pointing beyond the composition. His only adornment is a loincloth, and belt at the waist. A bird is depicted beneath his outstretched arm as if it is about to land on the prow (Wedde 2000:339).

Two creatures are depicted on the other side of the seal, one above the other, with a stylized figure of eight shield in the field above. The damage on the seal makes it difficult to accurately identify the animals, but lower quadruped is likely a stag because of the preserved antlers. The upper quadruped has been identified as a dog or cow, but it could also be a griffin.

### **Khania Sealing**

Date: LM IB

Finds Location: Crete, Khania, Kidonias



FIGURE 3.19. Light gray clay sealing from Khania, LM IB. Drawing of Khania sealing, CMS VS1A, 138 (Pini 1992:no.55).

#### *Provenience*

The sealing was found at the excavation site of Ayia Äkaterini-Platz in Khania on Kastelli hill near the Venetian Harbor. It was discovered in House I, Room D, within a cupboard (Pini 1992:no.138). The house itself is 225 m<sup>2</sup>, at least two stories tall, and contains over 10 rooms, including a combined kitchen and workroom which contained the remains of a loom. Room D was possibly a treasury and contained many high-status items, including stone vases, seals, and jewelry. One of the more interesting artifacts from that room is a clay bar with 12 seal impressions of 10 unique seals (Swedish Institute at Athens 2020).

#### *Description*

The sealing is a stopper made of light gray clay. It was likely formed from a lentoid seal, 1.53 cm in diameter. The impression of intaglio design features a curved hull with pointed

extremities, with deeper cuts forming the outline of the hull and sheer strake. A hint of bifurcation is visible at the right extremity, but otherwise the hull is smooth and without decorations. An indiscernible figure sits inside the boat holding a paddle or an oar that extends underneath the right extremity. The figure may be female based on the shape of its lower half, which appears to be a full skirt. There are arbitrary marks beneath the vessel that may have also been incised on the original seal, possibly indicating sea life or rocks (Wedde 2000:340). Unfortunately, not many details are apparent due to the quality of the impression.

## **Conclusion**

The artifacts under consideration for this study are varied, but all are linked together by common iconographical and contextual threads. Their dates range from around 1700 B.C. (MM III) to around 1100 B.C. (LH IIIC), and their contexts range from mainland Greece to the Cyclades to Crete. All of the artifacts meet the guidelines for depictions of ritual vessels outlined by Wedde (2000), which was utilized as a foundation for this study because of the clear and concise identification criteria. According to Wedde (2000:180), the five characteristics that can be identified as depicting ritual craft in the Aegean Bronze Age: presence of human figures; interaction or gesturing between the actors; motifs that heighten ritual significance; ship-morphological indicators; and narrative content. For the purposes of this study of ritual iconography, the finds context as well as the iconographic motifs heighten the significance of the artifacts.

Based on the finds' contexts and artifact types, several of these images were likely important to their owners and held either ritual or prestigious significance. Most were found in burials, or in the same context as precious objects or ritual artifacts. The Ship Cup, Ayia Triada

sealing, and the Khania sealing were uncovered from within or near storage areas, though the social status of the occupants were not the same. The Ship Cup's owners were likely artisans, the Ayia Triada sealing's owners were of high status as there were prestigious and ritual artifacts found in the villa, and the social status of owners of the Khania sealing was somewhere in between. The Candia ring, Ring of Minos, and Tsivanopoulos seal all have unknown or unconfirmed finds locations.

Furthermore, these images are set apart from other Bronze Age Aegean ship images by motifs that elevate their status beyond everyday use. Some of these motifs are added to the ships themselves, namely *akrostolia*, *ikria* or stepped shrines, stern devices, awnings, and nonsalient decorations. The human figures on or around the vessels also give indications of heightened ritual significance by performing ritual gestures, wearing specific clothing, or propelling the vessel in an unusual manner. Other motifs, such as the tree or female figure in the vessel, a fantastical hull, and salient decorations, can potentially help identify the specific referent of these images. Through the iconographic principle of cumulative sufficiency, the combination of some, but not necessarily all, of the motifs can categorize these images as belonging to a common theme (Knight 2013:71). Just as one of two motifs would have been enough for an emic viewer to recognize the subject, analysis can help determine the referent of this subcorpus.



## **CHAPTER FOUR: LITERATURE REVIEW**

The ritual nature of Minoan ships has been argued for three-dimensional boat models, linear images painted or inscribed on frescoes or ceramics, and glyptic images incised onto sealstones. Ship depictions constitute a relatively small percentage of Minoan artifacts, despite the probable importance of the sea in many of their lives. A proportion of those ship depictions relate to recognized Minoan ritual activity, either directly or indirectly. Interestingly, all of the linear and glyptic ship images in this study have been compared or related to at least one of the other selected artifacts, illustrating the degree to which previous scholarship has argued for the interconnectedness of Minoan ritual ship iconography. This section analyzes previous scholarship of artifacts relating to the ritual use of Minoan vessels, giving particular emphasis to those depicting a female figure and tree in conjunction with a ritually heightened ship in order to uncover further dimensionality to Minoan ceremonies and rituals.

### **Wedde's Definition of Ritual Ship Imagery**

One of the major works upon which this study has been developed, is Wedde's (2000) preliminary definition of ritual seagoing vessels in Bronze Age Aegean iconography. Wedde (2000:180) gives his definition of ritual craft based on typology and structure, boiling it down into five criteria: presence of human figures; interaction between the actors based on gestures; added motifs with heightened ritual significance; ship-morphological indicators; and narrative content. While his criteria have been instrumental in building a foundation for this study, some of his criteria are less than sufficient for establishing ritual significance for this particular theme. Wedde's (2000:180) suggestion that the presence of human figures indicates a narrative scene is far too subjective for multiple reasons. Not only could the figures in the images be engaged in

activities that are not cultic, but also the so-called narrative interpretation could be considered emblematic in certain contexts. The interaction or gesture of the figure(s) is a better indicator since it gives the viewer a clue about the nature of the activity. Precluding emblematic motifs from a discussion of ritually significance is also problematic. Though it is undeniably more difficult for the etic researcher to label a motif as ritually significant without narrative connotations, the motif can be better understood as ritual within a larger iconographic context. For example, the star/sun motifs on the ships of the Ship Procession fresco may be an emblem of the fleet, as suggested by Morgan (1988:134), but may also have cultic connections with a Minoan deity, indicating a possible ritual association in the context of the procession.

Included in Wedde's ritual ship image subcorpus are 12 LM glyptic images, 2 MM glyptic images, and 1 LM linear image that fit this criteria (Wedde 2000:188, 193, 339-340). Aside from the Ship Cup, which had not been discovered in time to be included in Wedde's catalog, and the Ship Procession fresco, all of the images in this study belong to Wedde's ritual ship images. From his subcorpus, five images must be excluded from the present study due to lack of substantiating compositional and finds contexts that can be compared to other Aegean Bronze Age images. One example is the MM II sealing from Phaistos (Figure 4.1) that Wedde includes because certain lines "invoke a seated human figure", which fits the first determinative criteria (Wedde 2000:335). Upon close examination, however, a clear definition of any motif other than the ship is too conjectural, and can therefore not be considered as a ritual craft. The other four exclusions do not have enough of the image preserved to definitively evaluate the presence or absence of a hull or other ritual motifs. The "Temple Repository" sealing (Figure 4.2) and a sealing from Pylos (Figure 4.3), for example, which have traditionally been

understood to depict human figures in boats, do not have enough of the hull extant to make positive identification for the purposes of this study.



FIGURE 4.1. Sealing from Phaistos with indeterminate “human figures”, MM IB-MM IIB (Wedde 2000:plate 818).

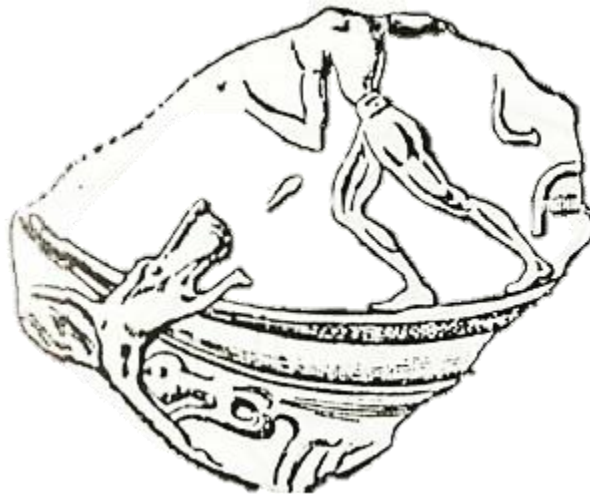


FIGURE 4.2. The “Temple Repository” sealing from Knossos depicting a male figure on a supposed boat appearing to lunge towards a dog-like figure, considered to be Scylla by Evans, MM III-LM I (Evans 1935:952; Wedde 2000:plate 901).



FIGURE 4.3. Sealing from Pylos depicting three human figures possibly sitting in a supposed curving hull and the legs of a fourth figure standing between the first and second, LH IIIB (Wedde 2000:plate 906).

Other images considered ritual that were not included in this study include the 3rd millennium B.C. Cycladic “frying pans”, some MM I-II prism seals, and the MM III-LM I talismanic seals. Wachsmann (1998:109, 113) links these to fertility and vegetation cults, whereas Tully (2016:3) suggests the vegetation motifs were earlier manifestations of the “Goddess from the Sea” cult imagery. The majority of the talismanic seals feature motifs identified as an *akrostolion* and an *ikirion*, along with the talismanic sprays and are therefore thought to have held similar ritual significance to the other images in this subcorpus with those motifs (Betts 1973:334; Wachsmann 1998:99-103; Davaras 2004:9-10; Tartaron 2013:77-78; Tully 2016:2-5). Though it seems unlikely that the talismanic seals had magical powers as originally suggested by Evans (1921), the rejection of a cultic interpretation in favor of purely stylistic, as Onassoglou (1985) and Wedde (2000:134-141) argue, seems too dismissive. The similar production technique allows for identification of the talismanic style category, but the inclusion of ceremonial objects, such as an *ikrion*, suggests a ceremonial reference similar to the ships in the West House frescoes or the Ship Cup (Davaras 2004:10; Tartaron 2013:55). Though these images may relate to those in this study, they do not unquestionably contain the motifs of

the tree or female figure that are integral to understanding the meaning of this theme in Bronze Age Aegean iconography. The images included in this study, however, all depict more than one motif considered ritual in conjunction with the female figure and tree in the boat theme.

### **Mochlos Ship Cup**

This fragmented cup dates to around 1500 B.C., is about one third extant, and depicts three crescent-shaped ships along the shoulder. Due to its relatively recent discovery, especially compared to the other images in this study, not much has been written about it aside from the thorough excavation reports from Mochlos. The Mochlos Ship Cup is singular in Minoan ship iconography in that it is the first LM I ship image to have been discovered on pottery (Wedde 2000:349). The attenuated crescent-shaped hull seems to be congruent with Michael Wedde's Type IV ship types, which includes the ships from the Ship Procession fresco, the Makrygialos seal, the Tsivanopoulos seal, and the Stathatos seal.

Davaras (2004:5-9) repeatedly stresses that every element included in the cup would have been easily recognizable to Minoans, and likely alluded to a scene that was probably frequently depicted in other contexts. The combination of the *akrostolion*, palm tree, and the *ikrion* and/or awning, with the addition of a possible human figure in the unpreserved sections, would have been an abbreviate allusion to an enculturated concept that was also present in the Makrygialos seal and Mochlos ring. Davaras's idea corresponds to the iconographic principle of cumulative sufficiency, which is defined by Knight (2013:71) as the ability by an emic viewer to recognize the subject of a pictorial representation based on a combination of features.

Davaras further asserts that the motifs displayed in these three objects are related in symbolically representing some sort of ritual activity important to the Minoans. He specifically

links the iconography of the Ship Cup with a Minoan tree transportation ritual that probably has links to Egyptian and Mesopotamian origins, as well as Classical Greek mythology linking the famous palm tree on Delos to the Leto and Britomartys cults which have been argued to be remnants of Minoan cults (Marinatos 1993:181; Davaras 2004:7; Galanakis 2009:126). The trees on the Ship Cup could have been symbols of fertility similar to the Levantine “Tree of Life” iconographic theme, especially if those same transported trees were a part of the Minoan tree-shaking rituals which were broken to symbolize the end of a fertility festival (Marinatos 1993:188; Davaras 2004:7). Though his interpretation identifying the actors and the occasion depicted in these three objects may be too specific, Nanno Marinatos (1993), Caroline Tully (2016), and Konstantinos Galanakis (2009) also cite the Makrygialos seal and Mochlos ring as belonging to the Minoan “Goddess from the Sea” imagery. Davaras (2004:5) also considers the possibility that the ships could be a simplified representation of a procession similar to the Roman *Navigium Isidis*. This interpretation seems plausible considering not only that the extant parts of the three ships on the cup are not identical, but also that there are other instances of Bronze Age ship processions in the frescoes at Akrotiri, Kea, and Pylos (Morgan 1988:168; Wachsmann 1998:87; Tartaron 2013:54). Ultimately, Davaras’s iconography analysis of the Ship Cup supports the consideration of other ship depictions in this study as part of the same pictorial program. Though Davaras does not explicitly link the Ship Procession fresco to the Mochlos ring, his interpretation leads to the possibility that ship processions could be linked to “Goddess from the Sea” iconography.

Davaras delves into deep analysis of every iconographic element of the Ship Cup. Some of his theories are more plausible than others. One relevant example is his hypothesis that the cup’s available space limits the accurate depiction of certain motifs in an image, specifically the

*akrostolion* (Davaras 2004:5). While he is partially correct, a more thorough explanation for the difference in this instance would also account for medium and tool usage, as well as artistic license. On talismanic sealstones, for example, the lines are created by regularly employed tubular drills and large cutting stones to create abstract ships (Wedde 2000:135; Tartaron 2013:77). The size and composition of materials as well as the tools employed upon those materials significantly affect the outcome of the final image, even when comparing the different stone media selected for seals (Wedde 2000:137; Knight 2013:41). The Ship Cup, on the other hand, was painted onto a curved surface using black slip, a watered-down clay material, which can cause imprecise brush strokes. The final element of artistic license is nearly impossible to control for in archaeological artifacts, and as a result is difficult to definitively assess. Though a larger corpus of material would make conclusions about artistic license more tenable, it is still an element that deserves consideration.

The discovery of the Ship Cup, for example, provides support for the motif on the Makygialos seal as a tree instead of sagging rigging, as earlier scholars supposed (Davaras 2004:6). The stylistic difference of these two tree depictions compared to the larger corpus of Minoan trees could indicate a separate species, the same species in a specific time period, or abstracted and realistic versions of the same species. The tree on the Mochlos ring, for instance, possibly represents a fig tree, but the tree on the Ship Cup looks more like the Cretan palm. The hearty and persistent Cretan palm has been found in Pleistocene volcanic ash at Santorini, and was first described in the 4th century B.C. as having two or sometimes three stems. It grows naturally along the coast of Crete, Santorini, Karpathos, Rhodes, the Sporades, and southwest Turkey (Rackham and Moody 1996:66-68). In Minoan ritual and religious iconography, possible fig trees are usually enclosed within a shrine whereas palm trees are depicted next to a shrine or

ritual implements, as in Figure 4.4 (Morgan 1998:18; Wedde 2000:185). Since Morgan (1988:18) attests that the West House fresco and a serpentine vessel from Knossos are the only two verifiable representations of fig trees in Minoan iconography, the two distinguishable trees in question could potentially be the same species, with those trees growing from shrines depicting the date palm tree during inflorescence. Minoan iconographers believe Minoan artisans alluded to a specific times of the year based on their depictions of the bloom of plants or animal coat colorings (Morgan 1988:165). Artistic license could also account for the difference, with an emic viewer only possessing the necessary cultural knowledge to discern the two depictions.



FIGURE 4.4. Agate seal from Knossos depicting female figure in adoration gesture facing a palm tree, LM II-LM IIIA1 (Tully 2016:3).

Some of Davaras's theories, however, present some problems in the study of Minoan boat iconography. He relies too heavily on the suppositions established by earlier scholars, namely the interpretations of the *akrostolion* limited to the prow of Minoan ships and the *ikrion* as the only superstructure located at the stern. As a result, he and other scholars, such as Wedde (2000), utilize these motifs to identify the extremities. The underlying construction of the ship as Aleydis Van de Moortel (2015) argues, however, is a more reliable indication of the bow and stern. Additionally, some ship depictions, such as the Stathatos seal, include *akrostolia* at the



bow and stern, leading to the possibility that the motif was more versatile than originally thought and does not automatically identify the bow. Furthermore, other images, such as the Ship Procession fresco, include a superstructure at the stern and amidships, opening up the possibility that the partial superstructures on the Ship Cup and talismanic sealstones are not depicting stern cabins.

The imprecision of relying on motifs to identify extremities is further tested by an analysis of the angle of the preserved ships on the cup. The ship opposite the handle rises at a shallower angle than the other two extant ship ends, respectively at 45° and 80° (Davaras 2004:3). This is congruent with Aleydis Van de Moortel's (2015:267) Type C2, corresponding to Wedde's Type IV, hulls that usually depict an asymmetrically curved hull with the stern rising more sharply. Therefore, the Ship Cup depicts three ships with *akrostolia* at both extremities. The best preserved ship depicts an *ikrion* at the stern with a palm tree amidships, just like the Makrygialos seal. The ship opposite the handle, however, depicts the bow with a ladder-like construction that may not be an *ikrion* as Davaras claims, but instead may be part of an awning as depicted in the Ship Procession fresco and the Tiryns ring. Regardless of the possible identification, both the *ikria* and the awning amidships seem to indicate an elevated status, especially when considering Egyptian ship cabin parallels and the other Minoan examples of the Epidauros stone rhyton relief (Figure 4.5) or the Tiryns ring (Shaw 1980:178-179; Morgan 1988:137-142; Tartaron 2013:54-55).

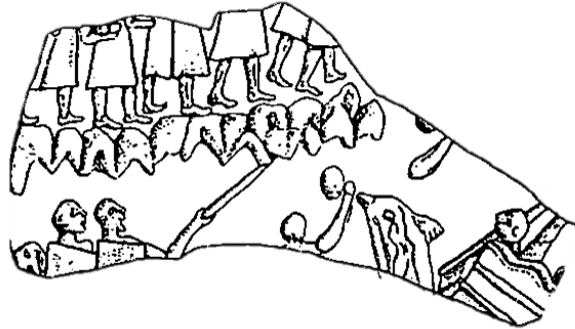


FIGURE 4.5. Fragment of Epidauros rhyton depicting an *ikrion* and dolphin stern decorations, LH IIIB (Wedde 2000:plate 642).

It must be noted that Davaras is correct in cautioning against the suggestion that the Ship Cup, or other motifs in Minoan iconography, could be transcribed into a Minoan phrase based on the relation of its motifs to Cretan hieroglyphics and Linear A, which are two writing systems endemic to Bronze Age Crete that have yet to be deciphered (Davaras 2004:10-12). Though a full linguistic analysis on Minoan writing is not possible yet, writing systems similar to Cretan hieroglyphics and Linear A generally convey the spoken language with interpretations separate from the visual referent (Knight 2013:9). In other words, a boat on a fresco likely refers to a boat in real life, whereas the Cretan hieroglyphic sign CHIC 040 (Figure 4.6) likely corresponds to the sound “o”, without any crossover between the two.

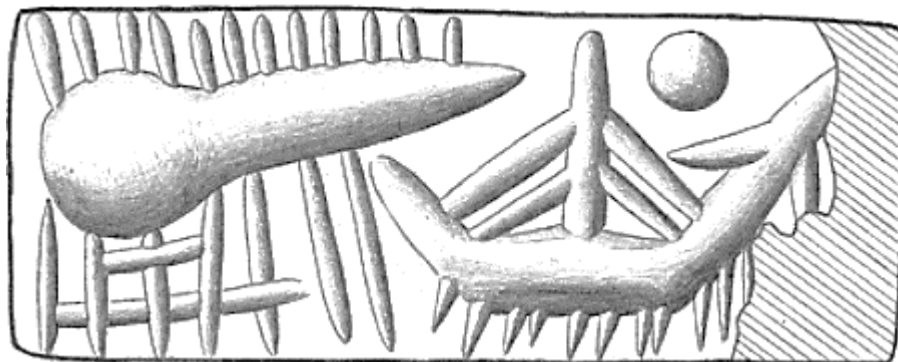


FIGURE 4.6. Four-sided prism made of hard stone of unknown provenience, MM II. Example of CHIC 040, the boat sign, with CHIC 062, resembling a rayed object, CMS II-6, 178 (Platon et al. 1999:no.178).

Ultimately, when considered in context of other Minoan ritual-related ship iconography, including the Mochlos ring, Makrygialos seal, Stathanos seal, Epidauros rhyton, Tiryns ring, Ship Procession fresco, or even talismanic seals, it is clear the Ship cup indicates specific Minoan cultic activity. Davaras clearly lays out a formula of motifs that connect the ritual ship images: an *akrostolion*, *ikrion* and/or awning, tree, and one or more human figures. Only part of the formula would have been necessary for contemporary Minoans to understand the meaning behind the iconography. Davaras (2004:13-14) hypothesizes that the iconography relates to the major sea or spring renewal festival, which culminated in the arrival of the marine aspect of the Great Goddess, or her earthly representative as a priest or sacred tree, in a cult boat to celebrate the renewal of nature or the opening of the navigation period. Though this scenario is extremely specific and difficult to definitively prove through archaeological methods, Davaras uses this specificity to illustrate his main point. When seeing the cup's iconography through an emic Minoan perspective, its motif fits within a larger theme indelibly understood in a Minoan cultural context. It is a code that was deciphered by merely belonging to this culture or subculture. Irrespective of the modern interpretation, its value lies underneath the painted surface by a concept that is inextricably linked to an integral part of the Minoan culture.

### **Mochlos Ring**

The Mochlos gold ring was discovered in an LM I burial area above the EM Tomb IX in a Prepalatial cemetery near Mochlos (Wedde 2000:191). Soles (2012:188) believes that it may have been imported from central Crete because of the iconographic similarities of the anthropomorphic boat between it and the Ring of Minos. It is not only a fine example of delicate Minoan artistry, but it is also one of the most cited examples of a Minoan ritual ship. The ring

depicts a seated female at the prow of a reed-like boat with a hippocampus-head forming the stern, and a stepped shrine at the stern with a possible fig tree growing from it (Wedde 2000:180). Though there are few concrete examples, trees atop shrines in Minoan iconography are commonly identified as a fig or olive tree, the former from a precedent set by Evans (1928:614-616; Sourvinou-Inwood 1989:99; Wedde 2000:185). The hippocampus-shaped hull recalls other Minoan examples of a fantastical hull shapes, such as the Ring of Minos and the Ayia Triada seal impression, as well as the cross-cultural example of the Phoenician hippocampus vessels depicted on coins, and the cross-temporal example of horse imagery connected with Poseidon (Wedde 2000:123). Not surprisingly, therefore, the ring has been cited as evidence for a multitude of explanations for Minoan religion, including links between Bronze Age Egypt and later Classical Greek mythology.

The Mochlos ring, unique to this subcorpus, includes unidentified objects in the sky above the boat, which further differentiates it from other Minoan glyptic images with ships and instead associates it with epiphanic glyptic images. These floating objects occur in several other Minoan rings, and have been interpreted as being ritually significant (Kyriakidis 2005b). One interpretation identifies them as constellations marking the time of year that the ritual activity depicted in the scenes are meant to take place (Kyriakidis 2005b:149). Another is that the objects essentially labeled the rituals associated with the tree shrine and, in the instance of the Mochlos ring, the arrival of the goddess (Marinatos 1993:164). Sourvinou-Inwood (1973:157), for example, argues the floating baetyl motif is the symbol of a vegetation cult that is depicted in several other glyptic images. Labeling the scenes seems the most likely for several reasons. Not only do many of the floating objects correspond to Cretan hieroglyphics and Linear A, but also the scenes on later Greek ceramics were labeled with the names of the figures floating above,

which could have been an iconographic tradition handed down from the Bronze Age (Kyriakidis 2005b:148).

The many motifs in the Mochlos ring has led to an increased interest in deciphering its meaning and contexts within Bronze Age iconography in the Aegean and broader Mediterranean influences. Wedde (2000:180-181) suggests this ring as an iconographical paradigm for cult boats, as all the motifs present are included in his five components of ritual craft iconography. One of Wedde's criteria, narrative content, is at the source of differing interpretations of the Mochlos ring. An emblematic reading of this image suggests that the motifs are highly symbolic and the composition is symbolically contrived, with the original context only apparent to an emic viewer (Wedde 2000:176). For example, Betts (1973:334) and Sourvinou-Inwood (1989:97-98, 99-100) argue for an emblematic reading because the images are devoid of realism, containing highly symbolic motifs meant to distance the scene from reality. Sourvinou-Inwood (1989:100) uses the lack of comparable examples of a possible fig tree growing from a stepped shrine as proof of an emblematic motif. An ivory pyxis discovered at Mochlos in 2010 (Figure 4.8), however, depicts the motif almost identical to that on Mochlos ring, refuting the earlier claim (Day 2012:14). A purely emblematic reading of Minoan iconography in general, however, should be avoided because it not only removes any onus on the researcher to propose theories that meaningfully contribute to scholarship, but it also relegates Minoan iconography to purely generalized and symbolic images that can never be understood to the etic viewer. As is the case with the possible fig tree growing out of the stepped shrine, the growth of the corpus of Minoan iconography by the accumulation of more comparable examples can help to solve this issue.

Most scholars argue that emblematic and narrative readings of Minoan imagery are not mutually exclusive since many cultic images can be interpreted as a conflation of fantastical

motifs based in reality (Marinatos 1993:161; Wedde 2000:16, 177). Theories espouse that the entire composition of the Mochlos ring is symbolic yet influenced by real events, such as relating to an annual festival transporting a tree (Marinatos 1993:183; Davaras 2004:13-14; Galanakis 2009:124-125). Others maintain that certain quotidian motifs could be elevated to the divine based on the finds context or the character of other motifs within the composition, such as the transportation of a deity in a boat with or without fantastical elements (Marinatos 1993:164; Soles 2012:188-189). The details that make these motifs emblematic, such as the general shape of the hull, could very well represent real events with varying exaggerated details meant to evoke something culturally relevant to the viewer. It is more plausible, therefore, that these images were based in a narrative reality with emblematic elements contextualizing the interpretation. Ultimately, the finds context as well as contextual clues in the iconography may help to elucidate meaning.

The “Goddess from the Sea” or one of her priestesses are common identifications of the human figure of the Mochlos ring. As Wedde (2000:181) has emphasized the narrative quality of the image, several scholars have attempted to reconstruct the narrative. Most agree that the figure is a goddess or the priestess of a goddess, but it is her specific narrative that is contested. Davaras (2004) and Marinatos (1993) agree that the composition symbolizes an actual ritual that inaugurates the beginning of an arboreal annual festival depicted in Aegean iconography. Goodison (1989:94) also cites the Mochlos ring as evidence for a set of beliefs or rituals held throughout the Aegean relating a sun goddess who traveled on the sea and was responsible for the fertility or regeneration of vegetation. Galanakis (2009:125-126), however, suggests that this cult emanates from Crete, concluding that the iconography of the Mochlos ring is symbolic of the arrival at new Minoan colonies of the cult of a goddess whose presence and protection was

invoked during rituals performed for important voyages. Without attempting to explain the events or details of the narrative, Tully (2016:9-11) asserts that the goddess was a tree goddess who was likely worshipped by Minoan sailors, for whom she provided protection, as well as the elites as a projection of power that extended over the landscape and seascape, expanded by means of maritime endeavors.

The Mochlos ring is frequently analyzed in conjunction with many of the other images in this study, further supporting the need to consider these images as part of the same subcorpus. Some scholars, such as Galanakis (2009), do not include an analysis of motifs outside Aegean maritime images. Others, including Wedde (2000:173-199), Marinatos (1993), Davaras (2004), and Tully (2016:2-3), compare the images to other motifs in Aegean cult iconography in order to understand their context and implications within the larger sphere of Aegean ritual activities.

Sir Arthur Evans initially recognized the similarities between Minoan religious concepts and those from the Levant and Egypt (Evans 1921:19). Though models of internal developmental processes were more prevalent in the mid-20th century, more recent scholarship beginning around the 1990s has widened the scope to include the influence of long-distance trade networks within the eastern Mediterranean (Manning 2008:106). For example, Davaras (2004:7) claims the trees in these images could result from the Minoan adoption of “Tree of Life” imagery and other fertility rituals from the Near East. Marinatos (1993:184) similarly hints that the narrative depicted on the Mochlos ring, especially the literal transport of the tree in a planter on the boat, is directly derived or adapted from the Near Eastern Epic of Gilgamesh or the iconography of the Egyptian god Min. Sourvinou-Inwood (1989:97-98) also compares the imagery on the Mochlos ring as a Minoan adaption of Hathor or Isis in the Egyptian *Book of the Dead*, but asserts that only the iconography was borrowed as it is an emblematic image of the deity unrelated to any

cult activity or beliefs. Contrastingly, Tully (2016:6-9) argues that the iconographic comparisons are more congruent with a confluence of a local Minoan tree goddess with one or more Near Eastern goddesses, especially those relating to trees, rulership, and seafaring, such as Athirat/Asherah, Hathor, or Isis. This interpretation is the most plausible as it puts the agency directly in the hands of those responsible for trading goods and ideas at both the lowest and highest levels – the sailors and the elite, respectively. Under Tully’s analysis, the Minoan seafaring religious subset, similar to the Canaanite seafaring religious subset identified by Aaron Brody (1998), was clearly evident in Minoan cultic iconography, especially as it relates to the sanctity of a ship’s prow, totemic animal decorations, and physiomorphic or anthropomorphic representations of the deity. Furthermore, Tully’s analysis successfully integrates the Minoan “Goddess from the Sea” iconography into the larger context of eastern Mediterranean seafaring ritual imagery.

As Galanakis (2009:125) suggests, the Mochlos ring and others in this study likely represent a goddess who was called upon to aid in safe passage during maritime voyages. Invoking the aid of deities would not have been unique to the Minoan seafarers. There is documentary evidence that most Mediterranean seafaring cultures from the Bronze through the Classical Ages made offerings to pacify deities and conducted rituals before, during, and after voyages for safe crossing (Blakely 2017:373-374). Considering these practices extended into the Classical Greek period, Galanakis (2009:126-127) also asserts that the Minoan “Goddess from the Sea” cult persisted through to the Classical Greek period, morphing into the Leto and Britomartys cults that survived on Delos (Galanakis 2009:126-127). The origins of these theories stem from Evans’s assertions that the goddess represented on the Mochlos and Candia rings survived in later forms as Britomartis or Diktyнна cults, which have parallels to the Syrian



Atargatis and Roman Isis Pelagia cults (Evans 1928:250-251). While there has been a tendency to rely on Classical mythology to explain Bronze Age beliefs, the approximate 600 years of cultural change between the two periods is often overlooked.

One aspect of Classical mythology that has persisted relates to the control of the seas by King Minos as relayed by Thucydides and Herodotus. For better or worse, this notion has persisted throughout the history of Minoan archaeology. Tully (2016) and Galanakis (2009) especially use these images of the “Goddess from the Sea” to attempt to prove the Minoan thalassocracy through religious iconography. Though Tully’s analysis clearly supports a cultic connection between the elite belief system and seafaring activities, especially based on material and subject matter, it does not necessarily indicate that Minoans used these images to symbolically protect their thalassocracy and projection of power.

Theories of Minoan thalassocracy range from the traditional definition of naval control, to economic control rooted in religious control (Marinatos 1984:176), to a complete rejection of the idea of Minoan dominion over the mainland (Furumark 1950; Marinatos 1984:176; Mountjoy and Ponting 2000:175; Broodbank 2004:54-55; Girella et al. 2016:4). Even the 1982 Minoan Thalassocracy Conference did not concretely decide the nature of a Minoan thalassocracy, though it did expose the variations in Minoan presence throughout the Aegean (Mountjoy and Ponting 2000:176). More recent scholarship has been directed towards explaining the Minoanization, or the infiltration of local culture by Minoan objects and ideas, of settlements under Minoan influence (Davis 2008:188; Berg 2019:7). Settlements around the Aegean, and even on Crete, display varying degrees of Minoan influence and emulation through chronology and location (Broodbank 2004:51-51, 58; Davis 2008:188; Girella et al. 2016:4). The variation within Minoanization observed throughout the Aegean indicates that not one process unified the

dissemination of heterogeneous Minoan material culture, making it unlikely that one explanation exists (Broodbank 2004:58; Girella et al. 2016:5; Berg 2019:208).

Whether used as supporting evidence for a Minoan tree transportation ritual, the “Goddess from the Sea” cult, or the Minoan Thalassocracy, the Mochlos ring is a clear example of a ritual scene involving a Minoan ship. The ring has parallels to multiple different cultures, all with different nuanced interpretations. It is set firmly within Minoan religious iconography with its ritual tropes that relate to other scenes with epiphanic figures and divinities (Marinatos 1993; Soles 2012). The ring has also been argued to prove connections to the Bronze Age Near East with the depiction of Egyptian ritual imagery in the *Book of the Dead*, the “Tree of Life” iconographic motifs, and motifs associated with the Levantine deity Athirat/Asherah (Sourvinou-Inwood 1989; Davaras 2004; Tully 2016). It also could also relate to later Greek mythology through the goddess and tree symbolism, and the hippocampus stern motif (Wedde 2000; Galanakis 2009). Especially within the corpus of other similar examples, such as the Ship Cup and Makrygialos seal, it is clear the Mochlos ring cannot and should not be interpreted as a separate entity. When compared to other examples, it is clear that the ring can be best understood as it fits within the larger corpus of Minoan ritual ship iconography.

### **Makrygialos Seal**

The Makrygialos seal is arguably the most similar to the Mochlos ring in terms of ritual motifs. Both feature a woman, tree, and a superstructure added to a crescent-shaped hull, though the former is lacking in many of the same details. Galanakis’s (2009:124) description of the seal as “rudimentary” is unfair. The Makrygialos seal is made of serpentine instead of gold-plated bronze like the ring, which could account for many of the differences in details since metal is a

more easily workable material compared to stone. Even the properties of two different stones commonly used in sealstones, such as carnelian and rock crystal, affect the outcome of the final image because of the way in which the material responds to the tools used to create the image (Wedde 2000:137). The scenes are not only different as the seal does not include any motifs outside of the ship, but the motifs are also depicted in differing styles. The female figure of the Makrygialos seal is in different dress with a different gesture, the tree is most definitely a palm tree as opposed to a possible fig tree, the superstructure looks more like an *ikrion* than a stepped shrine, and the hull includes short parallel oblique lines below the sheer but no reference to an animal (Sourvinou-Inwood 1989:99-100; Wedde 2000:339). The lines could indicate the boat's material, as Wedde (2000:188, n. 114) has described for the supposed papyrus vessel in the Tiryns ring, or a method of propulsion (Galanakis 2009:124). More likely, however, the lines reference a decorative pattern, such as on the ships in the frescoes at Akrotiri and Kea. The motifs of the hull, *ikrion*, and tree are more reminiscent of the Ship Cup, despite differences in material and manufacture.

Like the Mochlos ring, scholars have offered several interpretations of the Makrygialos seal, with most agreeing on some cultic connections. Due to the similarities between the two images, most theories involve comparing the two in order to support interpretations. Though Sourvinou-Inwood (1989:98-100) argues for an emblematic reading of the seal as an iconographical construct not based in reality, she does not dismiss the interpretation that it could also depict the actual transportation of a shrine and sacred tree on a boat. The female figure's adoration gesture suggests she is human, and fantastical elements are not included in this ship, with both motifs therefore rooting the image in a possibly real situation. Marinatos (1993:183) and Davaras (2004:13), on the other hand, suggest that both the Makrygialos seal and Mochlos

ring depict, in varying degrees of detail, the same festival associated with transporting a tree to be placed on top of a shrine during special ritual occasions, such as a festival celebrating the renewal of nature.

An interesting difference in the superstructures depicted in the ring and the seal could offer insight into the function. Both the stern and the prow of the ship in several Mediterranean seafaring cultures from the Bronze Age through the Classical period were known to have ritual significance (Blakely 2017:373-375). The stepped shrine on the ring is similar to the Ring of Minos and terrestrial shrines in Minoan iconography. The structure on the seal, on the other hand, appears more similar to the *ikria* motif depicted on the ships of the Ship Procession fresco and the Stathatos seal, for example. A gold ring from Pylos (Figure 4.7) depicts a stylized shrine with the construction more similar to an *ikrion*, which allows for more than one interpretation of its function at the stern of ships. The *ikria* on the Ship Procession fresco, and therefore those that are depicted in a similar manner, appear to serve a practical function. Its similarity to a type of terrestrial shrine, as well as the ritually elevated function of the stern, suggest an additional function for the Makrygialos *ikrion* – one that is not so dissimilar to the stepped shrine at the stern of the Mochlos ring (Wachsmann 1998:118; Wedde 2000:186).



FIGURE 4.7. Gold ring impression from Pylos, MH II – LH IIIA. Example of a hilltop shrine with similar construction to the *ikria* on the ships in this study. CMS I, 292 (Sakellariou 1964:no. 292).

Contextual clues could also serve to explain the compositional and motif differences between the two objects. The ring was uncovered in a burial over Tomb IX in Mochlos, whereas the seal was discovered near an altar in a villa in Makrygialos (Wedde 2000:339). If the ring and seal were both made and used in the same area that they were deposited, then the intended audience difference is not just socio-economic, but also regional. The Minoan culture on Crete was not homogeneous during the Bronze Age, undergoing differing degrees of cultural variation throughout the island over time. Settlements and broader regions on Crete, and especially most of the extra-island settlements exhibiting Minoan influence, were unique and complex mixtures of local and Minoan cultures (Broodbank 2004:52).

Research on ceramic regionalism, in particular, has shown differences in fabric, style, and distribution throughout the Minoan time periods on Crete from 3000 to 1490 B.C (Oddo 2019:20). There are distinct differences in the eastern regions of Crete throughout time, with most scholars including Mochlos in the same region with Malia, and Makrygialos with Palaikastro and Zakros (Oddo 2019:20-22). This ceramic regionalism is also compatible geographically because the Thrypti mountain range separates Mochlos on the Aegean, and Makrygialos on the Mediterranean. By extension, glyptic imagery also exhibits stylistic differences which can also be explained by the landscape which separates Mochlos and Makrygialos, for example, which makes direct contact over land extremely difficult. Circumnavigating the island would have been an easier method for exchange in east Crete. This only highlights the significance of shared underlying beliefs and ideas depicted in the two images that would have been transmitted via maritime contact. The meaning behind the images, therefore, would likely have been similar but depicted in their distinct regional styles.

The Makrygialos seal, therefore, is usually considered in the corpus of images depicting Minoan rituals involving ships. Galanakis (2009:125-126) and Tully (2016:1-2) both cite the seal as evidence of the “Goddess from the Sea” cult, though their interpretation of the cult differs. Davaras (2004:13-14) draws a direct comparison between the seal, the Mochlos ring, and the Ship Cup as part of an iconographic formula that recalls an important annual Minoan festival related to fertility and renewal, which is echoed by Marinatos’s (1993:183) suggestion that the tree transportation depicted signifies the arrival and manifestation of the deity. Morgan argues the sealstone is related to the Ship Procession fresco, especially when considered in the context of the priestess fresco in the West House at Akrotiri (Morgan 1988:144). The lack of motifs outside of the boat on the seal make it both easier and more difficult to include it as part of a larger narrative. Wedde (2000:199) therefore opts for a more conservative approach, merely concluding that the motifs relate to the progress of the rites and to divinities or their earthly representations, but does not specify the ritual. This would also be compatible with some scholars, such as Petrakis (2011:216), who have argued that divine status of female figures with boats in Neopalatial glyptics is merely presumed.

Despite the differences, the Makrygialos seal clearly fits within the pictorial program of Minoan ritual iconography involving ships. The exact nature of the related rituals would have been immediately recognizable to the emic viewer, and the best way that an etic scholar can attempt to elucidate any meaning is to analyze the seal as it fits within iconographic and finds contexts. It seems likely, therefore, that this seal represents similar ideas or events as other Minoan ship images, such as the Ship Procession fresco, as well as the Near Eastern ritual festivals involving palm trees for fertility. Including these images as different moments in the

same festival is a possible line of analysis, but should be applied cautiously without more evidence.

### **Candia Ring**

This gold signet ring, acquired by Evans, is also referred to as the Amnissos Ring. It features neither an *ikrion* nor a tree on deck as the three previous objects, but it does contain several figures standing on the shore, within the ship, and floating above it. The multiple passengers, the attenuated crescent-shaped hull, the zig-zag hull decoration, globule at prow as possible *akrostolion*, and the dolphins playing below the ship are reminiscent of several details in the Ship Procession fresco. Additionally, the interactions between the figures on shore and in the ship are compositionally very similar to the gold signet ring from Tiryns. Once Evans first linked the themes of the two rings, the two have been frequently analyzed together despite seemingly dissimilar finds contexts (Evans 1935:954). The Tiryns ring is from the Greek mainland and dates to LH II, whereas the Candia ring is from Crete and dates to LM I (Mylonas 1945:566; Wedde 2000:339; Galanakis 2009:124-125). The physical distance between the mainland and Crete, however, is not as great when taking into account the mobility of goods and ideas in the Aegean Sea as a maritime cultural region. Maritime cultural networks between Crete and the mainland were long-established by the Late Bronze Age (Knappett 2018). Furthermore, the material cultural *koine*, which is apparent in the Minoanization of settlements in the Aegean during LM I, reached its peak in late LH IIIA with the Aegean maritime network more dominated by Mycenaean influence (Broodbank 2004; Tartaron 2013:198-201). Similar to the Mochlos ring and Makrygialos seal, therefore, the underlying ideas of these rings could have been easily exchanged or adopted between LM I Crete and LH II Greek mainland.

Evans initially described the scene as the departure of the “Goddess from the Sea” with herself and her sacred tree floating above as epiphanic figures (Evans 1935:953-954; Mylonas 1945:566). Several scholars agree with his interpretation, especially as representing the “Goddess from the Sea” who is identified by the floating tree, linking the Candia ring to the Mochlos ring and Makrygialos seal (Wedde 2000:181; Galanakis 2009:125; Tully 2016:8). Galanakis (2009) and Tully (2016), in particular, include the Candia ring in their catalog of Minoan glyptic images illustrating the sea Goddess with the tree as an assertion of Minoan power over the seas. Mylonas (1945), on the other hand, disagrees with the interpretation of the smaller female figure and tree as an epiphany. He instead asserts that the smaller figures are illustrating depth of field by showing a woman and tree on the shore beyond the ship (Mylonas 1945:566). Several scholars argue that this convention, commonly referred to as the cavalier perspective or bird’s-eye-view, is the only perspective in Bronze Age Aegean iconography (Crowley 1977:142; Blakolmer 2017:101). There were actually several perspectives employed in Aegean iconography, sometimes within the same composition. Morgan (1988:12) argues that the cavalier perspective is used in conjunction with relative scales to separate scenes in the West House frescoes. Similarly, Immerwahr (1990:65) points out that the Grandstand fresco at Knossos is another example of multiple perspectives combined. In the Candia ring, therefore, the size difference between figures varies relative to importance within the scene and not distance from the viewer, especially in the limited space of signet rings and seals. It is more likely that the hovering female figure is meant to be a deity because in Minoan glyptic images, deities are often shown as smaller than the primary figures and descending from the sky either with or next to a tree (Marinatos 1990:175; Wedde 2000:181). Following that logic, the ship is secondary in the



composition, with the interaction between the male and female figures on shore with the hovering female as the primary narrative.

Wedde interprets the Candia ring as a ritual narrative scene for these same reasons, especially because of the gesturing between the figures, indicating the interaction is the most important motif (Wedde 2000:181). Mylonas's (1945:564) interpretation of the scene centers on the male figure holding the female's wrist, which recalls an important aspect of the ancient Greek marriage festival. He claims that both the Candia and Tiryns rings depict the groom bringing the bride to his boat, linking Bronze Age and Classical Greek traditions (Mylonas 1945:566). His interpretation is congruent with the tendency to seek archaeological support of Homer and other Greek legends rooted in the Bronze Age, or to try to link Classical Greek culture to the Minoans. A specific identification from classical *topoi* is unlikely as it is impossible with the current corpus of writing from the Aegean Bronze Age to prove a specific *topoi* likely existed (Wedde 2000:194, n.140). In order to avoid getting too caught up in identifying specific known characters, it is best practice to let the artifacts speak for themselves in a prehistoric culture. Arguably, it is rather difficult to completely ignore the similarities evident in the Classical Greek myths and legends that seem to be reflected in Minoan artifacts, but any comparisons should be cautiously applied while recognizing known limitations.

It is clear that the key interaction is between the male and the epiphanic figure, and not the two figures on shore and the ship. Especially if the ship and its crew are considered as secondary to the main interaction, the iconographic theme has a possible comparison to an LM IB ivory pyxis discovered at Mochlos (Figure 4.8). Soles (2016:249) compares the epiphany to the Ring of Minos and other signet rings in which the deity appears descending near a sacred tree. Though the figures on the right of the pyxis lid were not preserved from the waist up, the

gestures of the first male, the epiphanic female figure, and the tree are echoed in the composition of the Candia ring. It is possible that both represent a presentation scene (Soles 2016:250).



FIGURE 4.8. Drawing of ivory pyxis, depicting presentation theme similar to Candia ring, Mochlos, LM IB (Soles 2016:plate LXXXIIa).

The epiphany motif firmly places the Candia ring within the larger corpus of Minoan ritual iconography through the presentation scene. The epiphany of the deity with a tree certainly heightens the ritual context of the ship below in the Candia ring, even if the ship is meant to be secondary. The motifs and theme of the Candia ring are therefore iconographically linked to those in the Mochlos ring, Ship Cup, Makrygialos seal, Tiryns ring, and the Ship Procession fresco. If all the ship images in this corpus relate to the same event or idea, the motifs in the Candia ring may offer a more well-rounded interpretation of the meaning behind the ritual ship images, despite a lack of archaeological context clues.

### **Tiryns Ring**

Thematically related to the Candia ring, the Tiryns gold ring was found in a bronze cauldron, and dates to LH II. Similar to the Mochlos ring, the Tiryns ring is not pure gold, but

instead is gold plated over a lead core. The ship on the left side is reminiscent of the Ship Procession fresco vessels: the hull is attenuated-crescent shaped, a mast supports an awning amidships with two figures sitting underneath, the mast is upright with festooned lines running fore and aft of the awning, and a helmsman grips a steering oar at the stern (Wedde 2000:191, 340). The composition and perspective of the ring appears to highlight the person of the highest status at the stern by their increased size, in a position akin to that occupied by the *ikrion* (Wedde 2000:191). Galanakis (2009:126) calls the Tiryns a “minimalist” version of the iconography of the Ship Procession fresco, especially because the ring includes details of the townscape scenery but neglects similar elaborate decorations on the ship. Morgan (1988:124) also draws a direct parallel to the Ship Procession ships because of the added decorations, calling for an earlier dating of the ring to align more with the fresco dates.

The festooned line decorations also recalls a black steatite seal dating to LM III discovered in Central Crete (Figure 4.9), suggesting that these three ships could all indicate an elevated, ritual status (Wachsmann 1998:101, 119; Wedde 2000:81). Evans compared a similar festooned motif to LM IB frescoes and pottery from Knossos and the surrounding area, but the discovery of the West House frescoes, which were destroyed in LM IA (Evans 1935:285-286). This suggests that not only did the motif attained popularity before LM IB, but also that it was a decoration utilized in a variety of functions, some of which were unrelated to maritime affairs.

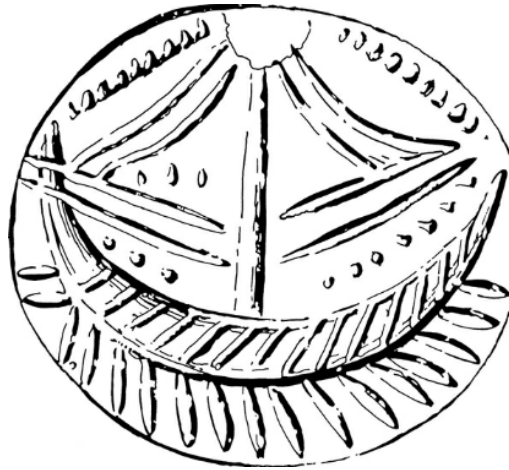


FIGURE 4.9. Black steatite seal, LM IIIB. Example of oblique line hull decoration and festooned lines. CMS VI, 468 (Wachsmann 1998:98).

Wedde (2000:188, n. 114) proposes that the papyrus hull is exceptional and out of place both physically and temporally since papyrus reed boats were more common in Egypt and the hull shape would have been archaic for the Greek mainland in LH II. While it is possible that a large papyrus reed boat could have been used in the Aegean inshore waters as demonstrated by H. Tzalas (1995), it is more likely that this vessel belongs to a class of ships descended from the expanded logboats that are depicted with asymmetrical curved hulls between EB IIB and LB IIIA2 throughout the Aegean (Van de Moortel 2017: 267). As with the Makrygialos seal, it is probable that the lines reference a decorative pattern, such as on the ships in the Ship Procession fresco, the Candia ring, or the LM III steatite seal (Galanakis 2009:124).

A motif on the vessel that seems out of place is the mast. It does not look functional, but rather a more decorative addition in order to support the festooned lines and an awning, under which sit two figures (Wedde 2000:191). Structurally, it makes more sense for the mast to continue beneath the awning as it does in two of the larger ships in the Ship Procession fresco, rather than be resting atop the awning. As Thomas Tartaron (2013:54) points out, the awning would have hindered multiple forms of propulsion as well as potential cargo, and therefore

would have likely been assembled onboard for special events and disassembled afterwards. Compositionally, it was likely excluded to make the figures under the awning visible. The mast would not have been necessary for the emic viewer to understand the thematic reference. Consequently, the entire scene recalls a ritual event, likely similar to the Ship Procession.

As an example of a complex narrative, Wedde (2000) divides the image into two scenes, rather than three as do both Mylonas (1945) and Evans (1935). Mylonas and Evans read the scene in a linear fashion, representing the female bride as transitioning from her home, to the shore with her bridegroom, to under the awning on the ship (Evans 1935:954; Mylonas 1945:566). Wedde (2000:183), however, suggests the composition should not be read as a linear narrative, especially comparing the interaction between the figures on shore to the ship and the two figures in the doorway. Taking into account the compositional techniques of indicating importance, Wedde's interpretation is more likely. The center of the composition is the interaction between the large man in the ship and the large man and woman on shore, the four figures on shore and the large man are proportionally larger than the other three figures on the ship, and the four figures on shore are incised more deeply into the surface of the bezel. All of these conventions not only indicate the subject, but also accentuate the importance of the figures to the narrative. The composition then becomes focused on the most visually obvious features. The scene is divided into two themes: the interaction between the couple on the left in the doorway, and the interaction on shore between the remaining large figures, with the ship again secondary and likely serving to set the scene as ritual.

Though the landscape scene is the least artistically emphasized aspect of the scene, Galanakis cites the landscape as further evidence for the ring's similarities to the Ship Procession fresco. Based on this analysis, he suggests that the Tiryns ring portrays a vignette of a Bronze

Age epic that narrates a large-scale mythological event (Galanakis 2009:126). The ring's depiction of an epic was originally suggested by Evans (1935). Though this is a possibility, naming specific actors in Aegean Bronze Age iconography is still problematic until more evidence suggests otherwise.

Mylonas (1945:564) again not only suggests specific actors in this theme, but also uses the Tiryns and Candia rings to link Classical Age Greek marriage ceremony customs to the Bronze Age. His hypothesis hinges on the vignette of the male figure grasping the wrist of the female figure in the doorway of the Tiryns ring, connecting it to the iconography of both a Geometric vase and a 7th century B.C. bronze signet ring. It is now less conventional to draw such a direct parallel between the Minoans and the Classical Greeks (Davis 2008:187; Palaima 2008:348). A better parallel to this motif on the Tiryns ring, therefore, is an ivory half cylinder seal found near Knossos dating to MM I (Figure 4.10). Evans (1921:197) suggests the female figure is a bride whose garments are heavily influenced by Mesopotamian iconography, particularly depictions of Ishtar-Inanna. Goodison (1989:166) similarly suggests a marriage but instead focuses on the fertility connections symbolized by jar motifs in conjunction with the union of a couple, a theme that she argues continues into Greek Iron Age iconography. The paucity of examples makes this theme on the Tiryns ring difficult to interpret with certainty. Without further evidence, Galanakis's (2009:126) suggestion that the Tiryns ring represents a theme similar to that of the Candia ring and the Ship Procession fresco seems the most likely.



FIGURE 4.10. Ivory half cylinder seal from near Knossos, MM I. Example of vertical emphasis of skirt, and possibly the sacred marriage (Evans 1921:197).

The issue of assigning the ring to Mycenaean or Minoan iconography is up for some debate, despite the ring having been discovered in Tiryns, an important Mycenaean citadel. Both Galanakis (2009:126) and Tartaron (2013:54) believe the ring was made by Minoan craftsman, but the former suggests a Minoan living on the mainland while the latter argues the ring was imported to the mainland from Crete. While some Minoan symbols persisted through to Mycenaean iconography, more so on Crete than the Greek mainland, the ritual architecture of the Minoans and the essence of Minoan religious iconography was likely unused or much altered (Palaima 2008:346; Tartaron 2008:116; Rutherford 2013:270). For example, Mycenaean did not seem to utilize peak sanctuaries as pervasively as Minoans (Rutherford 2013:264). Similarly, Mycenaean seals do not show the epiphany scenes typical to Minoan seals, though Linear B tablets detail the language to make offerings deities (Palaima 2008:346; Rutherford 2013:258). The Mycenaean religious iconography on signet rings and sealstones were likely made by Minoan

artisans in a Minoan style. Instead of being pervasive, therefore, Minoan-style iconography is found mostly in elite graves during the period of Mycenaean control of the Aegean (Palaima 2008:346; Rutherford 2013:259). It is possible the ring was created much earlier than when it was deposited. Morgan (1988:124), for example, suggests an LM I creation date based on comparable iconography. Additionally, the nature of the hoard in which it was found suggests that it could have been created much earlier than LH II and passed down through the generations (Maran 2006:141). If that is the case, its creation date could be more in line with the majority of images in this study.

The Tiryns gold ring can serve as a bridge between the seafaring-related rituals of the Minoans and Mycenaean, but anything beyond that is arguably tenuous. It is unlikely the vessel is related to Egyptian papyrus vessels, and it is difficult to identify the figures using Greek legends and mythology, though it is not impossible that Minoan folklore survived in some form. More likely, the ring does represent an event or idea similar to the Candia ring and the Ship Procession frescoes. The ring's theme is also, therefore, linked to the iconography of the Mochlos ring, Ship cup, and Makrygalos seal, among others.

### **Stathatos Seal**

This gray amygdaloid seal dates to between MM IIIB and LM I, and was found allegedly near Thebes. Due to uncertain provenience, it will be referred to by its collection name in the National Archaeological Museum in Athens. The hull is crescent shaped, and includes many of the added features of other ritual craft, such as a double *akrostolion* at the bow, a single *akrostolion* at the stern, an *ikrion* at the stern, an added stern device below the hull, and five oblong lines suggesting oars along the hull (Wedde 2000:340; Wachsmann 1998:111).



The iconographic motifs of the ship have been compared to the vessels on the Ship Cup and the Ship Procession fresco, both of which constitute contemporaneous examples (Wachsmann 1998:111; Wedde 2000:186; Davaras 2004:5). The stern device on the Stathatos seal, for example, is the only identifiable example of that motif outside of the ships depicted in the West House fresco. Due to a lack of iconographic evidence, the stern device motif has inspired much debate. Until evidence to the contrary is discovered, however, it is more than likely a non-functional symbol with direct associations to the subject matter of the Ship Procession fresco (Wedde 2000:129-130; Wachsmann 1998:105-106). Davaras (2004:5,8) also addresses the similarities between the iconography of the seal and the Ship Cup, namely the *akrostolia* and *ikrion*, arguing that the representation of the two motifs on the seal are more realistic than depictions on both the Ship Cup and talismanic sealstones. Though realism can be debated, it is more important that the motifs on this seal are more easily identifiable than other examples, lending itself as standard for comparison against other images.

The more believable rendition of certain motifs has led to the somewhat problematic tendency to consider the entire image as literal. Wedde (2000:186), for example, attempts to determine the size of the hull as proportional to the number of oars, basing the total length on the amount of space necessary for each rower – the *interscalmium* distance. The results, however, are inconsistent with the scale of the two paddling figures and the *ikrion*. The more likely interpretation is that the seal's craftsman used two different scales for the hull and the motifs within the vessel, a convention that is repeated in other images across several media. The motifs, in this case, are primarily emblematic and meant to reference the theme without sacrificing detail for available space (Wedde 2000:192, n. 136). The utilization of multiple spatial perspectives is

likely also the case for other glyptic images, such as the ship on the Tiryns ring which probably holds more passengers than what is depicted.

The identity of the two figures as well as the symbolism of the actions and dress have caused much speculation. Interpreting the figures in the context of the Ship Procession fresco is the root of many misconceptions. Wachsmann (1998:111) argues the iconography of this seal is the key to interpreting the Ship Procession fresco, and so uses both images to inform the other. Despite the only parallel dress made of sheaths of grain from a southeastern Anatolian site dating to approximately 6000-5000 B.C., Wachsmann (1998:111) suggests the garments reinforce his hypothesis that the seal and fresco both depict the theme of a waterborne ceremony with ties to an annual agricultural festival. There are no Minoan images with figures dressed in comparable skirts, however, and so it is more likely that the figures are wearing stylized flouncy skirts (Wedde 2000:340). Other scholars, such as Galanakis (2009:125) and Wedde (2000:194), interpret the figures as sailors or other non-divine figures because of the apparent domination of a singular goddess in the Minoan pantheon. Marinatos (2010:164-165), on the other hand, argues for the divinity of the two figures in chariots on the sides of the Ayia Triada sarcophagus as well as other Aegean iconography depicting more than one divine female. The key to identifying the figures may not be their skirts, especially because of the lack of parallel examples in Minoan iconography, but rather their headdresses. Though there has been no mention of it by scholars in this context, the headdress is extremely similar to those worn by women in either a royal, priestly, or divine capacity, such as the sides of the Ayia Triada sarcophagus (Figure 6.23), the signet ring from Anthia (Figure 6.24), or the genius procession ring from Tiryns (Figure 3.7) (Marinatos 2010:16-17, 164-165).

Though not strictly a criteria for the identification of cultic crafts, Wedde (2000:186) includes that anachronistic or “exotic” propulsion methods seem to indicate ritual when depicted with other ritually heightened motifs. Wedde’s (2000:186-187) identification of the “anachronistic” propulsion as poling on the Stathatos and Anemospilia seals is problematic for several reasons. Within both images, the viewer is not privy to whether the figures are using punting poles, paddles, or oars, and so an analysis of the propulsion technique is a better indication of the method. Rather than poling, it is more likely the figures are paddling the vessels based on the more common propulsion methods for the Aegean Sea. Additionally, though wind-powered craft would have been the most technologically advanced method in the Middle and Late Bronze Ages, its prevalence as the primary propulsion of larger vessels did not preclude other methods of propulsion altogether in smaller vessels. Poling or paddling, which Wedde (2000:65) himself states is primarily utilized for riverine and coastal navigation, would not have been outmoded by sailing vessels in the Bronze Age Aegean. Furthermore, the rocky terrain of the Aegean islands would have made routine, intra-island exchange much easier by means of coastal and riverine travel (Betancourt 2008:209). Consequently, paddling would have been employed on a regular basis, and likely would have been a motif familiar, and not exotic, to Minoan craftsmen. Instead of furthering the cultic qualities of the images, the choice of propulsion more likely indicates the settings in which these vessels were depicted. Without the inclusion of additional landscape or seascape elements, the Stathatos seal can therefore be better understood as traveling through shallow waters and not the open seas. The only example wherein paddling seems out of place is the Ship Procession fresco, which will be discussed further below.

The Stathatos seal clearly adheres to the iconography of other Minoan cultic vessels. Its various cultic motifs help to elucidate or corroborate those features on other vessels, especially

the *akrostolia* on both extremities, the stern device motif, and the *ikrion* construction. The key to identifying the figures may not be their skirts, especially because of the lack of parallel examples, but rather their headdresses. Despite the lack of the tree motif or landscape contextual clues, the Stathatos seal can still be included in this corpus as relating to a female figure and tree in a boat.

### **Ring of Minos**

As with most of the images in this study, the Ring of Minos does not include the theme of a female figure and tree in a boat, though two trees are depicted on shore. The entire composition of the ring is comprised of several themes indelibly related to Minoan cult iconography. The two figures grasp trees growing out of shrines and the seated female is visited by a smaller epiphanic figure in the above register are themes referenced in other images. In the waters below these themes, a female grasps a steering oar in a hippocampus vessel which features a stepped shrine with horns of consecration atop both steps. The hull shape and stepped shrine is most similar to the Mochlos ring, but the landscape and other motifs are markedly different. The hull morphology, however, is more anatomically similar to a sea horse compared to the horse of the Mochlos ring. Additionally, like the Candia and Tiryns rings, the boat motif is secondary within the composition to the figures in the upper register, as suggested by scale and placement (Wedde 2000:182-183; Galanakis 2009:125; Soles 2012:188). Tully (2016:7) suggests the scenery in the ring may represent sacred mountains that were landmarks for sailors, recalling the importance that promontories held for Canaanite sailors who sought seaside shrines that marked fresh water sources (Brody 1998:13-19, 39-61).

The authenticity of the ring, however, has been questioned since its discovery and is therefore not always included in discussions on ritual craft iconography (Wedde 2000:182). Arguments against its legitimacy include the circumstantial discovery, as it was found by a civilian in a stream and not in context by an archaeologist, as well as the complex composition and unique motifs, which supposedly do not have any direct parallels in Minoan iconography (Wedde 2000:182, n. 60-62). Scholars, such as Galanakis (2009:125), Marinatos (1993:ix), and Krzyszkowska (2005:336-337), maintain that the ring is a forgery, or at least controversial, and should not be included in discussions of Minoan iconography because of these excellent points. Others, such as Wedde (2000:182), Tully (2016), and Soles (2016:249), utilize the ring in iconographic analysis due to the similarity of the themes and motifs to other Minoan images, especially the Mochlos ivory pyxis and images depicting ritual boats. For those reasons, the ring will be considered authentic in this study. Until scientific or iconographic analysis can prove otherwise, the purportedly unique motifs and complex composition are not sufficient to exclude the ring from meaningfully contributing to this study. The context of the boat and female figure as well as the other themes can further understanding of ritual craft in Minoan iconography.

The entire composition, subdivided into arguably four themes, is a complex narrative, with the divine statue and activity of the female figure in the boat potentially contributing to the story (Wedde 2000:183). Two of the larger themes are reminiscent of tree-shaking epiphany scenes in Minoan glyptic imagery, and the third large theme is very similar to presentation scenes in glyptics and frescoes. The identities of those figures in comparable images have been argued as divinities, priests or priestesses, or adorants (Marinatos 1993:187; Wedde 2000:188; Soles 2016:250). Wedde (2000:188-198) compares the oarswoman to those figures in other zoomorphic vessels, namely the Mochlos ring and the Ayia Triada sealing, but concludes that

only the female figure in the Mochlos ring could be considered divine due to the apparent self-propulsion of the vessel. Ultimately, the specific identity is not as important as the theme of the female figure in the boat in relation to the other themes depicted on the ring. Wedde (2000:189) also points out the figure is similar to an LM IA sealing from Khania on which is preserved a nude woman resting on a steering oar without more of the context surviving. Based on iconographic motifs and the angle of the two extremities, the figure in the Ring of Minos is steering from the bow. This activity does not have good parallels in Aegean iconography, but is instead more frequently depicted in Near Eastern and Egyptian ritual iconography. For example, there are analogous scenes of Horemheb, the last pharaoh of the 18th Dynasty (1550-1295 B.C.), poling a boat from the bow in the *Book of the Dead* (Wedde 2000:190-193). This could potentially corroborate Sourvinou-Inwood's (1989:97) assertions that Minoan ritual boats, like those on the Mochlos ring and Ring of Minos, were copied from the Egyptian *Book of the Dead*. It makes more sense, however, that the placement of the female was another case of artistic license. The composition would not have been as balanced had the figure been sitting, and so her activity was more likely meant to reference seafaring rather than depict an actual technique.

There are clear indications that the Ring of Minos fits within the scheme of both the overarching themes in Minoan ritual iconography as well as the smaller subset depicting ritual craft. Especially if the entire ring depicts a complex narrative, the boat and female figure itself may be better understood as emblematic. The emphasis is her presence within the boat, and not necessarily her actions. Ultimately, it will be the context within the corpus and context within composition can help to achieve a better understand of the meaning behind Minoan ritual craft, both in this image and in this study.

## Ship Procession Fresco

The Miniature Frieze fresco runs along the upper register of Room 5 in the West House at Akrotiri, Thera (Morgan 1988:4; Wachsmann 1998:86; Berg 2019:224, 247-250). It is arguably the best iconographic evidence for Minoan attenuated crescent-shaped ships discovered thus far. Consequently many hypotheses have been put forward, from extrapolating the dimensions of the actual ships, to explaining the horizontal stern devices added to the larger ships, to imagining the narrative historical backstory of the patron. The frieze has survived on three of the four walls in Room 5, with the Ship Procession on the south wall and the Shipwreck scene on the north wall, the former being the better preserved of the two ship scenes due to its position on an interior wall (Morgan 1988:3). As Morgan (1988:161) has brilliantly argued, all of the frescoes in the West House contain related motifs and therefore relate to a common theme: for example, the eight large-scale *ikria* in Room 4 echo the ship cabins in the south wall in Room 5, and the lions depicted on the hulls and sterns of the Ship Procession on the south wall are reflected in the hunting lions of the landscape scene on the east wall. Scholars have also connected the iconography of the Ship Procession fresco to the motifs and themes depicted in other ritual ship images in this study, including the Mochlos Ship Cup, Mochlos ring, Makrygialos seal, Candia ring, Tiryns ring, Stathatos seal, Ring of Minos, Anemospilia seal, Tsivanopoulos seal, and Ayia Triada sealing, suggesting they all share a similar theme of reference (Raban 1984:13; Morgan 1988:144; Wachsmann 1998:111-113; Wedde 2000:191; Davaras 2004:5-9; Galanakis 2009:125; Tartaron 2013:54-55).

The scenes within the Miniature Frieze could have been visible not only to the residents of the West House from within, but possibly also to the general public from the square outside the house. Using 3D viewshed analysis, Eleftheria Paliou (2011:258) was able to prove that the

Ship Procession fresco on the south wall would have been up to 86 percent visible from the street below, provided the viewer were on the far side of the street and the windows were unobscured by curtains. Though there has not been any evidence recovered of shutters or curtains recovered from Akrotiri, Palyvou (2005:150) believes they would possibly have been used to deal with extreme weather, potentially rendering the viewshed analysis null. If Paliou's analysis is plausible, however, it also gives more credence to the hypothesis that the frescoes within the entire settlement of Akrotiri were intentionally projecting a similar theme of Spring, renewal, and rebirth (Marinatos 1984:119; Morgan 1988:165). Even if the Ship Procession fresco was not visible from the street, other frescoes in the West House may have been. Palyvou (2005:169) indicates that the pot of flowers on the window jamb in Room 4 would have been partially visible from outside the house. If most or all of the frescoes would have been visible to the public, the Ship Procession fresco would have reaffirmed both the patron's place within the social hierarchy of Akrotiri as well as his or her belief in the ideals that are inherent within the iconography and symbolism of the painting. Based on the upper floor frescoes as well as artifacts recovered from the West House, such as the 26 lead measuring weights or the 450 loom weights, the owner was likely a sailor or merchant, probably belonging to the upper crust of Akrotiri society (Berg 2019:251).

Most interpretations of the Ship Procession fresco and its meaning rely on iconographic analysis. The prevalent and pervasive theories involve a narrative reading of the scene. These include: a "victorious fleet returning from a mission, a festive procession at the resumption of navigation, or... the re-enacting of a *hieros gamos*" (Wedde 2000:179). At the very least, the varying degrees of decoration suggest a functional and hierarchical distinction among the ships participating in the procession (Marinatos 1984: 57-59; Morgan 1988:121; Tartaron 2013:54).



Different scholars tend to focus on different motifs within the composition to formulate their hypotheses, with few considering the entire context of the image in their analysis. Initial readings of the Ship Procession by Lucien Basch and Spyridon Marinatos not long after its discovery, for example, focused on the military symbolism of the helmets and spears at the stern of the ships as well as the warriors on the north wall to conclude that the frescoes in Room 5 depict a military expedition (Wachsmann 1998:105-106). Scholars now, however, generally agree that the procession is ritual in nature, though the precise explanations vary (Wachsmann 1998:105, 120). Nanno Marinatos argues that the frescoes are cultic in nature due to the prevalence of Minoan cultic symbolism, such as horns of consecration and sacral knots (Marinatos 1984:34, 53-54). Wedde (2000:198) cites the addition of the awning, *ikrion*, and stern appendage motifs to signify the unique status of cultic craft, indicating that these motifs and themes are also present in other Aegean Bronze Age iconography though divorced from the larger context (Wedde 2000:179, 198).

Some scholars have offered a more hybrid explanation for the festival. Marinatos (1984:59-60) suggests a procession that concurrently depicts a naval victory and seasonal celebration. Avner Raban (1984:16) contends the ceremonial procession was a ritual intending to display the vessels as specialized attack and ambush ships specializing in riverine and open-sea functionality with double-ended capabilities. The ships were double-ended but were likely not propelled from either end, as Raban (1984) suggests. The ship type was probably descended from the expanded logboat tradition: the stern rises more sharply, the shift in hull mass occurs in the stern, and the mast is forward of the center of the hull, indicating that there is a clear functional difference in the two ends beyond that of the decorations (Wedde 2000:21-22, 62, 77; Van de Moortel 2017:267). Though a dual peaceful and militaristic interpretation of the

iconography is understandable, the symbolism of the two seemingly opposing iconographic motifs were not necessarily at odds to the emic viewer. A simpler, more consistent thematic analysis is more likely to be correct until additional evidence proves otherwise.

Some motifs have garnered more attention than others. The paddling of the larger vessels, in particular, has sparked much debate because it seems so out of place based on available technology and the seascape depicted in the composition. Primary utilization of their sails would have been more appropriate for the size of the vessels, the hull shape, and the depicted context of the open waters in which the vessels are traveling. Morgan (1988:127), Wachsmann (1998:109), and Wedde (2000:65, 70-72) argue paddling large vessels would have been “old-fashioned” by LM IA, and therefore deliberately references earlier propulsion methods, such as that of the 3rd millennium B.C. Cycladic longboats depicted on “frying pans”. Some scholars have argued that paddling would have instead been practical in order to make room for passengers or increased maneuverability, especially in shallow waters for passengers (S. Marinatos 1974:51; Gillmer 1975:324; Tilley and Johnstone 1976:288). Examination of the paddlers shows them awkwardly bent over the sheer strake with their short paddles, indicating that this method would have been neither normal nor efficient for the larger ships with more freeboard than Cycladic longboats (Broodbank 1989:335). A purposeful reference to archaic technology seems more likely when considering efficiency, especially in the context of contemporaneous Egyptian nautical festivals and the later Athenian spring festival (Casson 1975:7; Morgan 1988:127). This method, therefore, may have also been utilized by the Bronze Age Aegeans during special events.

Another contentious motif is a crescent object atop a pole preserved at the bow of only two of the larger vessels. The best Minoan iconographic comparison to this motif is a triplication of ships prows depicting identical double *akrostolia*, and two crescent poles on an LM I sealing

(Figure 4.11). These were first interpreted as trees in the wind with cult symbols by Evans (1902-1903). Before the Ship Procession fresco was discovered to corroborate his findings, John Betts (1968) argued that the sealing was of three ships. After the discovery of the Ship Procession fresco, some have interpreted the crescent pole from these images as a mast crutch (S. Marinatos 1974:49-50; Morgan 1988:123; Wedde 2000:348). Wachsmann (1998:94), however, questions the functionality of a mast crutch and instead suggests that the motif could be cultic. If that is the case, it presents an interesting parallel to the lunar symbols that were later added to the prows of 1st millennium B.C. Phoenician ships in order to invoke the divine presence of Tannit/Tinnit to aid in navigation (Brody 1998:43). Similarly, Morgan (1988:133) links the bird, dolphin, and butterfly decorative motifs affixed to the extended bow with navigational powers, indicating that most of the motifs located at the prow would have aided sailors. Other decorations, such as the lion and griffin stern figures, would have also served as a means of evoking the power of the animal, protecting the ship, and avoiding misfortune (Morgan 1988:131; Tully 2016:6-7).

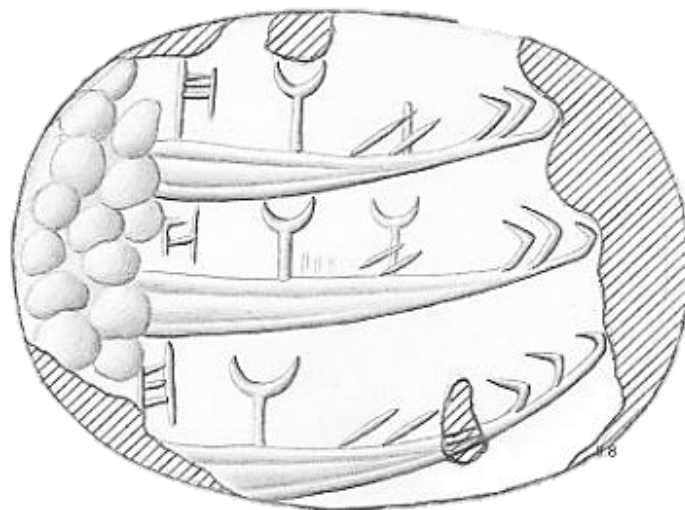


FIGURE 4.11. A sealing depicting crescent-shaped objects at the bows with *akrostolia*, LM I, CMS II-8, 135 (Platon et al. 2002:no.135).

Considering the added motifs of the ships *pars pro toto*, to include architectural objects such as an *ikrion* as well as decorative objects such as the butterflies atop the mast of one of the large ships, several scholars have concluded that they are an inclusive decorative scheme relating to a Minoan vegetation or fertility cult associated with a female divinity. Contemporaneous to the Ship Procession fresco, butterfly motifs are common in glyptic images found in funerary contexts on Crete and in Mycenae, doves are often depicted in conjunction with the tree-shaking epiphany theme (Figure 4.12), lions and griffins are often depicted with a vegetation deity, and the rayed star/sun motif is frequently associated with a female deity (Morgan 1988:133; Goodison 1989:79-82; Marinatos 1993:154-155; Wachsmann 1998:112-113; Wedde 2000:184). Though some of these motifs may seem out of place in a maritime context, the star/sun motif is frequently depicted with other marine motifs, especially the marine style that begins in LM IB (Morgan 1988:166). This marine style with rayed star/sun motif persisted through the end of the Late Bronze Age, with several rhyta (Figure 4.13) having been discovered at Palaikastro in LM III contexts, for example (Bosanquet and Dawkins 1923:49-54). Some scholars, therefore, argue that boats and the sea are innately connected with the cult of a goddess associated with the sun and vegetation (Goodison 1989:93-94; Marinatos 2010:124). Despite the militaristic associations of some of the motifs in the West House frescoes, it is more likely that the ships were ritually decorated for religious rather than warlike purposes.



FIGURE 4.12. Gold shield ring from Kalyvia, Crete, LM IIIA. Example of shaking a tree growing out of an enclosure, and a dove. CMS II-3, 114 (Platon and Pini 1984:no. 114).



FIGURE 4.13. Pear-shaped rhyton featuring rayed star with dots in marine composition, Candia, LM III (Bosanquet and Dawkins 1923:53).

Evidence for nautical rituals and festivals in the Aegean and Mediterranean is not unique to the West House frescoes. Ritual offering and thanksgiving scenes are depicted in 15th century B.C. Egyptian iconography of Syrian merchants and a 7th-6th centuries B.C. Cypriot scapula (Morgan 1988:143-144; Sauvage 2015:69-70). Other frescoes of ships with similar hull

decorations as the ships in the West House have been discovered on Kea and at Pylos, indicating that this same festival could have taken place throughout the Aegean (Wachsmann 1998:87; Tartaron 2013:54-55). The highly decorative aspects of the ships in the Ship Procession fresco is comparable to the level of decoration depicted on Egyptian ceremonial ships in the New Kingdom (Morgan 1988:131). More specifically, across the Mediterranean, from the Bronze Age to the Greek Classical period, the beginning of the new navigational season was inaugurated with a procession of ships imbued with religious symbolism and ritual offerings. Morgan (1988:144-145) cites several comparable nautical festivals, such as the Egyptian Opet festival or the Greek and Roman navigation festivals, that lead to the possibility the Ship Procession fresco is meant to depict a festival that inaugurates the prime maritime navigation months in the Aegean. Davaras (2004:14) links the Ship Procession fresco to the Minoan equivalent of Plowistos, which is the opening month of the navigation season in the Aegean mentioned on Linear B tablets from Pylos (ca. 1425-1200 B.C.), or at least a major festival celebrating the renewal of nature that began with the Minoans. Wachsmann (1998:106) argues that the Ship Procession is a depiction of an Aegean cultic festival that originated in the 3rd millennium B.C., and morphed into varying permutations as the tradition continued. Whatever the origins or influences of the procession, it is clear that it is important – it is depicted as drawing the attention of many people in both of the cityscapes.

It is possible the procession does not relate to rituals conducted to reinforce broader Minoan religious beliefs. Tartaron (2013:132-133) suggests the overall scenery depicted in the Ship Procession fresco displays a maritime subculture, initially hypothesized by Wedde (2005) as the galley subculture, that existed before the LM I period. Through analyzing the iconography, the Minoan and Mycenaean seafaring subculture continued their traditions and rituals, undeterred

by the changing political situation across time periods (Tartaron 2013:133). Following this logic, their religious rituals could have been distinctly separate from officially sanctioned religious practices. This is not only similar to the differences notated between Minoan public and domestic ritual practices, as demonstrated at Kommos for example, but it is also similar to the Canaanite seafaring rituals and beliefs that were separate to more broad Canaanite religious practices (Brody 1998; Shaw 2004:147-148). Sandra Blakely's (2017:364) argument that seafaring rituals practiced throughout the Ancient Mediterranean were distinct from civic religious rituals corroborates Tartaron, Wedde, and Brody's theories.

Contrastingly, some scholars do not argue for a religious interpretation of the Ship Procession fresco. Vassilis Petrakis (2011:216, n.204), for example, contends that religious or ritual connotations have been applied too liberally to ship iconography, suggesting that the motifs were simply copied from other examples and contain no additional symbolism. John Younger (2011:165, 172-173), however, agrees with previous interpretations that the ships are themselves taking part in a ritual festive occasion, possibly relating to the sailing season, but disagrees with a religious reading of the image. Instead, Younger (2011:165-166, 175-176) hypothesizes that all the frescoes in the West House are narrative with inclusions of *topoi* and *ephemera* subject matter, suggesting the subjects are personally significant to the owner of the house as they represent a real event and the owner's family. Though this explanation is possible, it is too specific to be confirmed with current archaeological evidence. Instead of focusing on presumptions of the reasoning behind the commissioning of the frescoes, Younger's iconographic analysis of the *topoi* and *ephemera* offers more interesting insight into the social and economic position of Akrotiri within the Aegean.

According to Younger (2011:164), the *topoi* are themes and motifs frequently depicted in iconography that comprise the collective understanding of a symbolic reality that represents a culture, such as a Minoan townscape or the tree shaking theme. The *ephemera* are scenes that represent daily, real-life activities that occurred when the frescoes were painted, such as women fetching water or fishermen toting their catch around the harbor (Younger 2011:171). In the study of iconography, both are referred to as genre scenes or themes of reference, which do not necessarily represent an actual instance of the event but rather capture the essence of the scene as it is understood within a particular culture (Morgan 1988:146; Knight 2013:88, 150). These scenes would have conveyed a sense of belonging to a specific culture to the viewer, and would have made the narrative immediately recognizable from an emic perspective. At the same time, the *topoi* illustrate social and cultural norms that the artist would have been expected to be depicted, while the *ephemera* display the individual creativity of the artist free of social constraints (Younger 2011:171, 174-177). Blakolmer (2017:113) argues that these *topoi* would have been standardized at palatial frescoes, especially at Knossos, and disseminated by means of glyptic imagery throughout the Knossian sphere of influence during the Neopalatial period, thereby reinforcing the iconographic concepts created by those in power. Without taking into account the subject of the narrative, the individual themes do seem to portray the Minoanization of Akrotiri. The Minoan *topoi* and Theran *ephemera* which would have projected the acceptable cultural norms of LM IA Akrotiri (Younger 2011:176-177). The addition of the Minoan-style architecture of Room 3 with the central pillar corroborates Younger's position that the frescoes intentionally projected Minoanizing elements to the viewer.

Ultimately, the Ship Procession fresco remains not only one of the most detailed examples of Minoan ships available to modern scholars, but also a fresco that represented a



concept that was significant in some form to the emic viewer. Though the meaning behind the fresco is debated, the main consensus is that it represents a procession celebrating an event important to the Late Bronze Age Aegeans. The most plausible interpretation seems to be that it depicts a ritual associated with the beginning of Minoan Plowistos, especially based on its context within the Spring or renewal theme of the iconography at Akrotiri, as well as similar naval processional celebrations that occurred throughout the Mediterranean in the Bronze and Classical ages. Given that many scholars link the iconography of the Ship Procession to many of the images in this study, there is a strong case to suggest that the Ship Procession depicts the same or similar events (Raban 1984; Morgan 1988; Wachsmann 1998; Davaras 2004; Galanakis 2009; Tartaron 2013). Its iconographic interpretations, therefore, are applicable to the images in this study of the theme of a female figure and tree in a boat.

### **Remaining Ritual Ship Images**

The remaining four ship images have also been considered as ritual craft, and contain more than one ritually heightened motif that has been identified in the other images in this subcorpus (Wedde 2000:180, 339-340). These are not necessarily direct parallels for the female figure and tree in a boat theme, but they are included because of their ritual motifs and extraordinary contexts. Though it may not appear so at first glance, these images are just as important in order to facilitate a more well-rounded explanation of the theme of the boat with a female figure and tree because of the iconographic principle of cumulative sufficiency. This principle states that an image can refer to a concept by including certain motifs that an emic viewer would have recognized as belonging to that referent (Knight 2013:71). The last ship images are the Anemospilia seal, Ayia Triada sealing, Tsivanopoulos seal, and Khania sealing.

The MM III-dated Anemospilia seal was found in the temple's west room tied to the wrist of a human skeleton, and features a zoomorphic hull with a human figure archaically poling the vessel (Wedde 2000:337). Wedde (2000:187) argues the motifs on the Anemospilia seal combined with the finds context at the destroyed temple near Mount Juktas contributes to its reading as cultic. The LM I Ayia Triada sealing also features a zoomorphic hull paddled by a central humanoid figure (Wedde 2000:339). In the LH II seal in the Tsivanopoulos Collection, much of the vessel is not extant, but certain ritual motifs are identifiable: a larger figure interacts with either the smaller figure grasping the steering oar or possibly something on the seal which has not survived, an *ikrion*, and a flying bird all indicate the cultic nature of the scene (Wedde 2000:125, 339). The final example, which is an LM IB sealing from Khania, would not necessarily be included in the ritual sub-category if considered on its own. Its inclusion in this sub-category is primarily based on the Ayia Triada sealing and the Anemospilia seal. The Khania sealing has an almost identical compositional structures to the other two images, and includes a female figure paddling the otherwise unassuming crescent-shaped vessel (Wedde 2000:184).

All of these four images are used in some way to support the ritual motifs of the other images in this study. Wachsmann (1998:113), for example, uses the Anemospilia seal and Ayia Triada sealing to support his theory of the Minoan vegetation cult. Similarly, Galanakis (2009:125) includes the Ayia Triada sealing and the Tsivanopoulos seal as relating to the "Goddess from the Sea" cult iconography. Galanakis erroneously suggests the female figure of the Ayia Triada sealing is a reference to contemporaneous bird-like female figures on seals from Kato Zakros (Galanakis 2009:125). The figure lacks enough detail to definitively compare it to Kato Zakros monsters. Instead, the figure appears to be wearing a headdress which is reminiscent

of those in other Minoan ritual depictions, such as the gold signet ring from the LH IIA Pylos Griffin Warrior tomb (Figure 4.14) (Davis and Stocker 2016:640-643).



FIGURE 4.14. Gold ring from Pylos, Griffin Warrior tomb, LH IIA. Example of a seaside shrine, and conical headdress worn by Aegean women (Davis and Stocker 2016:641).

These four ancillary glyptic images help to supplement a better narrative of related ship ritual images. The hull shapes and additional motifs serve as a bridge between other images, such as the Mochlos ring or Ship Procession fresco, that depict more detail and are therefore more easily analyzed. Overall, especially based on the iconographic principle of cumulative sufficiency, these examples also relate to the Minoan female, tree, and boat iconographic theme.

## Conclusion

Representations of Minoan ships can only be better understood within their multiple contexts. Scholars have successfully argued for certain ritual motifs, such as the palm tree on the Makrygialos seal and the Ship Cup, to be firmly rooted within Minoan ritual iconography. Other motifs, such as the *ikria* on several linear and glyptic images, imbue the depicted vessels with heightened ritual significance that is best illustrated on ship depictions. Based on the importance of

water at known ritual sites, like peak sanctuaries, or domestic shrines, it is clear that the sea, and ships by extension, played a key role in the rituals of the Minoans. Wedde's criteria for including a ship depiction as ritual serves as a good foundation, as all the linear and glyptic images fit his criteria to some degree (Wedde 2000:180). In some ways, however, he has too narrow of a focus because in his sub-category he does not include the Ship Procession fresco vessels, which have been argued by several scholars as being ritually significant, though not always arriving at the same conclusion (Marinatos 1984; Raban 1984; Morgan 1988; Wachsmann 1998; Davaras 2004; Galanakis 2009; Younger 2011; Tartaron 2013). This study, therefore, will seek to bring a cohesive interpretation for all of the aforementioned artifacts as they relate to Minoan iconography of a female, a tree, and a boat.

## **CHAPTER FIVE: RITUAL THEORY AND ICONOGRAPHIC METHODOLOGY**

The ritual use and symbolism of Minoan ships is likely to be anything but simple. By analyzing some of the many layers of significance, however, this study aims to shed light on a more comprehensive picture of the maritime aspects of Minoan culture. The framework of this study will be approached from two theoretical and methodological considerations: ritual archaeology and iconography. Both aspects fall under the larger theoretical framework of cognitive archaeology, which seeks to gain insight into the worldview and thought processes of prehistoric societies or individuals within the society by examining the material and behavioral remains and iconography they left behind (Renfrew and Bahn 2000:385; Renfrew 2007:112). Despite evidence for the Minoans having developed writing systems, the fact the Linear A and Cretan hieroglyph scripts are still undeciphered forces researchers to consider prehistoric methods for analysis. Though it may be too ambitious to understand the full meaning behind Minoan materials and symbols, some meaning can still be ascertained through context. As Ian Hodder (1986:84) argues, context is essential for a better understanding of an object's significance.

### **Ritual Archaeology**

Rituals essentially involve the transmission, creation, and modification of beliefs through actions and ideas (Bell 1992; Renfrew 2018). This process integrates many layers of significance that expound upon the repetition of physical action of the ritual to include the emotions, knowledge, and forms of communication that may or may not leave traces in the archaeological record (Insoll 2004:10). The more ephemeral aspects of rituals tend to reinforce or renegotiate the social or spiritual reality and beliefs of the participants, creating a unique worldview that is

difficult to extrapolate for prehistoric societies (Renfrew 2018:14; Rosenfeld and Bautista 2017:6-7). Context, therefore, is essential for any meaningful analysis into Minoan rituals. Richard Bradley (2003:21) even points out that rituals performed could have been part of formation processes of a site, and thus have likely aided in archaeologists' abilities to categorize and interpret the material and behavioral remains.

Studying rituals can therefore be the most straightforward approach to studying prehistoric religion, though there is a division amongst scholars as to the relationship between the two. Those who take a structuralist approach, view religion as the meaning behind the ritual acts, relying on historical or ethnohistorical sources as supportive evidence. The opposite approach is practice-oriented, with a view that the experience of the ritual reinforces social realities of the participants (Fogelin 2017:56-59). Ultimately, ritual and religion inform each other in a reciprocal manner, and so both approaches are useful in a study of prehistoric rituals (Fogelin 2017:63).

Some scholars, such as Colin Renfrew (1985), prefer to interpret the archaeological record as distinguishing between secular and religious rituals. Others, such as Catherine Bell (1997), accept the distinction but recognize the difficulty in identifying significant differences in archaeology. The reality, however, is that even in the modern world there is more of a sliding "grayscale" of religious influence on the secular, and secular influence on religion. It seems likely, therefore, that the relationship between these types of rituals were more complex, and that prehistoric societies did not categorize their beliefs and behaviors as it may seem from the etic perspective of scholars separated by millennia (Bradley 2003:20-21; Insoll 2004:22; Fogelin 2017:60).

There may be a desire to categorize Minoan rituals using modern methods, however, scholars must acknowledge that the Minoans and other prehistoric cultures conceived of rituals based on their own cognitive landscapes, unique to each society and individual. Our modern, etic view of rituals is likely not the same as that of the Minoans. Even within Neopalatial Crete, there is evidence for state-sponsored rituals practiced in tandem with vernacular or domestic rituals, such as was recognized at Kommos (Shaw 2004:144; Tartaron 2008:115). This blurred distinction between secular and religious or local and universal Minoan rituals is in conflict with the initial interpretations by Evans (1920:5) for a Minoan theocracy, especially during the Neopalatial period, that maintained governance through divine kingship.

Unfortunately, it was commonplace for earlier scholars to label anything unknown or unexplainable as ritual or religious, leading many Processualists to not see any value in studying religion. Other pitfalls have been to make implausible connections from little evidence or to universally apply ethnographic behavioral evidence to explain material culture (Gazin-Schwartz 2001:266; Insoll 2004:55). After further developments in theory and methodology by Post-Processualists, however, there have been better analyses for identifying ritual in prehistoric cultures. Though the cognitive aspects of ritual may be difficult to discern, it is the performative aspects of ritual by means of the repetition of formal and informal acts that can be more easily identified in the archaeological record. These rituals are manifested at specific locations where the actions occurred, and with paraphernalia or symbols that were integral in performance or invocations (Rappaport 1999:24; Rosenfeld and Bautista 2017:9).

While there are quotidian rituals that may have little to no significance, like eating or sleeping, some actions are made significant through the process of repetition and recontextualization of the participants. A utilitarian ritual can reassess a relationship with the

material world and the supernatural (Gazin-Schwartz 2001:278). Conversely, other significant rituals occur at unique intervals governed by the seasons, a person's life cycle, or a cataclysmic event. In all cases, formal aspects of both action and time can be interpreted in the archaeological record based on the performance area and associated paraphernalia (Fogelin 2017:58; Rosenfeld and Bautista 2017:8-9). Frequently, the ritual use of the paraphernalia or symbols is not always obvious from the material, form, or archaeological context (Gazin-Schwartz 2001:267). Furthermore, not all of the artifacts used in a ritual will be left or preserved in context (Rosenfeld and Bautista 2017:9). It is through the comparison of similar assemblages and the constantly increasing artifact corpus, therefore, that a more complete analysis of performance-based rituals can occur.

Colin Renfrew (1985) was one of the first archaeologists to outline a useful framework for identifying ritual in anthropology and archaeology. He specified that ritual practices can be verbal testimony, direct observation of expression, non-verbal records of mythical events or cult practices, and the remains of symbolic objects and materials (Renfrew 1985:12). Rituals pertinent to prehistoric societies, unfortunately, can only be observed through non-verbal records and remains (Renfrew 1985:13). Regardless, the structure of the ritual system, and associated belief system if religious in nature, should create a regular pattern of behavior, objects, and symbols that reflect meaning and are observable in the archaeological record (Renfrew 1985:17). Renfrew (2018:14) identified three circumstances in which prehistoric rituals can be observed in the archaeological record. He specified that the production of special artifacts, the designation or construction of special places for performance, and the depiction of ritual actions are observable. Renfrew's structuralist perspective, however, excludes the possibility of an inconsequential artifact gaining significance through ritual behavior, as argued by practice-oriented proponents.



Since special artifacts or symbols as well as behaviors constitute rituals, a quotidian artifact can take on significance based on its life history (Walker 1998:296; Fogelin 2017:61). Consequently, context and frequency are essential in determining ritual significance.

As one of the key aspects of identifying ritual in prehistoric societies, symbols and their associated iconography can be crucial in understanding ritual practices. The best example would be a depiction of a ritual using the same artifacts discovered in a nearby site. Even without this scenario, scholars can infer the meaning behind the symbols and the symbolic meaning of ritual materials. Ethnohistorical and historical sources, when available, can be useful in interpreting the symbols associated with mythology or ritual images, for example. Cognitive archaeology explores the effect of a symbol during its creation and during a ritual act. Other approaches seek to explain the ways in which symbols are utilized, controlled, and manipulated to achieve social or political order by certain members of society. A symbol can even be considered a material object that can be controlled like traded goods, thus altering the meaning and perception of the symbol through time (Fogelin 2017:63-65). All three approaches are useful in order to understand a symbol as it was used and functioned, as well as its underlying meaning. While Renfrew (1985:14), like other structuralists, doubts the efficacy of interpreting the cognitive realities of prehistoric peoples through analysis of rituals, he does admit that the iconography and symbolism of those rituals may help further understanding beyond the observable ritual behavior.

## **Iconography**

Iconography is both the study of visual subject matter and the term used to describe the images themselves (Morgan 1988:15; Knight 2013:20; Chapin 2016:10). Erwin Panofsky (1939),

a pioneering art historian, outlined a methodology for understanding the meaning behind visual art within a culturally specific context. His methodology was initially developed specifically for works of art, which Panofsky (1955:11-12) described as having an aesthetic quality. Since the development of cognitive archaeological theories, however, the study of iconography has been adapted by archaeologists in order to gain more insight into the cognitive landscapes of past cultures. As such, equating the study of iconography to the study of art from an archaeological perspective is problematic. This is not only because not all visual representations could necessarily qualify for the modern definition of art, but also because applying modern labels to prehistoric images makes too many assumptions about Minoan interpretations (Knight 2013:4-5; Kyriakidis 2018:244). Visual representations in this study, therefore, will not assume the label of art or artistic.

Panofsky (1939:3-17) identified a three part method for the interpretation of visual representations: pre-iconographical description, focusing on the natural subject matter or the referent; iconographical analysis, which refers to the culturally specific conventional representation methods of subjects; and iconological interpretation, which is focused on analyzing and understanding the intrinsic meaning behind the images (Knight 2013:11). Anne Chapin (2016:11) neatly summarizes Panofsky's method as: description, identification, and interpretation. One of the main criticisms of his original methodology lies in the interpretation phase that emphasizes the importance of using literature or oral traditions to analyze an image, which excludes prehistoric cultures from the possibility of meaningful interpretation (Knight 2013:12; Chapin 2016:11-12). George Kubler (1969:3-4) argued that an iconography of prehistoric images was possible by extracting recognizable motifs within and across images in order to reconfigure them into a pictorial equivalent of literary and oral traditions. He

successfully argued that an entire corpus of Classic Maya iconography referred to a ritual prayer sequence by using ethnographic analogy with an analysis of style (Knight 2013:12-13).

The study of iconography is inherently the study of cognitive phenomena which seeks to explain the representational imagery and the concepts to which the imagery alludes of any given culture (Knight 2013:15). The two main approaches to iconography involve the structural, phenomenological, hermeneutic, and critical theory interpretations on the one hand, and a functional approach centered in cognitive archaeological theories on the other (Knight 2013:16-17). James Knight builds on Panofsky's methods, Kubler's studies, and Post-Processual theories. He argues that the best method to analyzing prehistoric iconography is by integrating art historical and anthropological methodologies with natural history and archaeological field data to come to an understanding of a society (Knight 2013; Chapin 2016:21). Knight (2013:19-20) asserts that the cultural knowledge possessed in individuals, schematized by their given place within a culture or subculture, can be externally represented and enacted in material culture left in the archaeological record. Cultural conventions will dictate both the form of the image and how the subject is depicted, and therefore the analyst can reverse engineer a configurational analysis model based on the elements within an image. Without attempting to analyze the meaning behind the form and by only relying on the function apparent in the archaeological record, an iconographic study lacks meaning. It becomes a hollow shell without the substance of understanding the associations between images and their referents, which is the true intent of iconography (Knight 2013:18-20).

In order to make any interpretations about a culture, Knight reasons that the analyst must apply analogies, which are limited to ethnographic analogies in prehistoric societies, but can also be literary or oral traditions as Panofsky originally argued for historic societies. Knight's

methodology depends upon first performing configurational analysis to identify the style, form, and referent, then using ethnographic analogy to create a competent iconographic model that will ideally echo the original models used by prehistoric cultures to create their iconography (Knight 2013:20-21). Naturally this analysis, being performed from an etic perspective, can never truly be an exact replica of the original models, but will instead “be tentative, partial, approximate, and subject to correction” (Knight 2013:21). An analyst must always be cognizant that their interpretations of a visual image emerge from their own cognitive awareness, which is not necessarily the same as that of the cultures under study (Morgan 1985:6).

In Aegean Bronze Age archeology, a similar iconographical approach to that advocated by Knight was undertaken by Lyvia Morgan (1988). She successfully presented an interpretation of the West House frescoes at Akrotiri as being interconnected and centered around the same theme of the protection of maritime interest through ceremonial events. Evangelos Kyriakidis (2018) also utilized a similar methodology, without delving too deeply into the interpretation phase, to understand the Minoan motif of a female hugging a baetyl.

Anne Chapin (2016:19-20) describes the three common approaches to Minoan iconography as essentially the three phases of Panofsky’s original methodology, which has been adapted for prehistoric societies by Knight (2013). The descriptive approach aims to develop consistent vocabulary without biased identifications, the typological approach focuses on identifying recurring motifs, and the third approach applies theory drawn from ethnographic and historical comparisons. Anne Chapin (2016:21-22) believes that Knight’s methodology could be utilized by Minoan iconographers to begin to develop a testable model for understanding Minoan iconography. Part of the success of an interpretation of an iconographic model advocated by

Knight, however, relies not only on consistent methodology, but also on consistent terminology and vocabulary.

Kyriakidis (2018), for example, drew inspiration from Susanne K. Langer, a philosopher who focused on symbolism in art, for his study on the baetyl hugging motif. Instead of using ‘motif’, a standardized term in iconography, he adapted ‘situation’ from Langer. In an attempt to differentiate the iconographic terminology from art historical terminology, some Aegean iconographers have argued for the use of more specialized vocabulary. Morgan (1985:9) argues for the use of ‘idiom’ rather than ‘style’ to refer to the “conventional mode of expression” unique to each culture because the latter connotes the mode of a specific artist in manner of execution and technique. Morgan’s definition of ‘idiom’ as the underlying structural principle that governs the images produced by a culture is, in fact, identical to Knight’s definition of ‘style’ (Morgan 1985:9; Knight 2013:23). Instead of changing the terminology, however, the more conventional approach would be to follow Knight’s example and add a qualifier to ‘style’ in order to differentiate between the cultural mode or model of expression and a ‘style phase’ or ‘style tradition’ of a particular artist (Knight 2013:177).

In an effort to adhere to an established lexicon in iconography, the terms used in this study will follow the convention utilized by Knight (2013). Several of these terms have already been defined in the glossary in Chapter 1, but they are worth reiterating here. In its most broad sense, **iconography** is the study of the relationship between the images produced by any given culture and the tangible or intangible ideas they represent (Knight 2013:3). The **style**, or the “cultural models governing the form of all things artificial”, is the outermost layer of cultural constructs that dictates the iconography (Knight 2013:23). **Analysis of style** is an analysis of the form of the image. Style can vary within a culture, with certain canons being less

conventionalized, or more true to nature, and some being more conventionalized or more abstract (Knight 2013:28). The Minoan convention of depicting nude youths with an exaggerated curved back, for example, does not necessarily invalidate the accuracy in the style of depicting the naturalistic fish in the Fisherman fresco at the West House in Akrotiri. The manner of depiction of the subject matter, which is the idea or object represented as an image, is dependent on stylistic conventions.

The **elements** that comprise a style are: genre, media, decorative effect, layout, use of positive and negative space, scale, relative size, depth, perspective and proportion, dimensionality, degree of elaboration, and aesthetic quality. While some terms are intuitive from contexts outside of iconography, such as aesthetic quality or depth, other terms are more specifically applied to this methodology, and therefore require definitions. A **genre** is a “category of artifact or architecture devoted to a distinct functional purpose” (Knight 2013:176). **Media** is, of course, the raw materials from which an image is created, but it is essential to emphasize that different materials “have a decisive bearing on visual outcomes” (Knight 2013:41). **Decorative effects** are those tasks, such as drilling or brushwork, that create the recognizable character of a style (Knight 2013:41-42). **Layout** is the conventional modes of arranging subject matter, encompassing both framing elements and placement of the subject within an image (Knight 2013:42-43). The **use of positive and negative space** is an interesting examination into the conventions of the ways in which a form dictates an image, especially as it applies to Minoan sealstones and signet rings. **Scale** refers to the size of the subject matter *in relation to the composition*, whereas **relative size** refers to the *size comparison between subject matter within an image* (Knight 2013:44-47). **Depth cues** are culturally relative, and some compositions may have multiple points of view, which is uncommon in Western art (Knight

2013:47). Conventions of **perspective** and **proportion** refer to the differences in proportion of a subject, and not the depth of field of a composition (Knight 2013:47-49). A two-dimensional image with relief or intaglio techniques applied to raise or incise the surface creates **dimensionality** without becoming a three-dimensional object (Knight 2013:49-50). The **degree of elaboration** refers to the amount of information, modes of variability, and the amount of extraneous details that cause an image to appear less naturalistic (Knight 2013:50-51). And finally, the **aesthetic quality** is more subjective, but can still be described in the mastery of difficult techniques, for example (Knight 2013:51).

The next layer of analysis is the study of the relationship between the form and to what it refers, or the identification phase. Some subjects, such as flora or fauna, may be inherently obvious to an etic analyst of prehistoric images. Each image, however, does not need to look identical to its referent, but rather can include a sufficient amount of recognizable features in order to facilitate identification. The primary goal of identifying the subject matter can be unfortunately difficult for a prehistoric iconographer when attempting to name a human figure, for example. If it is not inherent, it is better to identify in general or neutral terms and avoid perpetuating possible misconceptions, as has been the case in many examples of Minoan iconography (Knight 2013:65; Chapin 2016:19). Another aspect of the identification phase is to break down a composition into different levels of analysis, which is the configurational analysis presented by Kubler (1969), in order to assemble an iconographic model.

A **composition**, which is an intelligible unit of imagery, can be a part of a larger tableaux or architectural grouping, and can also be broken down into **subcompositional elements**. As a part of a larger unit, a composition could be a part of a grouping of **visual themes**, or a class of images that represent the same subject matter (Knight 2013:88). These visual themes could, in

turn, be a part of a larger **narrative**, which is a grouping of compositions united sequentially in space and time (Morgan 1988:164; Knight 2013:107). Broken down into subcompositional elements, an image is comprised of **salient features**, or attributes that aid in the categorization of a subject, and **nonsalient features** (Knight 2013:68, 98). An example of a nonsalient feature is a **filler motif**, which is governed by cultural conventions and is characteristically connected to external referents but does not contribute to the identification of a compositional element (Knight 2013:105). Salient features include motifs, ideographs, identifying attributes, and classifying attributes. **Motifs** are not the building blocks of themes, but instead are *independent units* that can be *transferable* among distinct themes. They can be integrated with or separate from objects, either adding information to the object or the composition as a whole (Knight 2013:97).

**Ideographs** are figural units that are not bound to spoken language, but appear in images to convey a specific idea that is generally unchanged over time (Knight 2013:104). And finally, **attributes** are elements of a composition that identify the subject matter. **Identifying attributes** uniquely identify a *specific subject*, but **classifying attributes** identify a *group* to which the subject belongs (Knight 2013:97-98). In studying the iconography of prehistoric societies, the identification of subject matter and themes of reference, or the concepts and myths to which images refer, are sometimes veiled. The next phase of analysis is to understand the meaning ascribed to the images by means of ethnographic comparison.

Utilizing the recorded information regarding beliefs and mythology of subsequent cultures of a given region to analyze the iconography under study is a double-edged sword. It can be a rich source of material with tempting explanations for an otherwise unknown meaning of prehistoric iconography, but previous studies tend to utilize historic explanations too much without recognizing the inherent difficulties (Knight 2013:130). Evans and other early Minoan



archaeologists fell into this habit, and so later scholars avoided the analogies altogether. It is possible, as Knight (2013:131) argues, to take a middle position regarding ethnographic analogy in iconography. As Knight (2013:133) points out, ethnographic analogy can take the form of cross-cultural comparisons and historical homology. The danger in using both methods lies in the iconographic principle that the relationship between an image and to what it refers is unstable and can vary between and among cultures. Images that are borrowed across communities in space and time are constantly reinterpreted based on extant cultural models (Knight 2013:76; Chapin 2016:20).

Some studies of Minoan iconography using ethnographic comparisons have been successful, while others have been lacking in a clear methodology and therefore are less than adequate to scientifically prove their claims. Morgan (1988), for example, utilized the three-part method advocated by Panofsky to analyze the frescoes of the West House in Akrotiri in terms of the physical world, archaeological excavations, Linear B tablets, and comparative analogies. Chapin (2016:22) explores a similar approach taken by Morgan, namely that integrating corpus data with “cautiously structured comparisons” to contemporary Egyptian and Near Eastern art and documentary evidence of historical Greek religion, can be a successful approach to studying Minoan iconography. The danger is making definitive conclusions without testable methodology, such as Stephanie Budin (2011:576) argued was one of the main issues with Nanno Marinatos’s (2010) use of a Mediterranean iconographical *koine* to prove a Minoan theocracy.

Several Minoan iconographers have made great strides in understanding the impetus behind Minoan images, and not necessarily the meaning, by comparing themes and motifs within the broad corpus of images. Fritz Blakolmer (2012), for example, has compared several motifs and nonsalient features between the various media of Minoan iconography. Blakolmer (2012:83,

117) specifies that the highly narrative relief images at Knossos during the Neopalatial period were the original models for the motifs repeated in other media that then disseminated the complex narrative iconography in motif form as a seal or ritual vessel as official *topoi*. Somewhat unconvincingly, Blakolmer (2012:117) claims that there is little evidence of unofficial images in the Neopalatial period. John Younger (2011:164) agrees that the *topoi*, or frequently repeated motifs and themes, were meant to reinforce the social control of the elite in the Neopalatial period. As exemplified by the West House frescoes at Akrotiri, however, there is evidence for unofficial images in the *ephemera* motifs, or those that mimic local life, which were dependent on the creativity of the artist (Younger 2011:171). Similarly, Vassilis Petrakis (2011:187-188) argues that the *topoi* would have been part of the elite strategies of ideological manipulation, and therefore much of the meaning of an image can be extrapolated by who initiated the image as well as who was the intended recipient.

Afraid of making unwarranted assumptions, many scholars have avoided the third and second phases of iconographic methodology altogether, focusing on only the first phase. While their studies are extremely useful in establishing consistent vocabulary and cursory identification of the subject matter of Minoan images, they miss the point of iconography to understand the meaning behind the images. In addition to criticizing the contradictory and pessimistic attitudes in Olga Kryszkowska's (2005) study of Aegean seals, Judith Weingarten (2006:321) points out that merely describing an image contributes nothing to an explanation of meaning.

## **Conclusion**

This study will, therefore, utilize the iconographical method advocated by Knight (2013) in order to gain deeper insight to understanding the ritual significance in the symbolism of

Minoan maritime iconography. Specifically, this study seeks to gain an understanding of the recurring theme of a female figure and a tree in a boat. Through the iconographical principles and methodology established by Knight (2013), this study will first define and then identify a subcorpus of this specific theme within the corpus of Minoan ship imagery. The final task be to will interpret the subcorpus by utilizing primarily cross-cultural comparisons from the Near East. If successful, the comparisons can potentially reveal the ritual significance of this Minoan theme. While still recognizing the modifications the meaning has likely undergone after having been transmitted through time and space, it is possible to establish a potential meaning.

## CHAPTER SIX: ICONOGRAPHIC ANALYSIS

The artifacts of this study demonstrate an interest by Aegean artisans in depicting Minoan vessels associated with maritime ritual. Symbols and their associated meanings can be a crucial component of understanding ritual in the archaeological record, and so this study will utilize iconographical methods to elucidate some meaning to this subcorpus of Minoan ship depictions. Using Knight's (2013) methodology, this analysis will define the subcorpus of Minoan ritual ship iconography, then identify, then attempt to interpret.

### Defining the Theme

The first task, in keeping with Knight's methodology, is to define and describe the subcorpus of the ritual ship iconography as separate from the corpus of Minoan ship iconography. The Data Chapter has already served the purpose of describing the subcorpus in detail. These images are unique from other images of Minoan ships in that they definitively incorporate one or more of the iconographic motifs that elevate the vessels to belonging to ritual vessels. Wedde (2000:180) outlines five characteristics that can be identified as depicting ritual craft in the Aegean Bronze Age: presence of human figures; interaction or gesturing between the actors; motifs that heighten ritual significance; ship-morphological indicators; and narrative content. By integrating Knight's (2013) methodology, the characteristics outlined by Wedde can be further categorized by motif. Motifs that heighten ritual significance would be considered a classifying attribute, or a salient feature that indicates a general category of referent. In this study, these include: *akrostolia*, *ikria* or stepped shrines, stern devices, awnings, nonsalient decorations, and ritual gestures. Wedde's remaining characteristics can be applied as identifying attributes, or a salient feature that specifies the referent. These include: a tree, fantastical hull,

salient decorative motifs, and a female figure, especially one engaged in ritual gestures or wearing distinctive personal adornment. In general, narrative content can be discerned by the presence of human figures interacting with each other and performing an activity presumed to not occur every day. Creating this subcorpus also promotes the narrative content of these images, especially those that would not necessarily be considered narrative when considered separate from the subcorpus.

These identifiable characteristics related to ritual ship imagery are salient iconographical features that when considered together comprise and aid in the identification of the theme: the ritual narrative of a female figure and tree in a boat. The individual motifs themselves may or may not directly symbolize the theme, but when grouped together in a certain combination, they would have been immediately recognizable to an emic viewer as belonging to and representing it. As outlined in Table 6.1, all of the images in this subcorpus contain three or more classifying and identifying attributes that indicate this theme. Though all images exemplify this theme, the Ship Procession fresco and the signet rings of this subcorpus will be frequently utilized as the basis for comparison for several features. It is for the simple reason that their media, being fresco or soft metal, allow for greater detail within the composition. This is a known iconographic principle, namely that complex images provide more opportunity for comparison, and does not indicate a preference of images (Knight 2013:87).

<b>Distribution of Motifs in this Subcorpus</b>										
	<i>akrostolia</i>	<i>ikria</i>	stern device or awning	added hull decorations	paddling	ritual gesture	tree	female figure in boat	fantastical hull	animals (landscape or decoration)
Mochlos Ship cup	X	X					X			X
Mochlos ring		X				X	X	X	X	
Makrygialos seal	X	X		X		X	X	X		
Candia ring	X			X	X	X	X	X		X
Tiryns ring			X	X	X	X				X
Stathatos seal	X	X	X		X			X		
Ring of Minos		X			X	X	X	X	X	
Ship Procession fresco	X	X	X	X	X	X				X
Anemosphilia seal	X	X			X			X	X	
Ayia Triada sealing					X			X	X	
Tsivanopoulos seal	X	X				X				X
Khania sealing	X				X			X		

TABLE 6.1. An overview of the motifs depicted in each image.

### *Nonsalient Features*

This first section deals with the additional nonsalient iconographical features in this study. These nonsalient features fit within the same style of Aegean Bronze Age iconography, but do not necessarily aid in the identification of this theme. The two categories under consideration are landscape motifs, and floating objects.

### Landscape

These landscape motifs do not expressly relate to ritual or nonritual iconography, and are prevalent in linear and glyptic imagery, providing an idea of how the Minoans perceived their natural world (Krzyszowska 2010:169). As with the other motifs, media dictates the level of detail afforded to the image. Several of the images contain background or landscape elements that indicate the depiction of a similar event or narrative. The use of hierarchical and cavalier

perspective on such minute scale using varying depths of incisions further highlight the similarities. The Tiryns ring, for example, contains several groupings of straight lines with globules along the bottom. These groupings look very similar to outlines of the houses in the two towns of the Ship Procession fresco, suggesting that the two images may depict a similar type of event or setting. Likewise, the use of motifs suggesting the sea help to set the narrative or locational context. Frescoes generally employ color schemes to depict water, but they may also include some of the patterns and marine motifs utilized by glyptic imagery to provide a marine context. These nonsalient motifs include sea creatures, coastal vegetation and rocks, zigzag lines, and a net pattern as emblematic of the water (Morgan 1988:35; Shank 2016:85-87). As argued in the animal motifs section, however, the dolphins in this study are a salient motif integral in classifying the theme of this subcorpus. They were purposefully included as emphasis to the narrative content of the image, especially on the linear fresco examples when the typical colorwork could have been sufficient to provide context.

### Floating Objects

The Mochlos ring is unique in this subcorpus in that it contains unidentifiable motifs that are nonsalient features. Though the floating objects in the sky are most likely labels, due to the current understanding of the floating objects in Minoan iconography it is difficult to definitely describe them as salient features. It is possible the objects help the emic viewer identify the scene or the subjects within the composition, or possibly identify the owner or creator of the ring itself. Many of the floating objects, however, are depicted on signet rings with compositions that are considered ritual in nature, such as the Archanes ring of Figure 6.1. Kyriakidis (2005:149) goes

one step further and posits that the figures are actually constellations marking the precise time of year these rituals occurred.



FIGURE 6.1. Gold ring from Archanes, LM IIIA1. Example of gesture with one arm bent and one arm straight, shaking tree growing from sacred enclosure, and floating objects (Kyriakidis 2005b:138).

The rayed object on the Mochlos ring, which is the vertical line with four crossing horizontal lines above the female figure, is also depicted in the sky of the Archanes ring (Figure 6.1) with several other floating motifs, including a butterfly. Not only are the gestures of the central female figures identical in these two rings, but the fig trees growing from the shrines in the boat and on the ground are also very similar. If the rayed object is a motif identifying the subject or scene, these two rings may be representing a similar event or figure connected with a specific ritual, namely the tree-shaking ritual.

The other floating object in the Mochlos ring, the double baetyl, is iconographically similar to other baetyls on land. Those with sprouts growing from the central crevasse, which are especially similar, are depicted in scenes associated with the tree-shaking rituals. Two clear examples are Figures 6.2 and 6.3. The rayed object and floating baetyl with sprouts of the Mochlos ring therefore appear related to the tree-shaking theme, leading to the possibility that



the ring depicts a different part of the same narrative (Sourvinou-Inwood 1973:157; Goodison 1989:99; Marinatos 1993:164).



FIGURE 6.2. Shield ring sealing of unknown provenance, LM I. Example of gesture with one arm bent and one arm straight, tree growing out of sacred enclosure, and double baetyl with sprouts. CMS II-6, 002 (Müller and Pini 1999:no. 002).



FIGURE 6.3. Gold shield ring from Khania, LM I. Example of female flounced skirt, and double baetyl with sprouts. CMS VI, 278 (Hughes-Brock and Boardman 2009:no. 278).

### *Classifying Attributes*

This next section concerns the classifying attributes within this subcorpus. These are the primarily salient features, or the referent of a recognizable element, that group an image into a common category to which the subject belongs (Knight 2013:98). The classifying attributes of this theme relating to ritual ship imagery are an *akrostolion*, stern device, *ikrion*, nonsalient ship

decorations, poling or paddling, ritual gestures, and clothing or personal adornment. See Tables 6.1 and 6.2 for a distribution of these motifs.

Ritual Ship Classifying Attributes						
	<i>akrostolia</i>	<i>ikria</i>	stern device or awning	added hull decorations	paddling	ritual gesture
Mochlos Ship cup	X	X				
Mochlos ring		X				X
Makrygialos seal	X	X		X		X
Candia ring	X			X	X	X
Tiryns ring			X	X	X	X
Stathatos seal	X	X	X		X	
Ring of Minos		X			X	X
Ship Procession fresco	X	X	X	X	X	X
Anemosphilia seal	X	X			X	
Ayia Triada sealing					X	
Tsivanopoulos seal	X	X				X
Khania sealing	X				X	

TABLE 6.2. An overview of the images in which the classifying attributes are depicted.

#### Akrostolia, Stern Device, and Ikria

As illustrated in the Literature Review chapter, the frequent pairing of *akrostolia* and *ikria*, especially in conjunction with non-quotidian motifs like poling, suggests an allusion to an iconographic theme elevated from everyday activities (Wachsmann 1998:99; Wedde 2000:186, 199; Davaras 2004:4-5, 13-14; Tartaron 2013:54-55). Some scholars relate the *akrostolia* to other various Minoan ritual motifs, from a *fleur-de-lys* to a bird, likening it to the Minoan sacred lily motif or the epiphanic image of a bird as a deity (Davaras 2004:3). In the preserved bowsprits of the Ship Procession Fresco, however, a bird adornment is affixed to the *akrostolion*. The bird is iconographically distinctive from the *akrostolion*, leading to the conclusion that at

least by LM I that it was not meant to represent a bird (Figure 6.4). Most likely it is part of the iconographic abstraction process of a motif that modern scholars cannot yet positively identify due to lack of examples. For instance, Morgan (1988:34-38) illustrates that the abstraction process of water in Aegean iconography was only more completely understood after frescoes at Akrotiri were added to the corpus of water depictions. See Tables 6.1 and 6.2 for a listing of images in this study that depict an *akrostolion*.



FIGURE 6.4. Detail of the extended bow of Ship 613 and stern figure of Ship 614 in the Ship Procession Fresco, West House, Akrotiri, LM IA. Illustrating examples of the *akrostolion*, bird and sun/star attachments, and griffin stern figure (Courtesy of ARTSTOR: [https://library.artstor.org/asset/SCALA\\_ARCHIVES\\_10310474572](https://library.artstor.org/asset/SCALA_ARCHIVES_10310474572)).

Likewise, the stern device that is depicted on the large ships of the Ship Procession fresco and possibly the Stathatos seal has been greatly contested. Several scholars have made arguments that the devices on the Ship Procession fresco developed from Early Cycladic boat models and linear depictions. But in the fresco, it is clearly an additional element affixed to the stern with no

discernable function (Wachsmann 1998:106). The possible identification of the same motif in the Stathatos seal only confirms that this motif is one that identifies the vessel as a ritual craft. The presence of an awning likely also confirms the heightened status of a ritual craft, but there are few examples. The Tiryns ring and the larger ships of the Ship Procession fresco clearly depict a ship with its sail lowered to form an awning with stanchions. The occasion depicted in both images, therefore, were similarly ritual in nature. See Tables 6.1 and 6.2 for a listing of images in this study that depict a stern device or an awning.

The *akrostolion*, stern device, and awning do not have perceived parallels in Minoan iconography outside of maritime scenes due to their unique maritime character. *Ikria*, on the other hand, is a motif that not only has significance divorced from maritime context, but it also has parallels to shrine structures or sacred enclosures in Minoan glyptic iconography. At the very least, it could designate a place of honor at the aft of the ship as a ship cabin, as has been suggested for the ships in the Ship Procession Fresco in Room 5 of the West House at Akrotiri (Morgan 1988:140). The painted *ikria* (Figure 6.5) in Room 4, however, suggest ritual associations because of the frescoes and artifacts found in the same context, such as the priestess fresco in the door jamb between Room 4 and 5, and the dolphin painted stucco offering table (Figure 6.6) in Room 5 (Marinatos 1984:37-38; Morgan 1988:143-144). The LH III frescoes in a small room north of the megaron in Mycenae, which Maria Shaw (1980) has identified as four *ikria*, illustrate the use of the motif not only isolated from a maritime context but also continuing into the Mycenaean dominance of the Aegean.

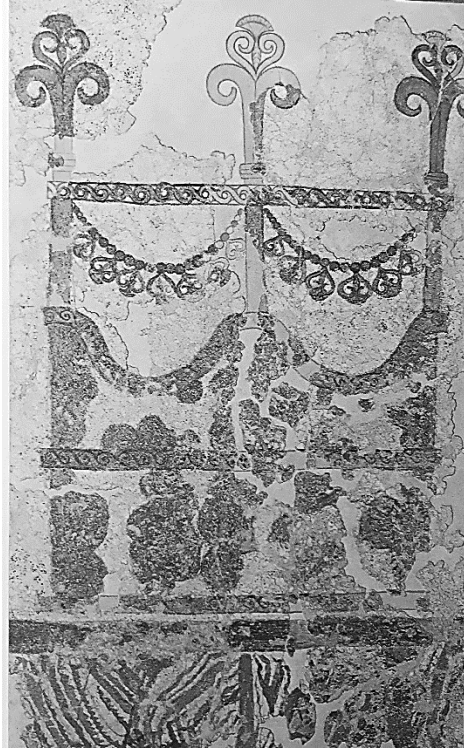


FIGURE 6.5. *Ikrion* fresco from Room 4, West House, Akrotiri, LM IA. Example of crocus festoons, lily finials, sea spiral decorations (Marinatos 1984:47).



FIGURE 6.6. An offering table discovered in Room 5, West House, Akrotiri, LM IA. Example of dolphins and marine motifs (Marinatos 1984:37).

The square panels of an *ikrion* have also been compared to the shrines or sacred enclosures depicted on land in Aegean iconography (Marinatos 1984:181; Wedde 2000:186). Figure 4.7, for example, is a gold ring from Pylos depicting a hilltop enclosure with its basic construction comparable to the *ikria* on ships. The seaside shrines on the Ring of Minos or Ring

2 from the Griffin Warrior tomb at Pylos (Figure 4.14), also exhibit similarities. Several of these enclosures have trees growing from the top and are depicted in a courtyard seemingly set apart from other buildings, and often involve a human figure pulling at its branches (Figure 6.7). Excavations have confirmed that the iconography of distinct areas for ritual action is based in reality (Rutkowski 1986:100). The shrines which contain trees in terrestrial settings further link those shrines to the *ikria*, especially since the Mochlos ring depicts a stepped shrine with a tree in the same position of status as an *ikrion*. Furthermore, the *ikria* on ships appear to be temporary structures added for significance. This is especially true on the Ship Procession fresco with the medium and large ships depicting either a seat at the stern or an *ikrion*. It has been suggested that terrestrial shrines were also sometimes flimsy structures that could be easily assembled and dismantled at will (Younger and Rehak 2008b:167).



FIGURE 6.7. Steatite lentoid seal, LM IIIA. Example of human figure pulling at the branches of a tree growing out of a shrine. CMS XII, 264 (Kenna 1972:no. 264).

Enclosures depicted on rocky shores, such as those depicted on the Ring of Minos, suggest that Bronze Age Aegeans may have maintained coastal shrines that were visible from or most easily accessible by sea. There are several examples in Bronze Age iconography as well as

later temples in the Classical period that attest to this possibility. The coastal sanctuary or pilgrimage site of Kavos on Keros, the ritual deposits of which date to as early as 2750-2300 B.C., make it possibly the earliest example (Renfrew et al. 2012). The later Classical Greek temple dedicated to Poseidon at Cape Sounion in Attica, completed around 440 B.C. but originally constructed during the Archaic period, was a frequent pilgrimage site for distant travelers (Kokkinou 2014:55-56). And the sanctuary of Aphrodite Paphia at Paphos on Cyprus erected in the 12th century B. C., which originally dedicated to an indigenous Cypriot goddess whose cult worship morphed into Aphrodite, was the most famous of her sea-side sanctuaries (Marcovich 1996:46; Budin 2014). While the Minoan examples of coastal shrines may or may not represent a shrine that was built literally within steps of the sea, the iconography suggests at least the view of a shrine from the sea as a landmark for passing ships (Tully 2016:6). Furthermore, the imagery of seaside shrines are symbolic of the liminality stressed by many Minoan sanctuaries and cult areas. Those taking advantage of the natural surroundings, such as peak sanctuaries, cave sanctuaries, or spring sanctuaries, as well as those of man-made construction, such as lustral basins, domestic sanctuaries, or sacred enclosures, all emphasize the boundaries between the sky, earth, and water. See Tables 6.1 and 6.2 for an overview of which images in this study depict *ikria*.

### Ship Decorations, Nonsalient

The nonsalient decorations and salient decoration motifs, including fantastical hull formations, also elevate the ships of this theme beyond a depiction of everyday use. Most of the definitive decorative elements in this subcorpus are in the Ship Procession Fresco, due to the iconographic principle of complexity, though some are also identifiable on other images. As

outlined in Table 3.2 of the Data Chapter, the large ships of the Ship Procession fresco have added stern devices, painted hull decorations, and bowsprit decorations of lions, griffins, dolphins, doves, sea spirals, stars/suns, and butterflies. Decorations hung from or affixed to the *ikria*, stanchions, or mast include waz lilies, crocuses, and butterflies. The salient ship decorations, which include motifs that arguably indicate a specific referent, will be discussed in a separate subsection. This section will examine the nonsalient ship decorations, which are motifs or patterns that cannot be assigned to a specific referent with extant evidence. These nonsalient motifs include sea spirals, marine rocks and vegetation, oblique line patterns, and zigzag patterns. All of these motifs relate to the iconographic abstractions of water depicted in Aegean glyptic and fresco images (Morgan 1988:35). This not only emphasizes the connection of the ships to the sea, but it also places the images firmly within Aegean iconography of the Bronze Age.

Sea spirals are primarily nonsalient motifs in Minoan iconography. They were initially a motif indicating a seascape context, such as the spirals on Cycladic Frying Pans. By MM III, the seascape motif had transformed into zig-zag lines below hulls, a net or scale pattern, leaving the sea spirals as a decorative, nonsalient border motif in iconography, textiles, and on ritual architecture, as depicted on the Ayia Triada sarcophagus (LM II) or the Zakros rhyton (MM IIIB-LM I) in Figure 6.8 (Morgan 1988:35; Marinatos 1993:119). Due to the iconographic association with ritual motifs, several scholars have suggested that the spiral motif was not just a nonsalient component of an iconographic theme. It is possible the motif held more symbolic significance to the Bronze Age Aegeans, possibly relating to a divinity or the elite (Rutkowski 1986:101; Blakolmer 2017:93; Günkel-Maschek 2017:126).



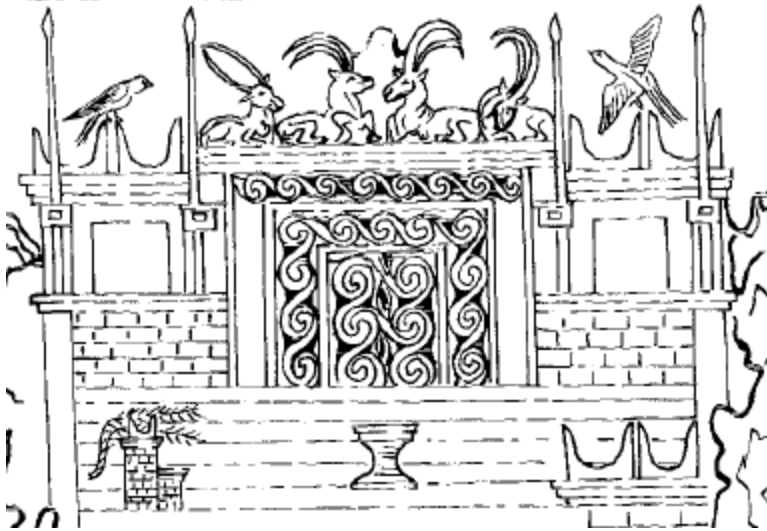


FIGURE 6.8. Detail of a chlorite rhyton from Kato Zakros, MM IIIB-LM I. Example of sea spirals as decorative motif (Marinatos 1993:120).

The marine rock and vegetation, also referred to as bifid stalks, motif is also a very common motif in Minoan iconography, especially LM IB Marine Style pottery. Several frescoes more naturalistically depict the rocky seashore while the motif is used in many different, yet recognizable forms, in painted ceramics (Morgan 1988:35-36). As an example of the diversity of this motif, it is used in the West House as part of the natural landscape of the miniature frescoes in Room 5, as abstracted decoration on ship 613 in the Ship Procession Fresco (Figure 6.9), and on the offering table with both realistic and abstracted marine motifs from Room 4.



FIGURE 6.9. Detail of the hull of Ship 613 in the Ship Procession Fresco, West House, Akrotiri. Example of the rock and marine vegetation motif decorations below the yellow sheer (Courtesy of ARTSTOR: [https://library.artstor.org/asset/SCALA\\_ARCHIVES\\_10310474572](https://library.artstor.org/asset/SCALA_ARCHIVES_10310474572)).

Abstract patterned decorations, specifically parallel oblique lines and zigzags, are also depicted on several ships in this subcorpus. The absence of these patterns on fishing vessels depicted in the Ship Procession fresco, for example, suggests that their addition signified heightened ritual associations. Oblique lines are not depicted on the Ship Procession fresco, but they are clearly incised as decoration on the ships on the Makrygialos seal and the Tiryns ring. The oblique lines decorations are consistent with other ship images, such as the ship model on the Ayia Triada sarcophagus (Figure 6.10), or a steatite seal from Central Crete dated to LM IIIB (Figure 4.9). These oblique lines are likely related to the vertical zigzag hull decorations on the ship fresco from Pylos, as seen in Figure 6.11, or the horizontal zigzag on the ship fresco from Kea, as seen in Figure 6.12. The ship on the Candia ring has faint hull decorations forming a long, horizontal zigzag, which is similar to the hull decorations on the Kea ship. The

iconographical links between these images indicate that they depict similar ritually heightened ideas or specific events (Wachsmann 1998:87; Brecolaki et al. 2015:284).

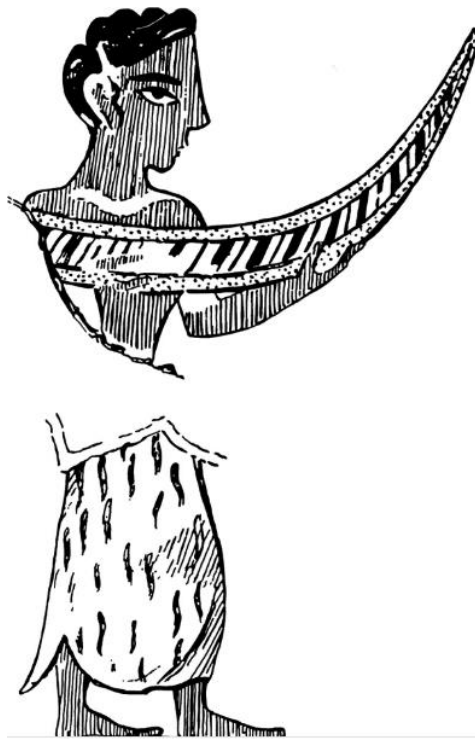


FIGURE 6.10. Detail of the model ship from side of Ayia Triada sarcophagus, LM IIIA. Example of oblique line hull decoration (Wachsmann 1998:102).



FIGURE 6.11. Detail of ship fresco from Room 64 of the Palace of Nestor at Pylos, LH IIIB. Example of vertical zigzag hull decoration (Brecolaki et al. 2015:267).

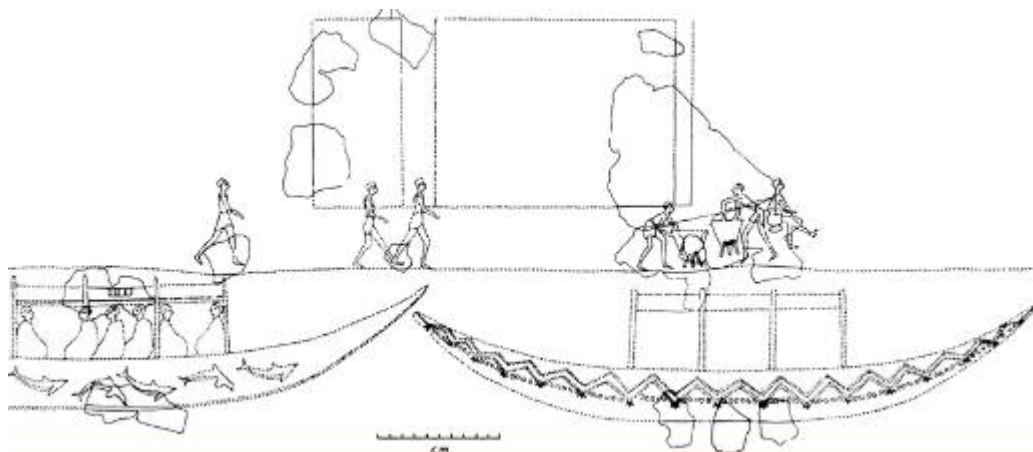


FIGURE 6.12. Reconstruction of ship fresco from Agia Irini on Kea, LM IB/LH II. Example of horizontal zigzag hull decoration and dolphin hull decoration (Wachsmann 1998:87).

### Paddling

The act of paddling alone is not sufficient to consider the image to be ritual in nature. Short-range, small boats that were paddled would have been ubiquitous in the Bronze Age Aegean for fishing or coastal transportation and resource distribution. The combination of the propulsion method in conjunction with other motifs, however, can suggest ritual action, especially when utilized as a non-functional propulsion method. In the Ship Procession fresco, for example, the large ships are clearly meant to be sailed or rowed, but the majority of them are awkwardly paddled. Likewise, the oblique lines extending beyond the hull of the Stathatos seal are likely oars, suggesting that the vessel should be rowed and therefore the female figures who are paddling the vessel are using an alternative propulsion method (Wedde 2000:186). The ritually significant motifs added to the images of a person paddling a vessel, such as an *ikrion* or a zoomorphic hull, lead to the heightened ritual significance of the action. The depiction of the paddling motif, therefore, may itself be emblematic and not directly reference an activity literally taking place. Consequently, even the Khania sealing with unclear motifs can be included in this subcorpus (Wedde 2000:184). The depiction of a woman paddling a vessel is especially

indicative of the heightened ritual significance of an image. If the iconography of fishermen and sailors as seen in the West House frescoes, as well as across the Mediterranean in the Minoans depicted on the Egyptian tomb of Rech-mi-re (ca. 1400 B.C.), is reflective of the norm, most Minoan mariners were men. The simple motif of a female figure in boat, therefore, elevates the scene to signify a special circumstance.

### Ritual Gestures and Clothing

Of the images in this subcorpus, the Mochlos ring, Makrygialos seal, Candia ring, Tiryns ring, Ring of Minos, Ship Procession fresco, and Tsivanopoulos seal all contain figures making gestures that are directly unrelated to the propulsion of a vessel. All of these non-maritime gestures, however, are depicted in iconography relating to rituals or divinities. The first is the gesture of adoration or supplication, which is often associated with the appearance of a deity or an object symbolic of the divine in Aegean iconography as well as votive figurines deposited at peak sanctuaries. It is depicted with one arm across the chest and the other arm raised so that a clenched fist touches the forehead, as seen in Figures 4.4 and 6.13-6.14 (Morgan 1988:117; Wedde 2004:172-174). The gesture is unmistakably performed by the woman on the Makrygialos seal, and by a sailor on ship 614 of the Ship Procession fresco. The Candia ring and Tiryns ring may also represent a variation of the gesture because the two women who grasp the arms of the men next to them appear to have their other arm across their waist or chest.



FIGURE 6.13. Bronze figurine in the example of the adoration gesture, unknown provenance (Wachsmann 1998:122).



FIGURE 6.14. Gold ring from Knossos, LM I. Example of adoration gesture, commanding gesture, and tree growing out of sacred enclosure. CMS VI, 281 (Evans 1921:160).

The second gesture is that which has been associated with both worshippers and divinities (Morgan 1988:118; Marinatos 1993:185; Wedde 2000:181, n. 49; Davaras 2004:4).

The figure is with one arm straight and one arm bent with the hand raised vertically and

sometimes appearing to touch the same shoulder. This gesture is depicted on the Mochlos ring, the Ring of Minos, and by the two men on shore in the Tiryns ring. The middle figure of the Archanes ring (Figure 6.1), the female figure on a shield ring impression (Figure 6.2), and the two figures on the gold ring from Pylos (Figure 4.7) provide good examples of the gesture outside this subcorpus. Morgan (1988:118) also points out that some of the women in the Arrival Town also mimic the gesture (Figure 6.15), suggesting it could be a wave or sign of reverence, depending on the position of the hand. These two interpretations of the figure's gesture has also been applied to the Mochlos ring (Cain 2001:41).



FIGURE 6.15. Detail of two women of the Arrival Town of Ship Procession fresco in Room 5, West House, Akrotiri, LM IA. Example of raised arm in possible reverence or adoration gesture (Courtesy of ARTSTOR: [https://library.artstor.org/asset/SCALA\\_ARCHIVES\\_10310474574](https://library.artstor.org/asset/SCALA_ARCHIVES_10310474574)).

A third gesture is performed by both epiphanic figures and persons in an apparent leadership position, often called the gesture of command (Marinatos 1993:217; Krzyszkowska

2005:352). The figure, which holds one arm bent behind its back and extends the other arm straight, is depicted by the epiphanic figures in the Ring of Minos and the Candia ring, as well as the two large male figures in the Candia ring and Tsivanopoulos seal. This gesture is comparable to the epiphanic figure in the shield ring from Knossos (Figure 6.14), an impression of a ring from Knossos (Figure 6.16), and the epiphanic figure in the ivory pyxis from Mochlos (Figure 4.8).



FIGURE 6.16. Shield ring sealing from Knossos, LM I. Example of commanding gesture, lions, and sacred shrines. CMS II-8, 256 (Gill et al. 2002:no. 256).

A variant of this gesture featuring one arm straight behind with the other extended straight forward appears on the Poros ring (Figure 6.17) discovered in an LM IB cemetery, a gold shield ring from Thrace (Figure 6.18), and a sealstone from Naxos (Figure 6.19). This gesture is most often associated with so-called presentation scenes, in which a figure, usually male, extends one arm towards a female or epiphanic figure as if to present themselves or others who are usually standing behind the male. The theme is also present in Mesopotamian iconography, wherein the owner of the seal is usually presented to a chief deity by an intermediary, usually a lesser deity or the owner's personal deity (Soles 2016:250-251). The chief deity in Mesopotamian iconography, for example, is frequently Inanna-Ishtar due to her



abilities to intercede to the pantheon at large on behalf of her devotees (De Shong Meador 2000:156).



FIGURE 6.17. Gold ring from Poros, LM IB. Example of commanding gesture, shaking tree from sacred enclosure, and birds with goddess (Kyriakidis 2005b:139).

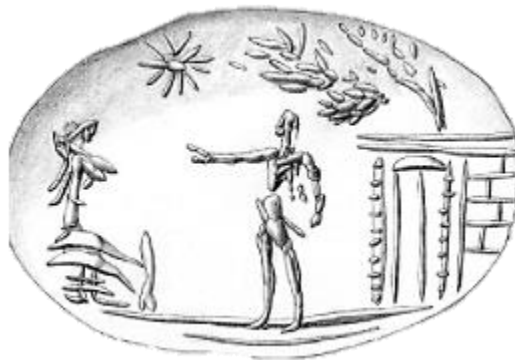


FIGURE 6.18. Gold ring from Thrace, LM I. Example of commanding gesture, possible adoration gesture, tree growing out of sacred enclosure, and sun/star motif. CMS XI, 028 (Pini 1988:no. 028).



FIGURE 6.19. Agate sealstone from Naxos, LH IIIC. Example of plumed headdress, stylized palm tree, ritual objects, and commanding gesture. CMS V, 608 (Pini 1975:no. 608).

The next gesture is only present on the Ring of Minos in this subcorpus, but has parallels in many glyptic images. The grasping, shaking, or bending of trees has been associated with an ecstatic ritual that has been hypothesized to provoke the presence of a deity (Marinatos 1993:184-187; Younger and Rehak 2008b:167). Examples of this gesture are seen in Figures 4.12, 6.1, 6.7, and 6.17. The final gesture considered in this study is only depicted on the Tiryns ring by the female on shore, who looks up at one bent arm raised with the other arm straight behind her. This gesture is similar to those that have been interpreted as a dance or a procession, such as the two females in Figure 6.20 (Cain 2001:44; Wedde 2004:157-163). Though the gestures not directly related to manning the ship are variable within this subcorpus, they are all connected in some way to perceived Minoan deities, either by evoking or acknowledging a deity or as representative of the deity itself. Consequently, these gestures are classifying attributes that contribute to the heightened ritual significance of these images.



FIGURE 6.20. Clay sealing from Ayia Triada, LM IB. Example of dancing gesture, and conical headdresses. CMS II-6, 013 (Müller and Pini 1999:no. 013).

Gestures can be overtly indicative of a ritual due to the etic perceptions of these actions, but clothing and other personal adornments can also refer to performance rituals. More elaborate and complex scenes, such as the Ship Procession fresco, provide evidence for a variety of different styles of dress and hair that could be dependent on several factors, such as occupation, societal status, or special occasion. All of the figures identified as male in this subcorpus wear a

variation of cloaks, loin-cloths, a belt, or nothing, all of which have a plethora of Aegean Bronze Age linear, glyptic, and model examples for comparison (Morgan 1988:93-98; Younger and Rehak 2008a:161; Murray 2016:45). See Figures 4.7, 4.8, 4.10, 4.12, 6.1, 6.3, 6.9, 6.10, and 6.14-6.19 for good examples both inside and outside of this study.

Women are more often depicted in ritual or special occasions in Late Bronze Age Aegean iconography, and therefore the clothing seen in frescoes, signet rings, sealstones, and figurines can be considered to indicate an elevated style of dress (Morgan 1988:98; Younger and Rehak 2008a:161). Most of the figures identified as women in this subcorpus are dressed very similarly to the flounced, layered, and fringed skirts or pants worn by other Minoan women in proposed ritual scenes, and so it is possible these women also wear ritual clothing (Murray 2016:44). Figures 4.4, 4.8, 4.10, 4.12, 4.14, 6.1-6.3, 6.7, 6.13-6.18, 6.20-6.22, 6.25-6.29, and 6.31 illustrate the assortment of women's garments similar to those in this subcorpus. Two images from this study, however, are singular in their depiction of their clothing and headdresses.



FIGURE 6.21. Clay sealing of unknown provenance, LM I. Example of female-worn flounced pants and separate overskirt skirt. CMS II-6, 026 (Müller and Pini 1999:no. 026).



FIGURE 6.22. Steatite seal from Knossos, MM III-LM I. Example of female-worn flounced pants, separate overskirt skirt, and double-axe cult object. CMS II-3, 008 (Platon and Pini 1984:no. 008).

As mentioned in the Literature Review, the paddling figure on the Ayia Triada sealing has been mistakenly identified as an abstract hybrid figure. The confusion has likely arisen due to the figure's conical headdress and amorphic head. A similar conical headdress is depicted in the gold ring from Pylos (Figure 4.14) as well as an LM IB sealing from Ayia Triada (Figure 6.20), suggesting that this is a form of a headdress worn in association with processions or shrines, thereby highlighting its ritual significance.

The second image with personal adornment unique in this subcorpus is depicted on the Stathatos seal. Wachsmann (1998:111) also emphasizes the importance of the unique dress, but compares it to a depiction on a stone bowl fragment from Sacke Gözü in the Near East created during the Halafa culture (ca. 6100-5100 B.C.), which is about 4500-3500 years prior to the deposition of the Stathatos seal. A stylized version of their adornment depicted on local, contemporary examples may better serve to explain the uniqueness. The shape of the headdresses, for example, are more similar to the plumed crowns worn by some of the women on

the LM II Ayia Triada sarcophagus as seen in Figure 6.23, the two women in the LB I-II gold ring as seen in Figure 6.24, the Prince of the Lilies (LM IA) fresco at Knossos, the male figure on a sealstone from Naxos (LH IIIC) in Figure 6.19, or the seated woman in the large gold ring from Tiryns in Figure 3.7. This type of headdress seems to be only worn by deities, men and women in positions of authority, and fantastical creatures like griffins or sphinxes, thereby emphasizing its ritual importance (Marinatos 2010:42).



FIGURE 6.23. Detail of short side of Ayia Triada sarcophagus, LM III. Example of plumed headdress, griffin, bird, and rosettes (Courtesy of ARTSTOR: [https://library.artstor.org/asset/AWSS35953\\_35953\\_31682649](https://library.artstor.org/asset/AWSS35953_35953_31682649)).



FIGURE 6.24. Gold ring from Anthia, LB I-II. Example of plumed headdress, griffins, and stylized trees. CMS VS1B, 137 (Pini 1993:no. 137).

The skirts of the figures depicted on the Stathatos seal, however, are unlike any other depicted in Aegean iconography (Wedde 2000:106, n. 102). Without any direct parallels, it is most likely that the skirts are highly stylized due to the limitations of the medium and choices made by the creator. Figure 6.25 is an example of a skirt motif depicted on a stone medium which has significantly impacted the precision of the tools.



FIGURE 6.25. Steatite seal from central Crete, LM I-LM II. Example of extreme stylization of motifs due to limitations of the motif. CMS II-4, 055 (Platon and Pini 1985:no. 055).

Furthermore, the Stathatos seal was likely manufactured in the talismanic style, in which a tubular drill is characteristically utilized (Sakellarakis 1982:no. 167; Wedde 2000:135).

Talismanic style sealstone motifs are characteristically highly stylized, further supporting the likelihood that the Stathatos skirts were merely stylized. In two examples of skirts depicted in the talismanic style (Figures 6.26 and 6.27), straight lines extend beyond the body of the skirt, indicating that the same result could have occurred in the Stathatos seal. The emphasis on vertical aspects of the skirts in the Stathatos seal is similar to the Makrygialos seal and opposite of the horizontal tiers depicted in other Minoan skirts. This is likely a difference in pattern, material, or shape that cannot be easily rendered by incising sealstones. Examples of an emphasis on the vertical pattern can be seen in Figures 6.2, 6.22, and 6.25-6.28. These examples of personal adornment further emphasize the ritual classifying attributes between the images of this study to the corpus of Aegean Bronze Age ritual iconography.



FIGURE 6.26. Carnelian amygdaloid sealstone possibly from Crete, LM I. Example of talismanic style sealstone with stylized skirt made from imprecise tubular drill cuts. CMS III, 339 (Müller and Pini 2007:no. 339).



FIGURE 6.27. Carnelian triangular prism sealstone possibly from Crete, LM I. Example of talismanic style sealstone with stylized skirt made from imprecise tubular drill cuts, and possible crown-style headdress similar to Stathatos seal. The two other sides of the sealstone depict a ship, and a dolphin. CMS XI, 020a (Pini 1988:no. 020a).

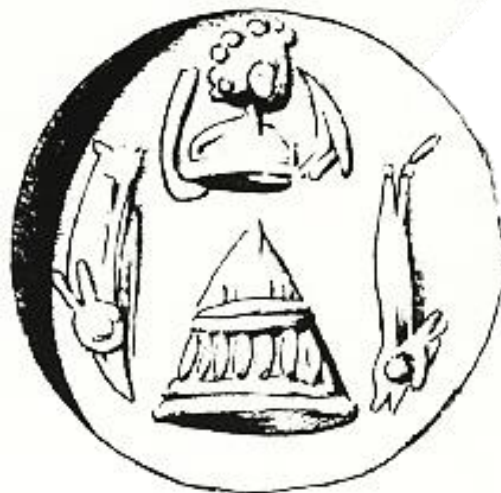


FIGURE 6.28. Steatite seal of unknown provenance, LM I. Example of vertical emphasis of skirt, and dolphins. CMS II-3, 327 (Platon and Pini 1984:no. 327).

### *Identifying Attributes*

This final section will give an overview of the motifs in this subcorpus that will be considered identifying attributes. These are the salient features that directly identify the theme of



the subcorpus. They can be depicted in conjunction with each other or alone, in keeping with the principle of cumulative sufficiency (Knight 2013:98). The identifying attributes of this theme relating to ritual ship imagery are a tree, added individual motifs, fantastical hulls, and a female figure. See Tables 6.3 and 6.4 for a distribution of these motifs.

<b>Iconographic Theme Identifying Attributes</b>				
	tree	added decorations	fantastical hull	female figure in boat
Mochlos Ship cup	X	X		
Mochlos ring	X		X	X
Makrygialos seal	X			X
Candia ring	X	X		X
Tiryns ring		X		
Stathatos seal				X
Ring of Minos	X		X	X
Ship Procession fresco		X		
Anemosphilia seal			X	X
Ayia Triada sealing			X	X
Tsivanopoulos seal		X		
Khania sealing				X

TABLE 6.3. An overview of the images in which the identifying attributes are depicted.

Salient Motifs								
	hippocampi	griffin	lion	dove	butterfly	dolphin	sun/star	lily/crocus
Mochlos Ship cup						X		
Mochlos ring	X							
Makrygialos seal								
Candia ring						X		
Tiryns ring						X		
Stathatos seal								
Ring of Minos	X							
Ship Procession fresco		X	X	X	X	X	X	X
Anemosphilia seal		X						
Ayia Triada sealing		X						
Tsivanopoulos seal				X				
Khania sealing								

TABLE 6.4. An overview of the images in which salient motifs are depicted, excluding the images in which the specific motifs are not present.

### Trees

Variations of the palm tree have existed in the Aegean as early as the Pleistocene, with the hearty Cretan palm growing naturally along the coast of Crete, Santorini, among other coastal regions of the Aegean (Rackham and Moody 1996:66-68). They were depicted as early as MM IIB on pottery from Phaistos, and featured in ritual iconography beginning in LM I. Trees have been considered to be associated with Minoan rituals since nearly the beginning of Minoan archaeology. Both fig trees, usually depicted growing within or from a shrine, and palm trees, usually separate from the shrine, frequently occur in ritual and religious contexts as a marker of a sacred space, though the interpretation varies (Sourvinou-Inwood 1989:98; Marinatos 1993:161). Figures 4.4, 4.7, 4.8, 4.12, 4.14, 6.1, 6.2, 6.7, 6.8, 6.14, and 6.17-6.19 depict a tree in or next to a shrine. Sometimes only a stylized tree or frond is depicted next to or within other objects imbued

with ritual significance, such as the Ayia Triada sarcophagus or a sealstone from the Idaean cave (Figure 6.29).



FIGURE 6.29. Rock crystal lentoid seal from Idaean cave, LB IIIA1. Example of palm fronds depicted in conjunction with other cult objects. CMS II-3, 007 (Platon and Pini 1984:no. 007).

Evans (1901:106, 178) was the first to link the “tree pulling” ecstatic movements depicted on gold rings to a ritual associated with invoking communication with deities. The appearance of deities seeming to descend from the heavens in the iconographic epiphany motifs as a result of these rituals only strengthened this hypothesis (Warren 1981:155–166; Marinatos 1993:175). Rutkowski (1984:101) considers the iconography of trees to be shrines as protective enclosures for the sacred trees, making the tree and structure both permanent fixtures in ritual architecture. It is likely that the tree, therefore, could have been an aniconic form of a deity, and the rituals surrounding it would have been related to the fertility of the earth as well as humans (Rutkowski 1984:107). This renewal of nature theme is echoed by Davaras (2004:13) who considers the transportation of a sacred tree as a celebration of the renewal of nature. Marinatos (1993:183), on the other hand, considers the tree to be a temporary aspect of the sacred structures, only being placed atop shrines during certain ritual events.

Despite this wide swath of interpretations, it is clear that trees were significant to Minoan rituals and religion. Their depictions in and around the sacred structures of the stepped shrines and *ikria* in this subcorpus link these images together the same iconographic theme. It is likely that, by extension through the association with other ritual motifs as classifying attributes, they also relate to the overall theme of other ritual images with trees in Minoan iconography.

### Added Decorative Motifs

This section concerns the classifying attributes of the motifs added as decoration to the ships in this subcorpus. The determining factor of whether a decorative motifs was considered an identifying or classifying attribute relates to the involvement of that motif as integral to the action of other compositions in Minoan iconography. Sea spirals, for example, are employed as a decorative pattern or a landscape pattern signifying the sea in iconography; though it relates to ritual images, it is not a salient feature of any composition. The following motifs are categorized as classifying salient motifs in regards to this subcorpus: lion, griffin, dove, butterfly, dolphin, sun/star, lily/crocus, and fantastical hull shapes. Refer to Table 3.2 from the Data Chapter for a location of all the classifying attribute motifs on the ships of the Ship Procession fresco. As Table 6.4 illustrates, all but the fantastical hull shapes are added decorations in the Ship Procession fresco, while doves and dolphins are depicted as separately within two other images of this subcorpus.

Lions and griffins are most often associated with figures attributed with heightened ritual and religious significance in Aegean iconography, namely priests, priestesses, or deities. Many lions and griffins are in an antithetical position with a goddess in between, and some are even

ridden by a deity or pulling a chariot (Davaras 1976:10-11, 128; Morgan 1988:52-53; Marinatos 1993:154,164). See Figures 6.16, 6.23, 6.24, 6.30, and 6.31 for comparative examples.



FIGURE 6.30. Gray sardonyx lentoid sealstone of unknown provenience, LH II. The reverse side of the Tsivanopoulos seal. Example of griffin motif. CMS V, 184a (Pini 1975:no.184a).



FIGURE 6.31. Detail of fresco on the north wall, upper floor of Room 3 in Xeste 3 at Akrotiri, LM IA. Example of griffin motif (Marinatos 1993:151).

Lions and griffins are symbolic of power, hunting, and protection throughout the Bronze Age Mediterranean, and both are frequently depicted with palm trees (Morgan 1988:49, 52). Both are also often depicted as attacking deer and caprids. The reverse of the Tsivanopoulos seal (Figure 6.30) depicts a quadruped attacking a stag, though it is difficult to determine which quadruped. Based on comparable renderings of griffins, as well as scenes of hunting griffins and parallel motifs in the Nilotic scene on the East wall in the West House at Akrotiri, it is possible

the unidentified quadruped on the seal's reverse is a griffin. If that is the case, then the context of the iconography of the entire seal, and not just one side, connect it to the West House frescoes.

Dolphins are often depicted with priest or goddess figures in glyptic imagery, indicating religious symbolism, as seen in Figure 6.28 (Marinatos 1993:131-132, 156). Their depiction on the ritual offering table discovered in Room 5 also hints at their symbolic associations (Figure 6.6). They are also included as a part of the landscape, helping to set the scene in the sea, as with the Candia ring or surrounding the ships in the Ship Procession Fresco (Morgan 1988:62). Given the multiple choices a Minoan craftsman would have for indicating a seascape in addition to the connection of dolphins to religious symbolism, the inclusion of dolphins elevates the scene. In these images, dolphins have become an integral part of the narrative, instead of just a symbolic decorative motif. The regular and standard depiction of the Common Dolphin in Late Bronze Age Aegean iconography helps to identify the motif in both linear and glyptic images. It is likely, therefore, that the unidentified objects around the hulls of the Mochlos Ship cup and Tiryns ring are dolphins, further emphasizing the dolphin motif as a classifying attribute in this theme.

Doves and other birds are also sometimes depicted with a goddess, but are more often depicted atop religiously significant structures or emblems, or shown descending from the sky as either the epiphany or messenger of the deity (Morgan 1988:66; Marinatos 1993:155-156). Figures 4.12 and 6.17 are examples of images depicting doves in a ritual setting. Both doves and dolphins are known for aiding sailors in navigation, historically and in legend (Morgan 1988:62,67; Wachsmann 1998:300). The dove in the Tsivanopoulos seal certainly appears to be giving the two sailors a message or guiding them in the direction of the shore.

Butterflies are also a common motif in Minoan iconography. They are depicted individually on sealstones, as well as linked to ritually significant Minoan iconography, including tree-shaking epiphany scenes in signet rings and engraved on double axes (Wachsmann 1998:112-113). Figure 6.1 depicts a butterfly below the rayed motif, and the floating objects above the double baetyl in Figure 6.3 look more like a pair of butterflies in profile than disembodied ears or eyes, as has been suggested by Kyriakidis (2005:142). The butterflies on the extended bowsprits of the Ship Procession fresco are comparable to those in Figure 6.3, further solidifying their interpretation as butterflies.

Both lilies and crocuses feature in pendants on necklaces or headdresses, as emblems in linear and glyptic iconography, as well as in glyptic images and frescoes to set the landscape contexts (Morgan 1988:166; Marinatos 1993:149-151). Some of the more famous precious metal artifacts and frescoes from Thera, Knossos, and Ayia Triada all frequently depict lilies and crocuses (Morgan 1988:30). In jewelry, the crocus pendant is usually turned on its side, but when the crocus is depicted in a marine context, it is hanging as a vertical pendant with beads as in Figures 6.5 and 6.32 (Morgan 1988:30). Though the festoons of the Tiryns ring and the ship in Figure 4.9 are not rendered with the same level of detail, it is possible they are also crocus festoons. The sailing ship of the Ship Procession fresco depicts a row of crocuses painted along the sheer above the doves, suggesting their iconographic connection. Marinatos (1993:195) has argued that, especially when depicted together, lilies and crocuses represent the cycle of the seasons and fertility, as they are spring and fall flowers, respectively. As a result, butterflies, lilies, and crocuses have been linked to a Minoan vegetation cult (Marinatos 1993:141; Wachsmann 1998:112).

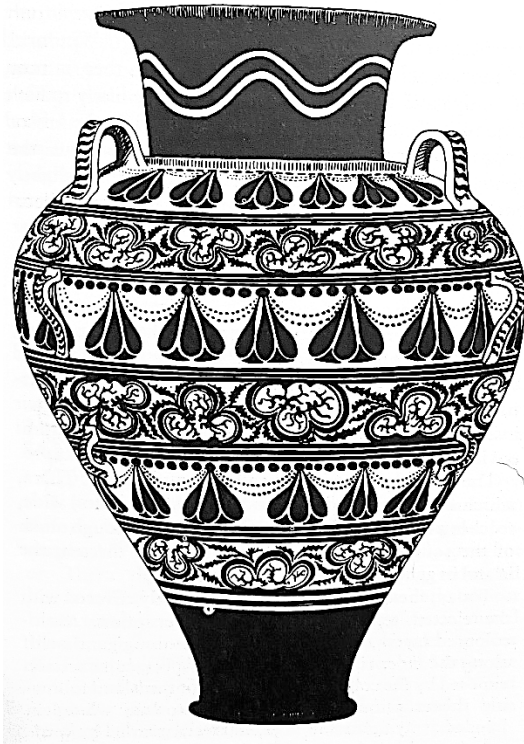


FIGURE 6.32. A painted amphora from Tyllissos LM IB. Example of crocus festoons in the same context as marine motif (Morgan 1988:33).

The star/sun motif is a both salient and nonsalient motif in Minoan iconography. As a nonsalient motif, it is used as border decoration, such as the Triangle Square gate at Akrotiri, where it is paired with the sea spirals (Marinatos 1974:18). The star/sun is also frequently used as a filler motif in Marine Style pottery and larnakes, so the presence of the motif on ships in the Ship Procession fresco is not out of place. Marinatos (2010:132) has suggested the rosette (Figure 6.23) and split rosette (Figure 3.7) could be an abstract form of the star/sun motif as it is in Near Eastern iconography. Like the star/sun motif, the rosette also has direct ties to marine iconography. The blue and purple rosettes of the Relief Lozenges fresco in Xeste 3 at Akrotiri, for example, are set within a border that resembles the net pattern that represents the sea in glyptic iconography (Vlachopoulos 2016:71). Several scholars have suggested that the star/sun or rosette motifs were not just a component of an iconographic theme, but held more symbolic



significance to the Aegeans, possibly relating to or signifying a divinity (Rutkowski 1986:42; Blakolmer 2017:93; Vlachopoulos 2016:71).

### Fantastical Hulls

If Morgan's (1988:134) argument is correct that the decorative motifs and stern figures, like those of Egyptian or Greco-Roman iconography, imbue an object with the power of the natural world or evoke the power of a deity, then the zoomorphic crafts in this subcorpus could be considered an extreme version of the stern figures of the Ship Procession fresco ships. Unless these zoomorphic vessels depict actual ships made for a special occasion, they should be considered as the figurative or mythological representative of a vessel for a divinity (Wedde 2000:188). The Ayia Triada sealing, Anemosphilia seal, Mochlos ring, and Ring of Minos are the four images in this theme that have zoomorphic vessels, with the former two taking on a bird-like shape and the latter two resembling a hippocampus. Based on the griffin stern figures of the Ship Procession fresco as well as other Aegean iconography depicting a griffin with a plumed head, such as Figures 6.23 and 6.31, it seems more likely that the Ayia Triada sealing depicts a griffin protome. The Anemosphilia seal would therefore also depict a griffin, furthering the iconographical similarities between the two images. The emphasis of the hooked beak and delineation between the beak and head likely refers to the Aegean griffin, but the restrictions of the agate stone medium make it difficult to reach a definitive conclusion. The ships on the Mochlos ring and Ring of Minos both likely depict the protome of a horse, recalling the hippocampi ridden by Poseidon in later Classical iconography. Both horses and griffins are depicted in terrestrial transportation in Aegean iconography as either pulling a chariot, as on the short sides of the Ayia Triada sarcophagus, or being ridden bare-backed, indicating that their

depiction as a zoomorphic watercraft is perhaps an extension of their real or supernatural use on land.

The bows of all the fantastical craft except the *Anemosphilia* vessel terminate in a fan of three-pronged fork, which Wedde (2000:180, 339-340) suggests represents a papyrus reed bundle iconography borrowed from the Near East. As H. Tzalas (1995) has demonstrated with his reed-bundled vessel, this type of vessel can successfully island hop in the Aegean. If these zoomorphic vessels are representative of actual vessels, they could have been local to the Aegean and not merely borrowing from the bird-headed prow iconography of Egyptian river boats as of the Old Kingdom (ca. 2700-2200 B. C.) as Wedde (2000:184) suggests. Wedde (2000:183) also incorrectly claims the ship of the Tiryns ring to be a large papyrus reed vessel, but this explanation requires more abstractions of an iconographic motif than painted hull decorations, as described above. By the time these zoomorphic vessels were depicted, they were technologically superseded by sailing vessels, which likely relegated their use to local waters or merely folklore. This deliberate reference to outmoded technology, just as the alternative propulsion methods of the Ship Procession fresco, heightens the ritual significance of these images (Wachsmann 1998:108). Alternatively, if these vessels only existed in memory, it would help explain the iconographic abstraction of the hulls taking on a hybrid papyrus bundle and zoomorphic hull shape. The artist would have had full artistic license to add classifying attributes in reference to the theme without being encumbered by remaining true to an existing hull form. Consequently, these animal protomes deliberately reference a unified theme. See Table 6.4 for an overview of the salient motif distribution.

## Human Figures

The final category Wedde (2000) has identified that constitutes a ritual narrative scene is the presence of human figures and their actions. For the purposes of this study, however, the simple presence of humans is enough to constitute a ritual image. Images likely depicting fishing, for example, contain humans but are instead considered emblematic, as they represent a recurring daily activity. Alternatively, the important motif in this subcorpus is the presence of a *female* figure. In this study, figures are considered female by the presence breasts and hips as opposed to the broad shoulders and sway backs of male figures, flounced skirts and pants as opposed to codpieces and kilts, and elaborately styled hair in glyptic and fresco examples, as well as pale skin in frescoes. For sake of reference, most of the comparative figures in this chapter contain female figures. Their prevalence in comparative ritual iconography is not accidental – females are frequently at the center of action, accentuating their importance to select Minoan rituals. Their presence in this subcorpus is therefore integral in the identification of this theme.

### **Identification of the Theme**

As demonstrated, the nonsalient and classifying motifs depicted in the images of this subcorpus firmly set them within the context of Minoan ritual iconography. Some of the motifs, namely the *akrostolion*, stern device, *ikrion*, and paddling, serve to set these images apart from other Minoan ship imagery into the category of ritual. The classifying attributes, such as gesture and personal adornment, relate to other Minoan iconography depicting figures commonly referred to as deities, priests or priestesses, or the elite class involved in ritual actions. The

identifying attributes, such as trees or specific animals, categorize the images of this subcorpus as belonging to the same theme. These identifying attributes also more concretely refer to images outside this subcorpus, relating the theme of this subcorpus to uniquely Minoan rituals, such as the tree-shaking epiphany scenes.

By applying the iconographic principle of cumulative sufficiency, the combination of some, but not necessarily all, of the motifs would have been enough for an emic viewer to recognize the subject (Knight 2013:71). The ship images in this subcorpus, therefore, are all variations of the same theme: the female figure and tree in a boat. Each image contains one or more identifying attributes of this theme. And each image, therefore, presents a piece of the puzzle or separate layer that constitute a larger idea when considered together.

The key element is the presence of the female figure, who is arguably a prevalent deity in the Bronze Age Aegean. When the female figure is absent, any one of the identifying motifs, such as the tree or lion, refers to her presence. As the gestures indicate, the female figures are involved in blessing, commanding, or adoring when not concerned with the propulsion of the vessel. The blessing or commanding figures likely represent a deity, while the adoring figures are likely involved in the official worship of that deity. The identity of some figures are more ambiguous. Those who are on shore in the Candia and Tiryns rings, for example, could depict the owner or commissioner of the artifacts. Those who are poling or paddling their boats, however, could be the deity or involved in her adoration or worship through the act of propulsion. Discerning between mortal or divine, however, is beyond the scope of this study. It is enough to suggest that these figures relate to the deity in some capacity, either as representing her or as human figures involved in her worship.

Unfortunately, there is not enough known about the characteristics of Minoan theology beyond speculation to give this deity a name. Some have, nevertheless, equated the transcribed personal name in Linear A, JA-SA-SA-RA, found on libation formulas at peak sanctuaries with Asherah (Younger and Rehak 2008b:174-177; Marinatos 2013:251-252). The deity in this subcorpus could be a distinct goddess, a cult aspect of the supposed one Minoan goddess, or somewhere in between. At the very least, this deity is clearly related to the water and trees. It is possible, however, that the maritime and arboreal aspects of the deity are only two of her characteristics. As Morgan (1988) has excellently summarized, many of these motifs that directly relate are also depicted together throughout the Aegean and Mediterranean divorced from a maritime context. Goodison (1989:79-83) also cites these motifs, especially the griffin, lion, bird, butterfly, and sun/star, as all directly associating with a Minoan goddess who is a solar deity. It is more fitting, however, that a tree or vegetation deity would preside over the welfare of those people and goods being transported in vessels constructed of and containing her associated materials. Sara Rich (2012:32; 2013:89) suggests a similar association for the Late Bronze Age Levantine deity Asherah, who was simultaneously in charge of celestial, maritime, mountainous, and arboreal affairs. Asherah's cult object, the *asherah*-pole, could have been symbolically fused with the ship's mast, embodying the goddess as a sacred tree and ensuring the ship would have been protected by the Canaanite goddess. Rich (2012:32; 2013:101; 2017:198) further suggests that wooden ships would have been the symbolic of Asherah, fulfilling Rich's translation of Asherah's Ugaritic epithet as 'The Lady Who Treads on the Sea'.

A definitive conclusion cannot yet be made due to the limitations of prehistoric archaeology. Through the third phase of the iconographical method, however, scholars can make comparative suggestions. Historical homology can be a useful method of comparison in many

instances, but it is not preferred for this subcorpus. The attempt by early scholars to prove Greek legends as a collective remembrance of the Bronze Age from Minoan, Mycenaean, or Trojan artifacts has integrated much bias into the foundation of this field. It is reflected in most aspects, from the accepted name of the Bronze Age culture on Crete to the insatiable need to prove or disprove their control of the seas. To avoid adding to that bias, this study will instead utilize contemporaneous cross-cultural comparisons in order to interpret the theme of this subcorpus. A suggested identity or proposed syncretized form of this Minoan goddess can be achieved through cross-cultural comparisons from the Bronze Age Mesopotamia and Levant. Several scholars, such as Crowley (1977), have already reasonably proven the transference of iconographic motifs from the Near East to those from the Aegean during the Bronze Age, and so it is possible the meaning behind the motifs could also be compared to a similar referent. This study has been limited to Mesopotamia and the Levant in an effort to focus the scope rather than to ignore any other potential iconographical referents, which will be briefly mentioned later as considerations for future research.

### **Interpretation of the Theme**

When Minoan archaeology was in its infancy, many scholars tended to compare Minoan material culture to that of contemporaneous Near East, as well as later Classical Greek literature and artifacts. By the early 20th century, those regions not only already boasted well-established archaeological traditions, but archaeologists could also rely upon a written record to support or explain any confusing artifacts. Later scholars rejected these comparisons in part due to a desire to illustrate the Minoans as a culture that ascended to prominence based on more internal processes. More accurately, however, the earlier archaeologists were not necessarily biased but

were instead limited in their theories due to limited evidence. Likewise, later archaeologists were not necessarily ignoring outside influences, but were instead attempting to highlight the agency of the Minoans in their own cultural development. After more than a century of research and a more complete picture, it is clear that the Minoans were actively involved in a larger exchange network in the eastern Mediterranean that encompassed Egypt and the Near East, the basic structure of which began as early as the advent of the sail in the 3rd millennium B.C. and continued into the Classical Period and beyond (Broodbank 2013:290-291).

Exchange between the various regions in the Near East strengthened once Mesopotamian city-states such as Uruk reached the Mediterranean around 3400 B.C. when highly valued finished goods and raw materials became more readily available to elite Egyptians by means of water transport (Broodbank 2013:283-284). The direct and indirect connections to Mesopotamian exports then expanded to the northern Levant, Cyprus, and the Aegean after 2500 B.C., likely also due to prestige items that were increasingly sought after by the elite (Broodbank 2013:336-368). In addition to goods and materials, technological exchange is also evident from the Near Eastern metalworking practices that are utilized on Crete beginning around 1900 B.C. (Watrous 1994:749). This long-distance exchange between the eastern Mediterranean and the Aegean only intensified in the Late Bronze Age, as documented in both archaeological materials and textual evidence, creating a market for international style goods which mixed several iconographic traditions (Sauvage 2017:151-152). Trade between the Levant and the Aegean was so well-established and well-managed that the Minoans were recorded in 1765 B. C. by a delegation from Mari as bringing a translator who understood Near Eastern languages to facilitate transactions (Foster 2018:346). As seen in the Aegean-style bull-leaping frescoes painted sometime during the 16th century B.C. at Avaris in Egypt, the individual motifs of large

scale images could have been exchanged or copied just as easily as a portable object (Younger and Rehak 2008a:157). Likewise, Crowley (1977) demonstrates that the transference of iconographic motifs from the Near East to the Aegean was very common, such as the griffin, as well as in the reciprocal direction, such as running spirals. Several iconographic motifs were transported either as cargo or as personal items by sailors who likely also adopted some symbols as a means of divine protection (Cornelius 2014a:143). Brody (1998) argues that the latter was the case for Phoenician sailors, whose worship of Tanit/Tinnit was brought to Carthage from the Levant while invoking her assistance to traverse the dangerous Mediterranean Sea. And as the late 14th century B.C. Uluburun shipwreck attests, the sailors of the Mediterranean sought divine assistance centuries before the founding of Carthage. The crew likely invoked the protection of the ship's tutelary deity, which may have been the Levantine bronze figurine of a goddess found at the prow of the ship (Pulak 1998:207).

The trade networks of the Late Bronze Age Mediterranean, therefore, not only exchanged goods and services, but also ideas and symbols. Certain deities and their symbols were adopted and adapted between the elites of various cultures, facilitated by the maritime community in particular (Cornelius 2014a:159). As Marinatos (2010) argues, the ritual practices and iconography of the Near East during the Bronze Age likely influenced the rituals and religion of those Aegeans who benefitted most from international trade, namely the elite. The sailors and merchants who were in direct contact with those international goods and ideas could have also adopted their rituals. A deity who could enable safe voyages for mariners would therefore have the most international exposure via maritime trade networks. For example, Brody (1998:100) has tentatively identified the goddess figurine from the Uluburun shipwreck (Figure 6.49) as Asherah, a primary goddess of the Levantine seafarers whose maritime aspect also likely served



as the protectress of sailors. If that figurine was the tutelary deity as Pulak (1998:207) suggests, then her cult would have been exposed to all of the ports the ship would have visited. A prevalence of iconographic motifs associated with Asherah in the maritime or elite communities involved in trade with the Levant, therefore, could indicate a transference of motifs or cult activity related to the goddess. It seems likely that not only is a Minoan goddess alluded to in the iconography of this study, but also that she is related to deities who presided over the seafaring activities of cultures involved in maritime exchange with the Minoans.

The hazard in any cross-cultural comparison, however, is assuming a direct correlation across time or space. The meaning ascribed to a symbol or artifact is constantly re-evaluated and reinterpreted based on its cultural derivations (Knight 2013:76; Chapin 2016:20). Iconography was sometimes transferred directly through cultural contact, but was frequently altered either by the addition of motifs or by its underlying meaning (Cornelius 2014a:159-161; Goodnick Westenholz 2014:169, 195). Thus the syncretism that is often cited for the symbols, attributes, and worship of deities between Greece and the Near East, such as Aphrodite and Astarte or Athena and Anat, is much more complicated than a one-to-one equivalence. The process first involves the recognition by the two cultures of a parallelism between the deities, and then may eventually cause an amalgamation or eclipse of the attributes or functions of the deities (Budin 2004:97-101). Treating the iconography as a simple transference of images is, therefore, neither possible nor productive. It is possible, however, to identify the connections of motifs between cultures, which could help identify meanings. These connections are extremely subjective, and require a much larger corpus in order to make a stronger hypothesis. Nevertheless, some preliminary analysis can be attempted with the available evidence.

Goddesses Mentioned in the Text	Other Names; Syncretized Forms	Primary Location(s)	Earliest Mention (Corresponding Cretan Chronology)	Prevalent Iconographic Motifs	Maritime Ties
Anat	Anathoth; Athena, Ishtar, Atargatis	Levant, Egypt	Mid-2nd millennium B.C. (MM I-II)	Battle regalia, bull horns, lion, star	Syncretism with later deities
Aphrodite	Cypriot Great Goddess; Astarte, Inanna-Ishtar, Hathor, Isis	Cyprus, Greece	Mid-1st millennium B.C. (Archaic)	Dove, lion, seashell, swan, myrtle tree, butterfly	Epithet, patron deity of sailors, navigation, safe passage, and trade
Asherah	Ashtart, Athirat Ashertu, Ashratum; Qeteshet-Qudshu, Elat, Atargatis, Tanit	Levant	Mid-2nd millennium B.C. (MM I-II)	<i>asherah</i> pole, palm tree, lion, rosette, lotus, snake, horse, caprid, crescent moon, bird, fish	Epithet, patron deity of Levantine sailors in Bronze Age and beginning of Iron Age
Astarte	Ashtart, Athtart, Asortheth; Ishtar, Shaushka, Aphrodite, Atargatis, Tanit/Tinnit, Sekhmet, Hathor, Isis	Levant, Egypt, Phoenicia	Mid-2nd millennium B.C. (MM I-II)	Lion, horse, battle regalia; Iron Age motifs of star, lion, dove, musical instrument, possibly palm trees	Epithets; patron deity of Phoenician sailors in 1st millennium B.C.
Atargatis	Ashtart, Astarte, Anat, Ishtar, Asherah, Aphrodite, Hera, Athena, Artemis	Northern Syria	Mid-1st millennium B.C. (Archaic-Classical)	Lion, star, crescent, mural crown	Patron deity of Syrian merchants
Hathor	Inanna, Ishtar, Aphrodite	Egypt	3rd millennium B.C. (EM IIA)	Sycamore tree, date palm, cow, solar disk, lioness, cobra, sistrum	Epithet, patron deity of Egyptian maritime protection and navigation
Inanna	Ishtar	Sumer	Late 4th millennium B.C. (Neolithic)	Reed symbol, star, lion, rosette	Epithet, mythology
Ishtar	Inanna; Shaushka, Mullissu, Aphrodite	Akkad	Mid-3rd millennium B.C. (EM I-II)	Star, lion, rosette, dove, ibex, tree	Syncretism with later deities
Isis	Demeter, Aphrodite	Egypt, Greece, Rome	3rd millennium B.C. (EM IIA)	Throne headdress, knot of Isis, sistrum	Epithet, protectress of ships at sea, <i>Navigium Isidis</i>
Tanit	Tinnit; Asherah, Astarte, Juno	Phoenicia, Carthage	Mid-1st millennium B.C. (Archaic)	Circle and triangle with arms, crescent, lion, dove, palm tree, rose	Patron deity of Phoenician sailors

TABLE 6.5. Overview of goddesses mentioned in iconographical analysis (Caquot and Szynger 1980; Black and Green 1992:108-109; Cornelius 1993; Brody 1998:26-27; Assmann 1999:456-458; Day 1999:36-43; Drijvers 1999:114-116; Graf 1999:64-68; Heerma van Voss 1999:385-386; Wyatt 1999a:99-105; Wyatt 1999b:109-114; Budin 2004:97-132; Ornan 2005:158-159; Cornelius 2008; Budin 2014).

## *Mesopotamia*

Mesopotamian mythology does not always directly correlate to iconography. It is likely, therefore, that the subject of Mesopotamian iconography either do not refer to conventional mythology, or depict a subject which has not been recorded or recovered (Black and Green 1992:15). Several instances of Bronze Age Mesopotamian iconography, such as boundary stones or sometimes cylinder seals, use labels to identify anthropomorphic figures or symbols, and so scholars have been able to identify certain iconographic motifs with specific deities with greater certainty than just attempting to ascribe mythological narratives to unlabeled iconography (Black and Green 1992:15-16,19). Deities were often depicted as anthropomorphic representations with their symbolic motifs, or as their symbolic motifs as the only referent to the deity. These symbolic motifs could be inanimate objects, animals, or natural phenomena, and were fairly standard as early as the 4th millennium B.C. (Ornan 2005:42). In Mesopotamia, there were thousands of deities recorded, but one goddess was worshipped more prolifically than any other: Inanna-Ishtar. The goddess called Inanna in Sumerian and Ishtar in Akkadian have standard iconographical associations and a rich, overlapping mythology.

### Inanna

She is arguably the most important goddess in the Mesopotamian pantheon, especially in her role as antecedent between the gods and humans. The name Inanna is derived from the epithet 'Lady of Heaven' (Leick 1991:86; Black and Green 1992:108; Goodnick Westenholz 1998:73). She was the patron deity of Uruk in southern Mesopotamia, with her cult well-established by the Third Dynasty of Ur (2168-2050 B.C.) (Leick 1991:87; De Shong Meador 2000:12-14). The reed symbol representing her name is derived from an archaic pictograph,

indicating that her worship extended earlier than that to at least the late 4th millennium B.C. (Leick 1991:86; Goodnick Westenholz 1998:73; De Shong Meador 2000:12). Though she is an important goddess, her mythology and aspects are simultaneously ambiguous and contradictory, indicating that she may have frequently absorbed the identities of local goddesses by means of syncretism (Leick 1991:87-88; Black and Green 1992:108). Consequently, her worship was widespread and her attributes varied depending on the time period and location. Inanna was primarily worshipped as both a warrior and a lover, embodying intense and unchecked human emotions, but was also responsible for the annual renewal of the land's fertility and legitimizing the king's rule (Black and Green 1992:109; Goodnick Westenholz 1998:73-74; Cunningham 2013:50-51). Inscriptions at Emar, an important Bronze Age port on the Euphrates, record sacrifices to 'Inanna of the Sea', a rare epithet (Caquot and Szyner 1980:7). The Mesopotamian goddess most associated with the sea, however, is Nanshe, whose oversight of fishermen, marine animals, and weights used in trade went hand-in-hand with her influence in the pantheon of Lagash around 2500-2000 B.C. (Daniels 2016:136). Inanna, however, had more of a widespread appeal, likely due to her many facets and syncretism with other deities. Compared to other Mesopotamian deities, she seems to have most inspired poets and singers, who disseminated her worship both in oral and written traditions (Leick 1991:89).

Inanna's usual symbolic motifs include a star or star disc to represent the planet Venus, a lion, a rosette, and the reed post, which also serves as a sign for her name (Black and Green 1992:108; De Shong Meador 2000:12; Ornan 2005:152). She is depicted with the horned cap of divinity, as with many Mesopotamian deities, and is usually dressed according to the accentuated aspects of her personality. When depicted as the warrior goddess, she is shown with wings and weapons across her back; when depicted as the planet Venus, she can also be surrounded by

stars; and when depicted as the goddess of love, she is differentiated from most images of Mesopotamian women and goddesses by her partial or full nudity (Black and Green 1992:108-109). Consequently, it has been the potentially erroneous habit of scholars to immediately label a nude female figure in Mesopotamian iconography as Inanna. Sometimes she is also associated with other fertility symbols, such as a scorpion or a suckling ibex or cow as early as around 1650 B.C. (Ornan 2005:159). See Figures 6.33-6.37 for depictions of the various aspects of Inanna.



FIGURE 6.33. Cylinder seal, Mesopotamia, Akkad period, 2330-2150 B.C. Example of Inanna-Ishtar seated wearing horned cap of divinity, weapons emanating from shoulders, and a crossed lion throne (Wolkstein and Kramer 1983:52, 189).



FIGURE 6.34. Cylinder seal, Mesopotamia, Akkad period, 2334-2154 B.C. Example of Inanna-Ishtar standing wearing horned cap of divinity, weapons emanating from shoulders with mace in hand, wings, lion as personal beast, partial nudity, and eight pointed star of Venus (Wolkstein and Kramer 1983:92, 193).



FIGURE 6.35. Cylinder seal, Mesopotamia, Akkad period, 2334-2154 B.C. Example of Inanna-Ishtar wearing horned cap of divinity while riding a winged lion or griffin, holding streams of rain, and full nudity (Wolkstein and Kramer 1983:94, 194).



FIGURE 6.36. Cylinder seal, Mesopotamia, Neo-Sumerian period, 2112-2004 B.C. Example of Inanna-Ishtar seated wearing horned cap of divinity, lions, Anzu-bird, and stylized date palm tree (Wolkstein and Kramer 1983:102, 196).

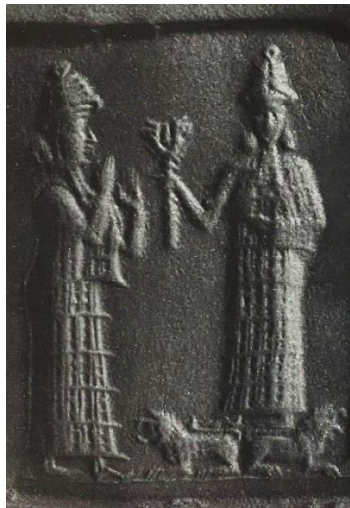


FIGURE 6.37. Cylinder seal, Mesopotamia, Old Babylonian period, 1850-1700 B.C. Example of Inanna-Ishtar wearing horned cap of divinity while standing on lions and holding a mace with lion-headed finials. (Wolkstein and Kramer 1983:100, 195).

Inanna and other Mesopotamian deities were known to have visited neighboring deities by boat along the canals and rivers in mythology as well as in ritual practice. The journeys were ritually enacted by ferrying cult statues of the gods in boats via the Tigris and Euphrates rivers and their canals and estuaries to the various temples during major festivals (Leick 1991:101; Black and Green 1992:45). The maintenance of the boat of a deity was a state-sponsored event important enough to name the following year after it, a tradition in Mesopotamia beginning around 2300 B.C. and ending in 2033 B.C. (Black and Green 1992:45,112). During the Babylonian New Year festival, all of the gods were transported by their barges to the *akitu* building (Black and Green 1992:112,137; Schneider 2013:62). Several cylinder seals dating between approximately 3100 and 2210 B.C. depict two human figures in a boat, which most likely references this ritual event of the representations of the gods visiting the temples in their barges rowed by the participants. Sometimes the prow, or the entire vessel, takes the shape of a man, which has been sometimes interpreted as either Sirsir, the patron deity of mariners who is a minor deity mentioned beginning around the Old Babylonian Period (1950-1651 B.C.), or the mythical Magillum-boat of the netherworld. A common iconographic theme of seals dating 3500-3100 B.C. is a procession of devotees approaching a water-front temple by boat or a shrine mounted on a boat (Black and Green 1992:44-45). An example, seen in Figure 6.38, contains similar motifs to the Tiryns ring, and comparable to the composition of the Candia ring and the interpretations of the Mochlos ring as the approach of the boat to a shrine (Marinatos 1993:183). In general Mesopotamian iconography, the moon god Nanna, the sun god Shamash, and the underworld goddess Lamashtu were most frequently depicted as traveling in a boat – not Inanna.



FIGURE 6.38. Cylinder seal, Tell Billa, Mesopotamia, Late Uruk-Jemdet Nasr period, 3200-3000 B.C. Example of reed boat approaching a temple, as evident by the flanking ring-staffs (Wolkstein and Kramer 1983:25, 183).

Despite the lack of iconography relating to her annual riverine journeys, Inanna is still central to the culmination of the New Year celebration in Sumerian polytheistic traditions, namely the sacred marriage rite that involved the ceremonial union of the reigning monarch to Inanna. The metaphorical or actual union involved a representative of Inanna, usually her high priestesses, and the reigning monarch, in order to ensure the fertility of the natural world. The celebration, originating as early as the Third Dynasty of Ur, occurred at the beginning of the first month of the year. In Sumerian and Babylonian traditions, this was after the spring equinox, though the date differed depending on the culture. For example, it was shifted to the second month in Neo-Assyrian traditions in the 1st millennium B.C. (Wolkstein and Kramer 1983:124; Black and Green 1992:136, 158; Leick 1991:87; De Shong Meador 2000:58-61; Annus 2002:22-24, 71; Schneider 2013:62, 78). The origins of this celebration stem from one of the myths in Sumerian ideology explaining the cyclicity of the seasons, in which Inanna plays a central role by retrieving her husband Dumuzi from the underworld.

Inanna is also vital to two other important myths in Sumerian religion: the myth of the *Huluppu*-tree, which is essentially a creation myth, and the myth of Inanna and Enki, in which Inanna underhandedly wins and transports the *me*, or the cultural and moral standards of human life central to Mesopotamian religion, upstream from Enki at Eridu to her city of Uruk. In the



former myth, a *huluppu*-tree was planted on the banks of the Euphrates when Enki, the Sumerian god of wisdom and the subterranean freshwater ocean, was shipwrecked. Once it was uprooted by strong south winds, Inanna happened upon it floating along the Euphrates and transported it back to her holy garden in Uruk (Wolkstein and Kramer 1983:4-5; Leick 1991:70; Black and Green 1992:109). Though there is some argument as to the species of the *huluppu*-tree, it is likely the date palm not only because it is most frequently depicted in Mesopotamian iconography, but also because of its prevalence in the region as well as its economic importance. Consequently, the epithet of Inanna as “Lady of the Date Clusters”, which refers to her consort Dumuzi and his fecundity as represented by the date palm, is also fitting (Wolkstein and Kramer 1983:178). In the latter myth, Inanna won the sacred *me* from the god Enki. She transported them in the Boat of Heaven back to her temple in Uruk, after her *sukkal* had defended repeated attacks from the duped Enki. Inanna docked directly at her temple after having flooded the river in order to reach it more quickly, and unloaded the *me* for the benefit of the people of Uruk (Wolkstein and Kramer 1983:19-25; Leick 1991:90; Goodnick Westenholz 1998:74).

Traces of an Inanna-like symbolic repertoire, both in iconography and mythology, are evident in a wide array of Minoan artifacts. The rosette motif of Inanna is a common filler motif in Minoan frescoes, for example, and Evans’ “sacral knot” is very similar to the reed-post symbol of Inanna. Within this study, the goddess’s motifs of a lion and a star, or star disc, are both depicted in the Ship Procession fresco on multiple ships as decorations and stern figures. The annual ritual of Inanna’s sacred marriage to the king at the New Year festival could be alluded to in the Tiryns and Candia rings, as suggested by Mylonas (1945:566) in his interpretation of the Greek *hieros gamos*. The motif of the man and woman inside a door in the Tiryns ring is similar to the ritual that began with the king meeting the high priestess at the door

to her residence (De Shong Meador 2000:61). The myth in which Inanna transports the *huluppu*-tree is similar to the iconography of the Mochlos ring, as Marinatos (1993:183) suggests, as well as the Makyrialos seal or Mochlos Ship Cup, all of which depict a tree in a boat. And finally, depictions of a female figure paddling, such as the Anemosphilia seal or Stathatos seal, are reminiscent of Inanna transporting the sacred *me* with her *sukkal*, Ninshubur, downriver to Uruk.

### Ishtar

The name Ishtar was derived from the West-Semitic designation for the planet Venus, Attar/Attart, and she was primarily worshipped as the goddess of war and procreation in Akkad beginning in the Sargonic period (2390-2210 B.C.). After the kings of Akkad promoted the syncretism of Ishtar with the Sumerian Inanna in the mid-3<sup>rd</sup> millennium B.C., the two goddesses have essentially been considered one in the same (Leick 1991:96; Goodnick Westenholz 1998:74). Like Inanna, Ishtar was the main goddess of the Akkadian Mesopotamian pantheon in the 3<sup>rd</sup> millennium B.C., though local manifestations grew more popular after 2200 B.C. when regional and family deities gained favor. The Akkadian Ishtar had many of the same attributes as Inanna, though administrative texts emphasize her war-like qualities associated with kingship while liturgical texts highlight her volatility and liminality (Leick 1991:97-99; Goodnick Westenholz 1998:74-75). Worship of Ishtar gradually spread north beyond Assyria, where the Hurrians and later Hittites worshipped local manifestations of her as well as syncretized her characteristics with their own main goddess, Shaushka. Though the Assyrian pantheon was dominated by the gods, Ishtar was the primary state deity of Nineveh, a major cult-center since the mid-3<sup>rd</sup> millennium B.C., as the star Venus (Leick 1991:99-100; Goodnick Westenholz 1998:78-79; Reade 2005:347; Schneider 2013:70).

As far as we know, Ishtar's mythology is essentially the same as Inanna's, but with localized differences. For example, though recorded much later in the Neo-Assyrian period (883-612 B.C.), Ishtar's Descent is more condensed than the Sumerian version of the goddess's descent to the underworld from Nippur dating to around 1750 B. C. (Leick 1991:98). Her iconography is also similar, dressed in battle regalia with the lion as her beast, and a star, star disc, or rosette as her symbol (Black and Green 1992:109). Cornelius (2014:91) also points out that Ishtar's symbols likely included a dove. Due to her syncretism with Shaushka, another of Ishtar's symbols could have also included the ibex during the Mitanni period (1500-1350 B.C.) as well as the tree and ibex theme representing fertility and prosperity (Ornan 2005:158-159). In addition to her epithet the Queen of Heaven, Miroslav Marcovich (1996:48) also argues that Ishtar could have been in charge of the sea as the patron deity of sailors through her syncretism with Astarte and Aphrodite, which was likely derived from her associations with the planet Venus. Megan Daniels (2016:224) also suggests that there are hints that Inanna-Ishtar was linked to the sea. These hints are derived from the deity's likely syncretism with the Hittite goddess Shaushka, who defeated a sea serpent and is commonly associated with the storm god's divine sovereignty of the sea in iconography and literature as early as the beginning of the 2nd millennium B.C. (Daniels 2016:175,182). If this reading is correct, it is possible that Ishtar, or even her Sumerian counterpart, was worshipped in a capacity that would have helped mariners in their voyages. In the tenth tablet of the Epic of Gilgamesh, discovered at Ninevah and dating to around 1300-1000 B. C., the lamenting Ishtar claims responsibility for bringing about the Great Flood and the destruction of her people (Parpola 2000:200; Annus 2002:124). Similarly, Inanna flooded the rivers in the myth of Inanna and Enki, and was exalted as being able to control storms in poems dedicated to her by Enheduanna, the Sumerian high priestess of the moon god Nanna who lived

around 2300 B.C. (De Shong Meador 2000:134, 172). Though there is no explicit evidence to suggest Ishtar as the patron deity of sailors, her potential ties to Aphrodite and her ability to conjure deadly storms at will makes her a deity sailors would want to have on their side.

Ishtar further relates to the images of this corpus because one of her central symbols is the sacred tree, specifically the date palm, by means of the syncretism with the goddess Mullissu, who is also the divine mother of kings (Parpola 2000:194, 199). One of her Bronze Age epithets at Elba and Mari was 'Ishtar of the Poplar', based on archival texts dating to 2390-2340 B. C., further attesting to her link with trees (Archi 2010:3-5). Later Neo-Assyrian (ca. 900-600 B. C.) iconography connecting Ishtar to date palms, lions, and rosettes highlight Ishtar's association with fertility and kingship that was already long established (Porter 1993:138; Ziffer 2010:418). One of Ishtar's cults also performed rituals involving the burning and purifying of a tree in order to become closer to the goddess (De Shong Meador 2000:156). Similarly, a text describing the ritual acts of Inanna's marriage to Dumuzi instructs that a date-gatherer must climb to the top of the tree to provide fresh dates for the goddess (Daniels 2016:130). Though not the same, these tree rituals are reminiscent of the Minoan depictions of a tree-shaking ritual that has been proposed to invoke a Minoan deity. The sacred tree has also been likened to Mesopotamian kings and Ishtar's king consort Dumuzi/Tammuz, further linking Ishtar to a tree, as she is the deity responsible for annually legitimizing the king's rule (Black and Green 1992:171; Parpola 2000:194; Schneider 2013:70). A fresco from Mari provides a good synopsis of the iconographic motifs, such as the palm tree and dove, ascribed to Ishtar as she hands over the symbols of kingship to Zimri-Lim, the king of Mari 1775-1761 B.C. (Figure 6.39).



FIGURE 6.39. Mural painting from palace of King Zimri-Lim at Mari, 18th c. B.C. Example of Inanna-Ishtar associated with royalty, weapons emanating from shoulders, lion as personal beast, partial nudity, palm tree, dove, and griffin (Black and Green 1992:23).

Like her Sumerian counterpart, the iconography relating to the Akkadian Ishtar is prevalent in Minoan iconography. In addition to the similar motifs and spheres of influence referenced for Inanna in iconography and textual evidence, Ishtar was possibly worshipped by sailors. Furthermore, the palm tree as a referent or symbol of the goddess was more apparent with Ishtar than with Inanna, especially when considering the fresco at Mari. Though the two goddesses were considered as essentially the same deity, it is relevant to note that there are differences, specifically regarding the tree cult and Ishtar as a possible patroness of sailors. The mythology, cult practices, and iconography of Ishtar, therefore, also seem to be evoked in the Aegean images of this study.

### *The Levant*

The most substantial, though still considerably fragmented, corpus of textual evidence from the Canaanite religions in the Late Bronze Age comes from the ancient port city of Ugarit in northern Syria, which flourished from around 1450-1200 B. C. Otherwise there are few textual

records and the artifacts are often difficult to interpret. Consequently, it is important to stress that the rituals and religion documented around 1275 B.C. in Ugarit do not necessarily reflect a comprehensive belief system of the Levant. The state-sponsored religion of Ugarit is represented in these texts, and so they may not represent local or folk beliefs of other Levantine areas. Furthermore, the Ugaritic pantheon seems to have been heavily influenced by foreign belief systems (Hadley 2000:38-39). There was a high degree of syncretism between the personalities of the Levantine deities as well as the borrowing of iconographical traditions from Egypt and Mesopotamia, depending on regional control of the Levant throughout the Bronze Age. Further contributing to the overlapping textual and iconographical traditions, several Levantine deities, such as Anat and Astarte, were borrowed by Egyptian royalty as patron deities, though the retention of their original character is debated (Eaton 1964:23; Caquot and Sznycer 1980:6-8; Walls 1991:187-179; Cornelius 1993:28-29; Wright 2013:130-131). The Levantine city-states often had a pair of deities, a male and female who were not always the same set, presiding over them, with the female deity often described less favorably and as the counterpart to the male (Wright 2013:138). The texts from Ugarit describe the pantheon as being headed by El and his spouse Athirat, who was also known as Asherah in Hebrew, Ashertu in Hittite, and possibly Qetesh or Qudshu in Egyptian writings. Anat, one of the children of El and Athirat, was another important goddess in Ugarit, though her popularity waned in the Iron Age as Astarte's popularity grew as the favored goddess of the Phoenicians. Astarte is mentioned in Ugaritic texts as Ashtart, or Ashortheth in Hebrew, but plays a subordinate role to Anat (Goodnick Westenholz 1998:79; Cornelius 2008:92-100; Christian and Schmitt 2013:151; Wright 2013:138; Smith 2014:64). For the purposes of this study, these deities will be referred to as Asherah, Anat, and Astarte, respectively. Like the Mesopotamian festivals involving the ritual visitations by the deities, there

is record of at least one festival in Ugarit from a clay tablet dating to the 14th century B.C. that occurs in the spring. This ritual culminates by parading the finely dressed statues of Athirat and Anat before placing them on a prepared location (Gaster 1946:50-51). Though the text does not elaborate on the method of the parade, as in Sumer via sacred boats, this tablet presents a link between these rituals relating to the processions of deities.

There are a small number of identifying inscriptions accompanying Levantine iconography that clearly label the depictions of deities. The Egyptians, however, labeled most of their depictions of deities (Keel 1998:37). As early as the 17th Dynasty (1580-1550 B.C.), the Egyptians began worshipping several deities local to areas under their influence, including Anat and Astarte. From the limited number of representations of Anat and Astarte with shared iconography between Egypt and the Levant, as well as from Egyptian labels, a characterization of their symbols and motifs have been made, though the identifications have been subject to scholarly debate over the last century.

### Anat

Anat's mythology is best known from Ugarit, where she was worshipped as the consort/sister of Ba'al. Over the course of her worship from the Late Bronze Age to the Hellenistic Age throughout the Near East, however, her mythology was constantly in flux (Eaton 1964:125). In the Late Bronze Age, Anat shares many similarities in characteristics, mythology, and iconography with Inanna-Ishtar. Like the Mesopotamian goddess, Anat is associated with battle, power, hunting, and protecting animals, all the while known for her beauty, maternal care, propensity to mourn, and ability to heal. At Ugarit, her epithets include 'Lady of Kingship', indicating her role of nurturing the king, 'Widow of the Nation', and 'Lady of the Heavens',

which is also used in Egypt to indicate her power over all the gods (Eaton 1964:84, 99; Caquot and Sznycer 1980:13-14; Leick 1991:6-7; Goodnick Westenholz 1998:79; van der Toorn 1998:87; Cornelius 2008:80, 92). Despite somewhat ambiguous interpretations of Anat's mythology, 20th century scholars have erroneously described her as a goddess of love and sexuality, in part due to an interpretation of Ugaritic texts leading to the assumption that all Levantine goddesses had a primarily sexual function. Additionally, a relatively large number of Late Bronze Age pendants and plaques depicting the frontal image of a naked woman, who is assumed to be a deity, with the "Hathor wig" and holding plants or animals, have been identified as Anat, Astarte, or Asherah (Walls 1991:142; Cornelius 2008:64-65).

Anat's mythology, though similar to that of Inanna-Ishtar, is only superficially related. Two of her main myths occur in the Ba'al cycle texts dating from the 15th-14th centuries B.C. The first text describes Anat mourning and searching for Ba'al's body with Shapsh after he is killed by Mot; and the second details her vengeful destruction and subsequent mourning of Aqhat, a king's son. The general narrative of these Anat myths are similar to some of Inanna-Ishtar's exploits, but the roles of the figures affected by the actions of the goddesses, namely Ba'al and Dumuzi or Aqhat and Gilgamesh, are vastly different in the Ugaritic pantheon compared to the Mesopotamian. Unlike Inanna-Ishtar, however, Anat does not mature over the course of her myths and dedicated poetry, and is always portrayed as a maiden warrior who relishes in violence but is also remorseful of her actions (Leick 1991:6-7, 12-13; Walls 1991:86-89, 296-297). Similar to Inanna-Ishtar, Anat is linked to both Ugaritic and Egyptian royalty, though as their wet-nurse and protector and not the source of their legitimacy to rule (Eaton 1964:84-88; Walls 1991:188-189). In a more local context, rituals to Anat were performed at



home or in the open air to invoke divine protection for prosperity and protection against harm, attesting to her popularity outside of the official cults of royalty (van der Toorn 1998:88).

In accordance with her warrior aspect, labeled images of Anat from Egypt often depicted her with weapons, but she is also shown sitting on a throne or standing with a *was*-scepter, a symbol of power in Egyptian iconography, next to or suckling the pharaoh, indicating her connection as the patroness of his rule (Eaton 1961:104; Cornelius 1993:23). See Figure 6.40 for an Egyptian depiction of Anat. Bronze Age Levantine images are not labeled, and so identification of Anat in iconography is subject to interpretation. Many of Anat's motifs, especially relating to battle or wearing an *atef*-crown, are similar to those of Astarte, leading to confused identifications. Anat is described in texts from Ugarit as having wings and wearing the bull horns of Ba'al, and so images that include those motifs could depict Anat, such as Figure 6.41 (Cornelius 1993:26). Probably through her association with hunting and royalty, as well as a handful of Egyptian images that are depicting Anat-Astarte-Qedeshet, Anat is sometimes associated with a lion in iconography (Eaton 1961:113; Caquot and Sznycer 1980:27; Cornelius 1993:33). Cornelius (1993, 2008), on the other hand, argues in favor of the lion belonging to the iconography of Qedeshet-Qudshu as a distinct goddess. It is the nude images labeled as the three goddesses in Egyptian iconography that have partially led to the identification of the Levantine figurines and plaques of the popular cult as Anat, Astarte, or Asherah.



FIGURE 6.40. Detail of lower register of stela, possibly from Deir el Medina, Egypt, The New Kingdom, 1300-1200 B.C. Example of inscribed iconography of Anat, wearing an *atef*-crown, seated, and branching a mace-axe in one hand with a shield and spear in the other (Cornelius 1993:22, figure 4, plate II).

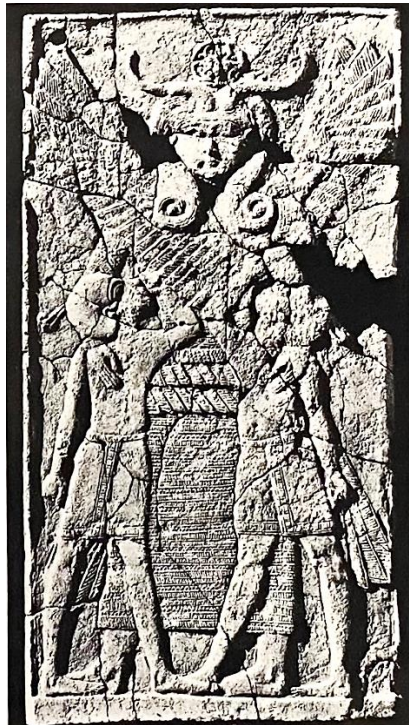


FIGURE 6.41. Subset of larger ivory panel found at Ras Shamra. Example of unscribed iconography of either Anat or Asherah, a suckling goddess with Hathor locks, horns, wings, and a sun disk (Caquot and Szyner 1980:27-28, plate 29b).

It is clear that the mythology and iconography of Anat does not relate to the Bronze Age Aegean images in this study. No extant textual sources relate Anat to trees or boats, and none of the iconography that can be reasonably deduced as depicting the goddess relates to the motifs that bind this subcorpus together, such as lions or stars. Only one aspect could relate, and that is the notion that Anat is the personification of springs, though there is not much supporting evidence for this claim (Caquot and Sznycer 1980:9; Walls 1991:286). The two other major goddesses of the Bronze Age Levantine pantheon offer more of a comparison to the motifs in this study.

### Astarte

Astarte was first worshipped as early as the 3rd millennium B.C. in the capacity of Venus and as Athtart was one of the main goddesses at Ugarit in the 2nd millennium B.C., though she took a backseat to Anat and Athirat. Having been brought to Egypt after Syrian military campaigns during the New Kingdom, Astarte was most popular in Egypt during the 18th and 19th Dynasties (1550-1189 B.C.), and was worshipped by royals and the general public alike (Eaton 1964:24; Smith 2014:34; Tazawa 2014:105). Her cult spread rapidly throughout the Mediterranean in the Iron Age and historical period by the Phoenicians, who considered Astarte the main deity in their pantheon; her character after the Bronze Age, however, was somewhat ambiguous due to her syncretism with local deities (Caquot and Sznycer 1980:15; Schmitt 2013:217-219). The Iron Age Phoenicians considered Astarte a mother goddess, likely by means of syncretism with Asherah, and Phoenician mariners brought both Astarte and Tanit/Tinnit with them during voyages (Christian 2013; Sugimoto 2014:157). Though she has many epithets depending on the time and location, she has often been reduced to a sex goddess in past

scholarship. More recently, after a re-examination of textual evidence and iconography, the some characterizations of the Late Bronze Age Astarte are more closely associated with battle and kingship, similar to Anat (Christian and Schmitt 2013:150; Schmitt 2013:213-214).

In Ugarit and Egypt during the Late Bronze Age, Astarte shared a similar position to Anat as a beautiful virgin and violent warrior goddess, though she was usually mentioned subordinate to the latter (Caquot and Sznycer 1980:15; Christian and Schmitt 2013:151; Smith 2014:64). Like Anat, Astarte was also equated with Inanna-Ishtar in personality and especially due to the lexicological similarities between Akkadian Ishtar and Astarte's Ugaritic name, Athtart/Ashtart. The morning and evening stars in the Syrian pantheon were split into the god Athtar and the goddess Athtart, respectively. Consequently, Astarte is also associated with the evening star (Caquot and Sznycer 1980:15; Black and Green 1992:108; Budin 2004:104-107; Goodnick Westenholz 1998:76; Schmitt 2013:215; Marcovich 1996:45; Smith 2014:35). Ayali-Darshan (2010:25) suggests an Akkadian epithet of Astarte from Emar around the 14th-12 centuries B.C., where she also received offerings together with Yamm during a ritual festival, is 'Astarte of the Sea'. Additionally, Astarte was worshipped as the 'Mistress of Peru-nefer', the harbor of Memphis or Avaris (Cornelius 2008:69, 93; Tawaza 2014:110). And if an often overlooked epithet in Ugarit can be translated as Kerr (2013:212) suggests to mean 'Astarte of the Estuary/Harbor', then her links to mariners could have been in place as early as the Bronze Age.

In liturgical texts from Ugarit and ritual texts from Emar, Astarte is referred to as a hunter (Smith 2014:54; Budin 2004:107). And though the evidence is limited from the Bronze Age, she is also associated with combat and warfare in texts from both sites, as well as from Egypt (Smith 2014:55-57). Astarte is less often mentioned in mythological texts from Ugarit, but almost

always in conjunction with Anat, leading to the interpretation of their similar functions (Wyatt 1999b:110). Astarte's animal has often been identified as a lion, though most evidence derives from Egypt and from her association with Ishtar. Only one hymn from Ugarit associates her with a lion, in a manner that is evocative of praises to the warrior aspect of Ishtar (Smith 2014:71-72). At Ugarit and Emar, she is mainly associated with horses, hunting, and healing (Schmitt 2013:215-216; Cornelius 2014:95). In Egypt, she was associated with royalty and she was specifically invoked for support in battle as well as the pharaoh's own health (Tazawa 2014:110). She was also identified with lion goddesses in Egypt, particularly Sekhmet, the lion-headed goddess of battle, at Memphis (Cornelius 2008:93; Smith 2014:72). In the Bronze Age, consequently, Astarte was likely associated with both horses and lions, especially in Egypt.

As with Anat, images of Astarte from the Levant were not labeled, while Egyptian images were. The iconography considered to be Astarte from both regions were similar, leading to the potential identification of unlabeled Levantine images. However, many of Astarte's motifs overlap with Anat, likely due to their similar functions and characteristics during the Bronze Age. Egyptian images labeled as Astarte depict the goddess holding weapons while standing or riding a horse, and wearing a horned headdress or *atef*-crown, as in Figure 6.42 (Eaton 1964:106-107, 109; Wyatt 1999b:111; Cornelius 2008:75-76). It is possible that she was also depicted with wings or with a lion due to her similarities with Ishtar, though textual evidence links the iconography of the winged goddess to Anat and several of the Levantine deities are depicted with lions (Cornelius 2008:89-93; Christian and Schmitt 2013:151). Scholars have labeled the common Late Bronze Age figurines and plaques depicting nude women as Astarte, Anat, or Asherah (Figure 6.43), but more due to a precedent set by Albright (1939) than empirical evidence (Mazar 2006:251-252; Cornelius 2008:6-7, 98; Cornelius 2014b:98-99). The frequency

of these artifacts, however, indicates the popularity of this goddess as a family or local deity, regardless of the controversy surrounding her identity (Van der Toorn 1998:91).



FIGURE 6.42. Detail of fragmented stela from tomb at Tell Zawyet Sultan near Minya, Egypt. Example of probably Astarte iconography, nude female deity riding a horse, wearing an *atef*-crown, and brandishing a weapon with one hand while holding a spear and shield in the other (Cornelius 2008:117, catalog 4.1).



FIGURE 6.43. Gold pendant from Minet el-Beida, 1450-1365 B.C. Example of contested identification as Astarte, Anat, Qedeshet, or Asherah; nude female standing on lion with star/rosette decoration on shoulder, wearing Hathor wig, holding caprids in each hand, snakes interwoven behind waist, and embossed dots/stars in the background (Caquot and Szynger 1980:26, Plate 19b).

As early as the 4th century B.C. in Syria, Astarte and Anat were combined with Ishtar and possibly Asherah to form Atargatis, a mother goddess whose worship spread throughout the Mediterranean. Atargatis assumed many of the characteristics, cult worship, and iconography of the Bronze Age goddesses through an amalgam type of syncretism (Eaton 1964:117, 121; Marcovich 1996:45; Budin 2004:97, 124, 132; Cornelius 2008:96, n.12; Christian and Schmitt 2013:151; Sugimoto 2014:157). It is possible, therefore, that her motifs of a star and lion could have also been associated earlier with Astarte or Anat, especially due to Astarte's connection with Ishtar. In addition to Atargatis and Tanit/Tinnit in the Classical period, Astarte was also syncretized with Aphrodite, Isis, and Hathor, attesting to her widespread appeal and all-encompassing attributes (Budin 2004:97, 132; Schmitz 2013:213). Though it is certainly Astarte's Classical period associated goddesses that add the star, lion, and dove motifs to the iconographical repertoire from the Bronze Age, it is possible the motifs and references have yet to be uncovered. Sauvage (2015) argues that a 7th-6th centuries B.C. image incised on a scapula found in Dor, a coastal town in Israel, depicts a Cypriot invocation of Astarte to protect a departing ship. If this is correct, it potentially adds palm trees as relating to Astarte in addition to the musical instrument depicted on the scapula which is already associated with Astarte in the 1st millennium B.C. (Christian and Schmitt 2013:151).

The Bronze Age character of Astarte is somewhat ambiguous in text and iconography due to a lack of surviving evidence, scarcity of labeled depictions, and overlap with Anat and other goddesses. The extant textual evidence does not particularly relate to this study, aside from the lexicographical associations with Ishtar and possibly therefore her functions and iconography. Astarte's ties to royalty and overlap with other goddesses associate her with the lion motif in this study. It is Astarte's later functions in the 1st millennium B.C., however, as

well as iconographic associations with her syncretized forms that relate most to the images in this study, namely the star, lion, and dove motifs. Additionally, the hippocampus hulls of the boats on the Mochlos ring and the Ring of Minos suggests a possible referent to Astarte's relation to horses. Her maritime associations are well-known in the 1st millennium B.C. as the protectress of ships and sailors, but may also extend to the 2nd millennium B.C. as the epithet 'Astarte of the estuary/harbor' and her worship in the harbor of Memphis suggests. It is the third Levantine goddess, however, that offers the most comparison to the images in this study.

### Asherah

Evidence for Asherah's worship is not as straightforward as the other two main Levantine goddesses. She was a prominent goddess in the Levant during the Late Bronze Age, likely having been brought by the Amorites as 'the Lady of the Steppe' in the 2nd millennium B.C. due to possible etymological similarities to an Akkadian deity (Binger 1997:48; Hadley 2000:45; Anthonioz 2014:133). She was most popular in coastal cities, such as Ugarit, Tyre, and Sidon during the Late Bronze Age. Unlike the Levantine goddesses Anat and Astarte, however, Asherah's adoption into the Egyptian pantheon is contested. Unfortunately, throughout the 1st millennium B.C., her cult was suppressed in the official religion of the early Israelites, creating almost a vacuum of clearly identifiable textual and iconographic evidence and making concrete analysis difficult (Dever 1984:31).

In Ugarit, she was known as Athirat, the female consort of El as outlined by the 13th century B.C. texts from Ras Shamra which were likely recorded from oral traditions. As the female head of the Ugaritic pantheon she was the mother of the gods, and was given the epithet 'Lady Athirat of the Sea' (Caquot and Szytler 1980:14; Hadley 2000:40; Stuckey 2003:131).



Alternatively, that same epithet has been translated in several different ways, most notably as: ‘Lady of the Day’, due to her associations with Shapash, the Ugaritic sun goddess; and ‘Lady Athirat who Treads on the Sea’, due to linguistic connection between her Ugaritic name and later Hebrew name translated as ‘to tread’ (Binger 1997:45, 50; Rich 2012:19). An obscure and largely debunked translation of the epithet is the ‘Great Lady who Tramples Yamm’, which refers to the sea as a deity or monster (Daniels 2016:233-234; Natan-Yulzary 2020:132). Athirat was sometimes referred to as *Qds*, pronounced Qudshu and meaning sacred or sanctuary, or *ilt*, pronounced Elat and meaning goddess, though both of these titles were also given to other deities. The former title has led scholars to equate Asherah and the Egyptian Qedeshet, a foreign goddess likely brought to Egypt from the Levant (Maier 1986:83-85; Binger 1997:51-52, 90; Hadley 2000:9; Smith 2014:40). Some scholars, such as Cornelius (2008, 2014) and Daniels (2016), adamantly maintain they are two separate deities, while others, such as Binger (1997), take a more neutral stance. This dissenting opinion stems from the fact that the Bronze Age iconography of Asherah-Athirat is presumed to be of a certain character based on very little textual evidence, and does not take into account her local worship outside of the official state capacity. In later biblical sources, there are also several references to *asherah* as a cult object or symbol, which can be some form of a tree, ranging from an erected pole made of wood to a living tree (Van der Toorn 1998:90; Wyatt 1999a:101-102; Serwint 2002:334; Anthonioz 2014:134). It is possible that as Asherah’s official cult was suppressed, aniconic trees as representative of the goddess were still worshipped in local cults (Binger 1997:114, 141).

The textual evidence from Ugarit provides the most information about Asherah’s character and function in Levantine religion. In the Ba’al Cycle, she is portrayed as the ideal mother: she is the mother of all the gods, she is a mediator who intercedes with El on their

behalf, and she performs “feminine” tasks, such as spinning thread or weaving. In the Epic of Kirta, she is wet-nurse of the gods as well as kings, a function she shares with Anat (Eaton 1964:123; Binger 1997:71, 83; Hadley 2000:43; Stuckey 2003:132). Both her main epithet and her servant, a divine fisherman, strongly connect Asherah with the sea, likely resulting in her worship by seafarers in the Late Bronze Age (Brody 1998:26; Hadley 2000:40; Rich 2012:22). Textual evidence from the Late Bronze Age indicate that Asherah was the goddess of the calm sea, which De Moor (1971:145) indicates makes her the patroness of both fishermen and sailors. Similarly, Shirly Natan-Yulzary (2020) argues in favor of Asherah’s maritime aspects, citing a combination of her epithet, divine assistants, and an alternate translation of an Ugaritic text mentioning weaving. Natan-Yulzary (2020:134, 136) rejects the original translation of Asherah’s weaving tool as a spindle due to Levantine iconographic evidence of weaving tools, and instead translates the tools as the double pin and hook used for weaving fishing nets. Sara Rich (2012:31; 2013:101; 2017:198) also argues for Asherah as the patron deity of Levantine seafarers, indicating that the cedar masts would have represented the *asherah* cult object, allowing for the embodiment of the goddess to fulfill her epithet. Daniels (2016:236), however, argues there is no direct link between Asherah and seafaring. In alternative translations of some Ugaritic texts, Asherah may have also been associated with lions, leading to the epithet as the “Lion Lady” (Maier 1986:167; Binger 1997:52; Serwint 2002:335). Some scholars, however, reject this connection (Wiggins 1991). Like most mother-type goddesses, Asherah was also a possibly a fertility goddess, though more prominently by the cult-worship of the early Israelites and possibly the Egyptians rather than in Ugarit based on iconographical evidence (Eaton 1964:121; Hadley 2000:46-49; Stuckey 2003:132; Jacobson 2015:355). Asherah’s capacity as a

fertility goddess, therefore, has provided further evidence for a tree, often considered a symbol of fertility, as one of her motifs (Hestrin 1987:215; Hadley 2000:43; Serwint 2002:334).

The iconography of Asherah in the Bronze Age is unclear and generally debated. Cornelius (2008:86) even describes the iconography of Asherah as “elusive”. There are no depictions that are labeled Asherah/Athirat (Cornelius 2008:99). Most of the Bronze Age images that can arguably depict Asherah rest on three interpretations: the Egyptian goddess Qedeset can be connected to Asherah’s Ugaritic epithet *qdš*; images of goddesses with trees and branches refer to Asherah because of her fertility aspect and the later associations with an *asherah* cult object in Palestine; and Asherah/Athirat is depicted as a benevolent bestower of blessings due to her position in the Ugaritic pantheon. If the *qdš* epithet indeed refers to Asherah and Qedeset was her Egyptian counterpart, then the Winchester stela (Figure 6.44) from the reign of Ramses III (1198-1166 B.C.) provides the iconography of Asherah to be a nude female with a Hathor hairstyle or wig holding lotuses and/or snakes while sometimes standing on a horse or lion, some of which depict a rosette on its flank.



FIGURE 6.44. Winchester Stela from Egypt, Ramses III, 1198-1116 B.C. Example of Egyptian triple label of Anat-Astarte-Qedeset for one nude goddess, standing on a lion with rosette on its

shoulder, wearing Hathor hairstyle or wig, headdress, holds lotus in right hand, serpent in the left (Cornelius 2008:128, catalog 5.16).

In some images, such as the plaque discovered near the stern of the Uluburun shipwreck (Figure 6.45), the goddess is holding a pair of caprids (Pulak 1998:206). Plaques and figurines with this general iconography have been discovered in the Levant and Egypt throughout the Bronze Age. These images, therefore, associate the motifs of lions, rosette, lotus, snakes, horses, and caprids with Asherah. Maier (1986:85) has argued these motifs indicate the goddess is intimately associated with fertility, grace, and beauty. Rich (2012:23) primarily includes horses as Asherah's totemic animal due to her syncretism with Qedeset and Tanit/Tinnit. Contrastingly, Cornelius (2008:99-101) argues that these motifs are specific to Qedeset as a separate deity from Asherah, insisting that Asherah would be depicted as a mature woman and bears no overt fertility aspects synonymous with youth or the *pontia theron*.



FIGURE 6.45. Gold pendant from the Uluburun shipwreck, 14th century B.C. Example of nude goddess, likely Asherah, with high crown, and caprids held upright by the legs in each hand (Pulak 1998:206).

Clay plaque figurines and seals with a similar composition to the *qdš* type, found almost exclusively in the Levant from the Early Bronze Age to Early Iron Age, depict a nude female usually with a Hathor hairstyle, an stylized pubic triangle, and a tree branch incised near the navel or on either side of the figure, as in Figure 6.46 (Hestrin 1987:216-217; Keel 1998:26; Mazar 2006:251). These images are also very similar to the stylized figures on pendants mainly from Ugarit and its port, Minet el-Beida, dating to the 15th-14th centuries B.C., some of which only include the head, branch, pubic triangle, and sometimes emphasized breasts, such as Figure 6.47 (Keel 1998:24-25; Ziffer 2010:413; Sugimoto 2012:143 n.8). Keel (1993:28, 35) argues that the sacred tree, sometimes abbreviated as simply branches, was related to a goddess from the 3rd millennium B.C. onward, Asherah being the most likely candidate (Dever 1984:27). Some of the pendants also feature a crescent headdress or a crescent moon and other astral symbols below the figure, suggesting that the crescent moon may have been among Asherah's symbols. Later in the Iron Age, the Phoenicians placed crescent-topped poles at the stern of their ships to invoke Asherah's protection and navigational assistance in her syncretism with Tanit/Tinnit (Petley 1990:32; Brody 1998:26-27, 100; Dever 2005:221; Christian 2013:192). Consequently, Asherah's motifs also include a palm tree and sometimes a crescent moon.



FIGURE 6.46. Seal from Lachish, Middle Bronze Age. Example of nude goddess, likely Asherah, with Hathor wig, and stylized palm tree fronds in each hand (Keel 1998:figure 22).



FIGURE 6.47. Gold pendant from Ugarit. Example of nude goddess, likely Asherah, reduced to a head with Hathor wig, emphasized breasts and pudenda, palm frond near navel, and star/rosette background motifs (Caquot and Sznycer 1980:25, plate 17b).

Some Late Bronze Age bronze figurines in the blessing gesture have been also identified as Asherah. The main argument for this identification is that Asherah, as the female head of the pantheon, would have been responsible for bestowing blessings. These figurines include depictions of a standing clothed figure (Figure 6.48) and two seated clothed figures all from Ugarit, as well as a nude figure (Figure 6.49) discovered at the prow of the Uluburun shipwreck (Brody 1998:68; Cornelius 2008:32-33, 100). From these, Asherah is not only associated with certain motifs, but also with a specific blessing gesture.



FIGURE 6.48. Gold plated bronze figurine from goldsmith's workshop at Ugarit, Late Bronze Age. Example of clothed goddess, likely Asherah, performing a blessing gesture (Caquot and Szyner 1980:24, plate 14a).

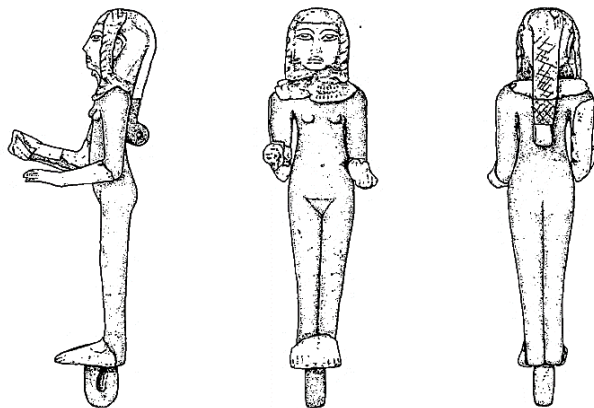


FIGURE 6.49. Bronze figurine from Uluburun shipwreck, 14th century B.C. Example of nude goddess, likely Asherah, with Hathor wig performing a blessing gesture and possibly grasping a missing object in other hand (Pulak 1998:207).

Citing Asherah as the referent in these images derives from several assumptions, though not all are without merit. The most contested is considering the Egyptian Qedeset as a

syncretism of Athirat. Cornelius (1993, 2008, 2014) has built a significant case arguing for the independence of Qedeshet/Qudshu in the Bronze Age. There are, however, examples of iconography that depict motifs of Qedeshet in conjunction with trees, a motif of Asherah, thereby demonstrating some overlapping motifs.

The “Tree of Life” motif is the most common motif depicted on Late Bronze Age ceramic vessels of the southern Levant. It is characterized by a central tree, usually a stylized palm tree, and antithetical caprids that eat from the branches, birds, water, or fish (Hestrin 1987:214-215; Keel 1998:23-24; Sugimoto 2012:131-132). A 13th century B.C. ceramic vessel (Figure 6.50) from the same region with an inscription offering to ‘Elat, one of the titles of Asherah, also includes a frieze of the tree and antithetical caprid motif with two deer, a lion, and a bird in flight. Possibly as a coincidence, ‘Elat is inscribed directly above the tree. This has led to the hypothesis that the tree is a representative and manifestation of the goddess (Hestrin 1987:222; Keel 1998:33; Hadley 2000:159; Ziffer 2010:415; Sugimoto 2012:132). Ornan (2005:45) indicates this theme was also prevalent throughout Near Eastern iconography, arguing the tree would have stood for the storm god and the caprids would represent Shaushka or Ishtar in Syrian and Anatolian seals in the Middle to Late Bronze Ages, instead of the entire theme representing Asherah in Levantine iconography as early as the Middle Bronze Age. Interestingly, this composition is reminiscent of the Nilotic Scene fresco on the east wall in the West House at Akrotiri. This theme is also comparable to a 14th century B.C. cylinder seal found at Tel Batash (Figure 6.51) in the southern Levant likely imported from Cyprus. It is of the Derivative Style of Cypriotic glyptics, characterized with a deity, tree, filling motifs, and a griffin, caprid, or lion (Smith 2006:246). It is possible that due to the find’s location, the Bronze Age Canaanites, and possibly also the Cypriots, recognized this theme as representing Asherah.





FIGURE 6.50. Ceramic ewer decorations and dedicatory inscription in two dimensions from Lachish, late 13th century B.C. Example of ‘Tree of Life’ theme, stylized palm tree with antithetical caprids, a bird, a lion, and two deer (Hestrin 1987:213).

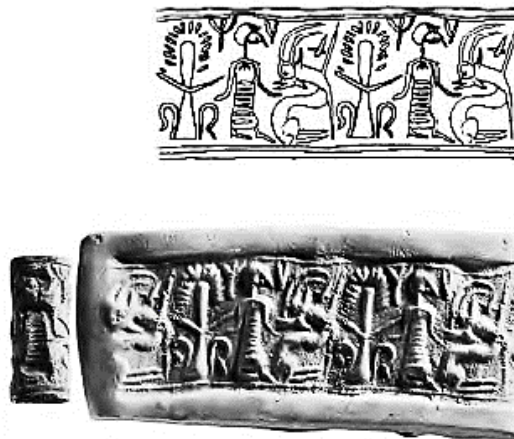


FIGURE 6.51. Chlorite cylinder seal of Derivative Cypriot Style, from Tel Batash, 14th century B.C. Example of ‘Tree of Life’ theme created elsewhere in the Mediterranean, with stylized tree, caprid, and goddess with long dress (Smith 2006:245).

Additionally, a group of nude female figurines also from the Late Bronze Age in the southern Levant (Figure 6.52) combine the motifs of the metal pendants from Ugarit and the ceramic vessels in overt fertility symbolism (Hadley 2000:193; Ziffer 2010:415-416). The suckling motif of these figurines also conveniently recalls Asherah’s function in Ugarit as the divine wet-nurse, further solidifying the likelihood Asherah is a referent of these figurines.

Interestingly, the emphasis on the vulva, though considered in this instance to be a fertility motif, also recalls the overt sexuality of Inanna in the texts regarding her transition into womanhood.

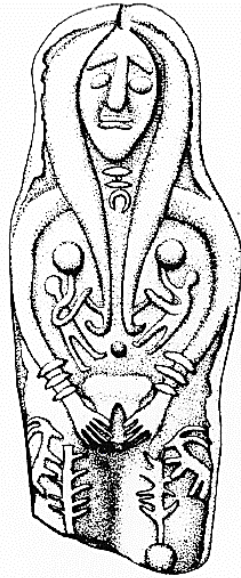


FIGURE 6.52. Figurine from Revadim, Israel Late Bronze Age. Example of nude female, likely Asherah, with long hair, emphasizing her vulva, suckling infants, a palm tree with flanking caprid on each thigh, and a crescent pendant on her neck (Ziffer 2010:416).

Asherah was the likely primary Bronze Age goddess worshipped in the southern Levant after the start of the Iron Age and before Astarte became the primary goddess of the Phoenicians, especially in the cities of Tyre and Sidon (Keel 1998:38; Daniels 2016:245). Iconography from the Iron Age feature the combined motifs of a palm tree, caprids, lions, as well as a goddess, and attests to the possible continuation of the Bronze Age Asherah theme, though it is likely that Yahweh had begun to absorb some of her motifs and functions in the south (Hadley 2000:153; Ziffer 2010:420-421; Sugimoto 2012:128, 130, 137). Consequently, the animals and features that Cornelius associates solely with Qedeshet could also be motifs of Asherah in the Bronze Age, giving some credence to either their overlapping iconography or their syncretism.

Though there is some evidence illustrating the character of Asherah's worship through textual sources and iconography, there is little that is not contested. Through the interpretation of

her epithet 'Lady of the Sea' and her divine fisherman servant, as well as her possible iconographic motif of the crescent, it seems likely that Asherah could have been worshipped by mariners in the Late Bronze Age, and possibly earlier. Rich's (2012) suggestion that the mast of Levantine ships would have symbolized the *asherah* cult object furthers this possibility and provides a connection between the character of Athirat of Ugarit and Asherah of the southern Levant. This reverence by mariners could have resulted in a dispersion of her cult to the Aegean in the Bronze Age (Rich 2012:20). Jacobson (2015) even notes that Asherah's epithet at Ugarit is almost identical to that of Aphrodite, likening her to the Greek patroness of sailors in name as well as function and characteristics. As Aphrodite was worshipped at ports by mariners giving thanks for a safe journey, Asherah-Athirat was intimately connected to port towns, indicated by her epithets, and the seashore while still receiving revered by those who traversed the seas. If all the aforementioned possible motifs are related to Asherah, even those argued to solely depict Qedeshet, then all of her symbols relate in some way to the images in this study, most significantly the palm tree. If Asherah is the patron deity of sailors, the presence of a palm tree as her referent in images of Minoan ships is not out of place. The Ship Procession fresco, which provides the most opportunity for motif comparison in this subcorpus, contains many motifs that are associated with Asherah, such as lions. Binger (1997:45) suggests that Asherah had solar connections because of her epithet, and though there are few iconographic examples of Asherah with a star motif, the star/sun motif on the fresco's ships could also relate to the goddess in her astral capacity. The griffin, butterfly, and dolphin motifs, however, do not directly relate to Asherah's known iconography or mythological character. This is not surprising, however, because those iconographic motifs are infrequently used or understood outside of Aegean iconography. Black and Green (1992:101) even admits that the griffin probably had some sort of

religious significance in Mesopotamian iconography, but its functions are unknown. Based on textual evidence and iconography, therefore, Asherah is the most related to the Minoan deity of this subcorpus in the known Levantine pantheon.

### *Future Research*

In an effort to focus this research on the comparison of one specific region, major deities outside of Mesopotamia and the Levant were excluded. There are several deities, however, that present iconographic and textual parallels worth exploring in order to achieve a fuller analysis of this subcorpus. Specifically, these are Hathor, Isis, and Aphrodite.

In Egypt, Hathor and Isis offer interesting evidence. Hathor was considered the ‘Lady of the Sycamore’ and ‘Mistress of the Date Palms’, in a capacity that likely predated her eventual worship as the cow goddess (Buhl 1947:86; Maier 1986:218). She was closely linked with the pharaohs, especially as their symbolic mother. Hathor, like Inanna-Ishtar, fulfilled seemingly contradictory roles, as both the bringer of fertility and joy while also maintaining a savage ferocity as a warrior (Tawaza 2014:111). Hathor was also closely connected to boats, serving as the navigator of the deceased’s barques with her steering oar, and maritime activities as the ‘Mistress of the Port’ (Hollis 2009:3). Also like Inanna, a cult statue of Hathor was ritually transported on the Nile to visit Horus at Edfu as part of a sacred marriage (Canney 1938:145, n. 29). Another Egyptian festival, the Opet Festival, celebrated the flooding of the Nile in Thebes in order to promote the fertility of Amun-Re and the pharaoh. During the festival, cult statues of the deities were ritually transported down the river, similar to the New Year Festival in Mesopotamia (Canney 1938:133-135; Morgan 1988:145).

Originally, Isis played a minor role in the Egyptian pantheon, and primarily accompanied the deceased on their funerary barque. During the 18th Dynasty (1550-1292 B.C.), however, Isis began to take over many of the symbols and functions of Hathor. It was at that time that she was also considered a tree goddess and was closely linked with the pharaohs, her headdress symbolizing their throne (Buhl 1947:95). Isis was also considered linked to maritime activities, gaining the epithet of 'Mistress of Navigation' (Hollis 2009:4). In the Classical period, her cult spread throughout the Mediterranean, and she was especially honored during the *Navigium Isidis* that was celebrated on March 5th to inaugurate the sailing season (Canney 1938:135; Witt 1971:180-181). Interestingly, her mythology involving Osiris shares many parallels with Inanna and her consort Dumuzi.

Though Aphrodite may have emerged on Cyprus as early as the Late Bronze Age as the main Cypriot goddess, an examination of her mythology and iconography from the Classical period would be useful (Budin 2004:109). She was closely linked with the sea, with the epithet 'Lady of Fair Sailing and Safe Port'. Not only was she born from the sea, but she was also the patron deity of sailors, navigation, safe passage, and trade. Additionally, she had many cult sites and temples near the sea where votive offerings included anchors and boat models, as well as dedicatory inscriptions were found (Marcovich 1996:48; Demetriou 2010). Despite her persona as the goddess of sexual love and beauty, Aphrodite was also characterized as a warrior (Budin 2004:110). Consequently, she has been likened to both Astarte and Inanna-Ishtar, and shared their motifs of a dove and possibly a lion (Marcovich 1996:52). Finally, Aphrodite's relationship with Adonis also parallels Inanna and Dumuzi's mythology, illustrating the degree of syncretism between the two deities.

## Conclusion

The goal of this chapter was to conduct an iconographical analysis of the images in this subcorpus, using the three-part method proposed by Knight (2013). Having completed the third phase of the iconographical method, it is finally possible to propose some referents. The first two phases of this method, namely defining and identifying the theme, demonstrate that not only does this subcorpus clearly relate to the character of Minoan ritual iconography, but also that the theme is related to a female deity or her symbolic representations in a boat. Through cross-cultural comparisons from the Bronze Age, some Near Eastern deities certainly present comparable iconographic and mythological characteristics. The two deities that are most similar in iconographic and textual evidence are Inanna-Ishtar and Athirat-Asherah.

It must be stressed that the Minoan deity present in this subcorpus is likely not Inanna-Ishtar or Athirat-Asherah. Based on the iconographic principle of disjunction, the imagery that is borrowed across cultures, or even handed down through subsequent generations, is subject to constant re-evaluation and reinterpretation based on the existing cultural models (Knight 2013:78). It is more likely, therefore, that the Minoan goddess was of a similar character to Inanna-Ishtar or Asherah, perhaps seen as the local version of the foreign deity. Daniels (2016:316, 553) likens the Minoan goddess to the Near Eastern Queen of Heaven, manifested in most of the deities discussed in this study, whose shared motifs would have been recognized across the Mediterranean cultural groups. At times, the syncretism of Inanna-Ishtar and Asherah with local deities in the Near East makes it difficult to isolate which version of the goddess is most similar to this study. If this Minoan goddess was indeed a syncretism of the overarching Mesopotamian or Levantine goddesses, then more iconographical and textual evidence would help the analysis. At present, the available data limits any definitive interpretations.

Nevertheless, the third phase of the iconographical analysis method has successfully provided possible referents for the Minoan deity in this study.

## CHAPTER SEVEN: CONCLUSION

This research began with an interest in Minoan culture and an interest in explaining the images of women transporting trees in a boat. Any iconographical study is bound to be biased by the researcher's subjective understanding of the referent, constrained by his or her own cultural point of view. Though it is impossible to completely remove bias, this study has attempted to be as objective as possible by utilizing iconographical analysis to contextualize this unique ritual. The analysis has been dictated by the images and ethnographic comparison, and has reached an unexpected result, one which may help to understand Minoan maritime culture and Minoan culture in general within the larger sphere of the Late Bronze Age Mediterranean.

### **Review**

This study's theoretical framework utilizes theories in both ritual archaeology and iconography. In particular, the production and utilization of special artifacts, in this case images depicting a common theme, is an observable pattern that can elucidate the significance of the artifact and the image. The repetition of the iconographic theme of the female figure and tree in a boat indicates that this theme held significance to at least one group of Minoans. The meaning it held for that group, therefore, can be better understood in the context of the other motifs present in the subcorpus, the Aegean contexts in which the artifacts were discovered, and the larger context of Bronze Age Mediterranean iconography. In order to understand this iconographic theme, this study has applied the iconographic theory and methodology proposed by Knight (2013). Special emphasis has been placed on the theoretical iconographic principles of cumulative sufficiency and of complexity of corpus (Knight 2013:71, 87). These principles are integral to the ability of this analysis to extrapolate motifs from detailed depictions, such as the



Ship Procession fresco, and confidently categorize the motifs from less detailed images as belonging to the same theme and therefore the same subcorpus. In following the hypothesis that an emic viewer understands a motif or theme divorced from the original context, the etic viewer is granted the authority to attempt some analysis and understanding. Without these principles, it is impossible to discern any meaning from the study of images.

Though not the main focus of this iconographic study, the multivalent contexts are especially apparent and worth mentioning. The Data Chapter specifically details the provenience in addition to a thorough description of each object. Most of these images were depicted on artifacts made from precious materials, indicating that the image conveys a message of equal importance to the status of the owner or commissioner. Arguably, though not a gold ring, the Anemospilia seal also evokes a sense of status. The image was purposefully positioned on an agate stone that was likely curated and crafted specifically for this image because of the pattern created by the black and white veins of the stone. That intent alone demonstrates that both the stone and the image were significant. Similarly, the conscious choice to depict the motifs on the two sides of the Tsivanopoulos seal also indicates that these motifs were elevated to a certain status in conjunction with one another. It is no coincidence, therefore, that the Ship Procession fresco is also depicted in the same room as another scene involving a mythological hunting scene, indicating that the Tsivanopoulos seal references the same theme.

Provenience also plays a key role in deciphering meaning. As indicated in the Data Chapter, of the artifacts with confirmed locations, all but the Mochlos Ship Cup were discovered in elite or ritually heightened locations. The Anemospilia seal, for example, can potentially be considered contextually both elite and ritual due to location. It was worn on the wrist of a man who likely enjoyed the benefits of good nutrition, considered a sign of elite status, and who was

in a small temple directly associated with Mount Juktas. Several of the other artifacts were found in the same context as other precious items. The Tiryns ring, for example, was buried in a cauldron with other valuable artifacts which may have been curated over generations to emphasize their status. This connection between the elite and maritime iconography is also exemplified by the emphasized maritime context of the Ship Procession fresco in the West House. The owner may have been a wealthy merchant due to the lead measuring weights from the ground floor and the abundance of loom weights discovered in the “Minoanized” room adjacent to the frescoes on the first floor (Berg 2019:251). The loom weights are usually thought to be used for weaving textiles, which was likely a great source of wealth for the Minoans, but they could have also been for making the fishing nets or sails that helped maintain the owner’s status. The Makyrialos seal was also discovered in a context that was simultaneously elite, ritual, and maritime, further highlighting the importance of its unique iconography (Davaras 1980).

The first step in Knight’s (2013) three-part iconographic analysis methodology involves describing and defining the subcorpus. The images included in this study are demonstrably separate from other ship images with the inclusion of one or more motifs of cultic significances: human figures, ritual gestures, elements that heighten the ritual significance of the vessel, and narrative content, as originally indicated by Wedde (2000). Classifying attributes, or those salient features that generally refer to the subject, are recognized in this subcorpus as: *akrostolia*, *ikria* or stepped shrines, stern devices, awnings, nonsalient decorations, and ritual gestures. This study proposes that these attributes are the motifs that can categorize a ship image as ritually heightened, especially when depicted in conjunction with multiple motifs. Identifying attributes are those salient features that directly indicate the referent of the image. In this study, these

motifs that identify the theme include: a tree, fantastical hull, salient decorative motifs, and a female figure, especially one engaged in ritual gestures or wearing distinctive personal adornment. Some elements, such as the surrounding landscape, are not considered relevant to the identification of the referent, but still may be helpful to an emic viewer in contextualizing the scene. By employing the iconographic principle of cumulative sufficiency, it is clear that all of the images in this subcorpus relate to the same theme: the female figure and tree in a boat. Though most of the images do not contain both the tree and the female figure in the boat, the addition of the identifying attributes leads to the reasonable conclusion that they all reference the same theme. When the female figure is absent, other identifying motifs refer to her, symbolize her presence, or indicate her veneration. An emic viewer would have understood this, and so this iconographic method allows for the possibility of hypothesizing the relationship between the motifs.

During analysis and comparison with other Aegean images of purported ritual significance, it became clear that several motifs have been potentially mislabeled in previous scholarship. These motifs have a direct influence on the analysis of this subcorpus and so this study proposes their corrections, which is essential to future scholarship, especially since some misunderstandings have resulted in the perpetuation of misinformed rules for Minoan ships. This study proposes the following corrections:

- The *akrostolia* can be depicted at both the bow and the stern. The Stathatos seal and the Mochlos Ship cup, for example, clearly depict the motif at both extremities. This potentially necessitates the re-evaluation of motifs identified as *ikria* based on the motif's relation to the *akrostolia*.

- Hull decorations are not necessarily indicative of hull construction materials or the presence of rowers. Based on comparisons with frescoes, the oblique lines of the Tiryns ring or Makrygialos seal, for example, clearly refer to diagonal or zig-zag hull decorations.
- Stylized human or human-like figures should be compared against other contemporary depictions to determine identification. The figure on the Ayia Triada sealing, for example, is not a bird but rather a female with a distinctive conical headdress that has clear comparable examples.
- Stylized animal figures should be treated likewise. The protomes of the Ayia Triada sealing and Anemospilia seal, for example, are not birds, but are instead griffins, which have clear comparisons in Aegean iconography.
- Gender in Aegean Bronze Age iconography does not always follow clear rules. Women were not always depicted in glyptics as voluptuous women wearing flounced skirts, and men were not always depicted as wearing a kilt and codpiece. The Anemospilia seal, for example, possibly wears a skirt with articulated legs, though the figure has alternatively been drawn as wearing no clothing.
- Photographs of artifacts should be relied upon more than replicated drawings. The drawings of the Anemospilia seal, for example, do not depict the skirt that is more obvious in photographs. Similarly, the third floating object often reference on the Mochlos ring was more likely damage to the ring, which can be more easily discerned in photographs of the original ring.

- Motifs should not be relied upon to define key characteristics of the ships, such as identifying the bow and stern or construction material. Instead, hull construction evolution should guide the characteristic identifications.

This last point has been especially problematic for two of the images in this subcorpus. The position of the female figure in the Mochlos ring has led to unnecessary debate about her arrival or departure. By applying the hypothesis that the boat was evolved from logboats, however, the identification of the sharply rising stern is more apparent. Similarly, the double *akrostolia* on the surviving portions of the Mochlos Ship Cup have led to the incorrect identification of the preserved pieces as only the ships' bows and, therefore, an incorrect reconstruction.

As demonstrated by the Analysis Chapter, many of the classifying and identifying attributes directly reference motifs in other Minoan ritual images, especially those depicting the tree-shaking ritual or relating to a Minoan deity or priestess. Instead of belonging to an entirely separate subcorpus of ritual images, the analysis reveals that this group of ritual ship images are actually a part of the larger corpus of ritual Minoan iconography. Due to this association, the female figure in the boat of this subcorpus also likely relates to this deity. Whether the female figures depicted are the actual deity or a priestess of this deity is beyond the scope of this study. It is sufficient to understand that the deity is the intended referent. Motifs that refer to the deity include: a tree, hippocampus or horse, griffin, lion, dove, butterfly, dolphin, sun/star, and lily/crocus. Some images are more emblematic in character, especially those with limited iconographic context like the Ayia Triada sealing. Others are definitively narrative, such as the Tiryns and Candia rings or the Ship Procession fresco, indicating that they both may be a part of

a larger narrative understood by the emic viewer. Ultimately, the maritime quality of these images suggests that they refer to a maritime aspect of a commonly depicted Minoan goddess.

### **Inanna-Ishtar or Asherah?**

The third phase of the iconographic method in prehistoric societies is an ethnographic analogy that involves cross-cultural comparison with contemporary cultures or historical homology. In an effort to focus the analysis, this study only compared the Near Eastern regions of Mesopotamia and the Levant. These two regions were chosen not only for their ample iconographic and textual evidence, but also because they have demonstrable contact with Neopalatial Minoans. By the Late Bronze Age, the Minoans were integral in an extensive exchange network that had begun almost two thousand years earlier and involved the exchange of raw and unfinished goods, as well as ideas and symbols.

Of the iconographical and textual evidence regarding the deities surveyed, Inanna-Ishtar of Mesopotamia and Athirat-Asherah of the Levant have the most in common with the Aegean deity referent in this study. Unfortunately, there are no published images of either deity in a boat with a tree, making an exact comparison impossible. The similarities, however, are still evident in both iconography and mythology.

Inanna's mythical transport of the *huluppu*-tree and the sacred *mes* are both reminiscent of the female figure and tree in a boat theme as well as the female figure paddling motif in this study (Marinatos 1993:183). Her integral involvement in the annual fertility and kingship rituals are also similar to the iconography of the Tiryns and Candia rings. Inanna's epithet of the 'Lady of the Date Clusters' and Ishtar's epithet of 'Ishtar of the Poplar' strengthen the similarities with the Minoan deity (Wolkstein and Kramer 1983:178; Archi 2011:5). The iconography of Inanna-

Ishtar also recalls many of the motifs in this study and throughout Aegean iconography, namely the reed symbol, rosette, star or star disc, lion, dove, ibex, and date palm (Black and Green 1992:109; De Shong Meador 2000:12; Parpola 2000:194, 199; Ornan 2005:158-159; Cornelius 2014:91). Though there are few references in the Bronze Age, Inanna-Ishtar still has some links to the sea, such as the recorded sacrifice to ‘Inanna of the Sea’ at Emar and her defeat of the sea serpent in *The Song of Hedammu*, a Hittite myth recorded around the 15th century B.C. (Caquot and Szyner 1980:7; Daniels 2016:174-175).

Our knowledge of Asherah’s mythology is limited, but in 13th-12th centuries B.C. Ugarit she is described as a mother goddess, wet-nurse of the kings, and an expert in weaving textiles or fishnets, depending on the translation (Eaton 1964:123; Binger 1997:71, 83; Hadley 2000:43; Stuckey 2003:132; Natan-Yulzary 2020:134, 136). Her main epithet of ‘Lady Athirat of the Sea’ has been alternatively translated as ‘Lady of the Day’, and ‘Lady Athirat who Treads on the Sea’, emphasizing the extent to which Asherah’s mythology and iconography is contested (Caquot and Szyner 1980:14; Binger 1997:45, 50; Hadley 2000:40; Stuckey 2003:131; Rich 2012:19). Unlike Inanna-Ishtar, none of Asherah’s iconography is labeled, and so her identifying attributes are also contested. If the blessings-bestower from Ugarit, the *qdš* type theme, and the *asherah*-pole motifs are all iconographically related to Asherah, then her associated motifs include the palm tree or branch, caprid, lotus, snake, lion, rosette, crescent moon, and possibly a bird, fish, and horse (Dever 1984:27; Hestrin 1987:214-217, 222; Brody 1998:96-97; Keel 1998:23-25, 33; Hadley 2000:43, 159; Serwint 2002:334; Ziffer 2010:413, 415; Rich 2012:23, 28, 31; Sugimoto 2012:131-132). Asherah’s most obvious connections to the sea are the more common translation of her epithet and her divine fisherman helper, suggesting sovereignty over a calm sea (De Moor 1971:145). Rich (2012:31; 2013:101; 2017:198) adds that Asherah was the patron deity of

Levantine seafarers because of her aniconic representation of the *asherah*-pole, while Brody (1998:26-27) stresses her syncretism with Tanit/Tinnit and therefore navigational assistance. The suggestion that Levantine sailors would have recognized Asherah's divine presence in the form of the mast as an aniconic referent is especially poignant considering that the tree on the Makryialos seal was previously mistaken for a mast with drooping rigging by some scholars (Davaras 2004:4). Perhaps the Latin word, *arbor*, being identical for tree and mast is not a coincidence, but rather a reference to a deity that was brought to Italian shores in the Bronze Age.

Based on the above information, the Near Eastern deity that is the most similar to the Minoan deity in this study is Asherah because of the shared iconographic motifs, connection to the sea, and greater potential for iconographic transference through economic exchange. Both of the candidates share many of the same iconographic motifs present in this study's images, but Asherah appears to have a stronger connection to trees, which is a motif central to the iconographic theme of this subcorpus. Inanna-Ishtar is depicted in conjunction with palm trees in the Late Bronze Age, but Asherah is represented both with trees and as an aniconic tree deity. This correlates more with the motifs of this study because the tree is sometimes depicted with the Minoan deity and sometimes as a representation of her.

Though it is not well documented and the connections are sometimes doubted (Daniels 2016), Asherah is the likeliest candidate for patron of Canaanite seafarers as early as the 16th century B.C. (Rich 2012:23). Inanna-Ishtar, on the other hand, did not need to fulfill that role in Mesopotamia because Nanshe was already the Sumerian patron deity of mariners. Some scholars, such as Daniels (2016), doubt Asherah's connection to the sea due to lack of textual and iconographic evidence equating the two. That discrepancy can be accounted for simply



because very few texts survive that mention Asherah, and no iconography can be absolutely attributed to her. Countless documents and iconographic evidence survive mentioning Inanna-Ishtar but few, however, relate her to the sea. This indicates that if that was Inanna-Ishtar's role in some local manifestations, it was not ubiquitous. Though more analysis is needed that positively match the *qdš* type of Levantine goddess representations, there is not enough evidence to absolutely determine that they do not depict Asherah. The discovery of the *qdš* type plaque at the stern of the Uluburun wreck suggests that a sailor or passenger sought the protection of this deity during the voyage (Pulak 1998:206). Considering that the plaque figurines from Palestine and the pendants from Ugarit both feature tree motifs as well as the theory that the mast of Levantine vessels could have been an aniconic representation of Asherah, the association of the *qdš* type iconography with Asherah seems the most likely (Hestrin 1987:216-217; Keel 1998:24-26; Mazar 2006:251; Ziffer 2010:413; Rich 2012:31; Sugimoto 2012:143 n.8). Asherah, therefore, was likely the patron deity of a sailor or passenger aboard the Uluburun ship.

Finally, due to the nature of Late Bronze Age exchange across the Mediterranean, the Minoans possibly would have been exposed to the iconography of Asherah more than Inanna-Ishtar. Minoans leaders certainly would have had contact with cultures who worshipped Inanna-Ishtar, as exemplified by the 18th century B.C. inventory documents written at Mari that mention a meeting with Cretan representatives (Foster 2018). Based on evidence from the Uluburun shipwreck, however, Canaanite sailors possibly carried images of Asherah with them during their voyages for protection. The shift in the Late Bronze Age Near Eastern representations of the tree goddess towards less expensive and more easily replicated materials, such as terracotta molded figurines and plaques, attests to the popularity of this deity amongst the populace, which likely included sailors, and not just the elite (Keel 1998:30). The reliefs of Canaanite sailors on the

tomb of Kenamun (14th century B.C.), the Dor Scapula (7th-6th centuries B.C.) depicting Cypriot worshippers near a ship, and documentary evidence from several Mediterranean cultures during the Iron Age all attest to the prevalence of ritual appeasement to deities by sailors (Brody 1998:39-62; Sauvage 2015; Blakely 2017:373-374). This pervasiveness of rituals and popular ritual imagery suggests Asherah's motifs could have been more easily spread by Canaanite sailors. A craftsman could have copied a motif after seeing it first hand, resulting in a more accurate likeness than a second hand description (Crowley 1977:268). A motif that perhaps contained similar meaning or was seen in the same context would have had a greater chance of iconographic transference (Crowley 1977:269).

### **Implications for Minoan Ritual Imagery**

Both the iconographic and textual analysis indicate that the referent of the female figure and tree in a boat theme is related to the elite or ruling class in Minoan society. Not only do the images in this subcorpus suggest elite ownership, but also the related motifs are repeated in other elite contexts. This referent, therefore, appears to be a maritime manifestation of a specific Minoan deity who is otherwise depicted in terrestrial contexts relating primarily to fertility, regeneration, animals, and rites of passage (Morgan 1988; Goodison 1989; Marinatos 1993; Wachsmann 1998; Davaras 2004; Daniels 2016:316). This elite control of the iconographic theme in this study corresponds to two main understandings: Minoan public religion and cult practices during the Neopalatial period were dominated by the palatial elite; and the ruling elite of the eastern Mediterranean maintained a special relationship with their supreme goddesses during the Bronze Age (Younger and Rehak 2008b:166; Daniels 2016:361). The reach of the Knossian elite in charge of maritime affairs, in particular, may have extended to the coastal town

of Mochlos since both the Mochlos ring and Ship Cup may have been imported from the area of their centralized control (Soles 2012:188).

Daniels (2016) has demonstrated that the various cultures throughout the Mediterranean worshipped a supreme goddess, who was always different but uniformly called the Queen of Heaven, in a shared ritual language that continued from the Bronze Age through the Iron Age. As the source of the ruler's power shifted from agricultural fertility or military prowess to overseas trade, the domain of the Queen of Heaven shifted from control of fertility to control of the seas (Daniels 2016:225). This is consistent with the iconographic analysis in this study. The same motifs that are associated with the Minoan goddess began to have stronger connections to the sea in the Late Bronze Age, as demonstrated by both sea creatures as in the popular LM IB marine style pottery and ships as in the Ship Procession fresco, for example. Again, Asherah's association with fertility, nurturing rulers, and the protectress of sailors makes her a possible deity that Minoans could have recognized as similar to their own.

On the other hand, it is likely that religion and cult worship fluctuated during the Neopalatial era, with localized worship in the various administrative regions and even across households (Younger and Rehak 2008b:170). The subcorpus suggests that this manifestation of the deity was more popular in some areas with maritime connections, but was not pervasive throughout the Minoan sphere of influence. This is also consistent with the supreme deities in charge of the welfare of rulers and seafarers during the Bronze Age, such as Inanna-Ishtar and Asherah, who had universal appeal as well as personal and localized cults with different qualities evoked and entreated depending on the context. The Minoan goddess, whose motifs are repeated in both terrestrial and maritime contexts, could have been similarly evoked by the ruling elite to maintain the source of their power as well as sailors who likely turned to her for protection.

The Aegeans clearly maintained an intimate connection with the sea even before the maritime iconography attests in the Late Bronze Age. As the Mediterranean maritime exchange network strengthened throughout the Bronze Age, the Aegean traditional maritime culture morphed from a source of sustenance to a source of wealth, especially for the Minoan elite. The goddess associated with trees and animals ensured the fertility of land, and her maritime aspect ensured prosperity of the ruler. Unfortunately, the iconography does not elucidate much about the sailors themselves, or their subculture for that matter. They are depicted as willing, or perhaps unwilling, participants in the festivals associated with the Minoan goddess. Later Iron Age Phoenician sailors, for example, were active participants in the veneration of their patron deity Tanit/Tinnit through boat model votive offerings and the transportation of her statue between winter and summer residences in the Western Mediterranean (Raban and Kahanov 2021:71). Since Asherah was likely the patroness of Canaanite sailors in the Late Bronze Age just as Tanit/Tinnit was of Iron Age Phoenician sailors, it seems likely that the Minoan deity who combines aspects of trees and the sea would have also been the deity venerated by Aegean sailors to traverse the sea without incident. Though primarily promoted by the elite, based on the evidence in this study, the Minoan deity would have likely also had universal appeal and would have been called to protect those responsible for the transportation of the source of the power of the elite.

### **Suggestions for Future Research**

This study has delved into the comparisons of Bronze Age Near Eastern ritual imagery to that of the Aegean in order to better understand the ritual ship imagery created primarily by Neopalatial Minoans. A more comprehensive comparison could also include Middle and New

Kingdom Egyptian iconographic and ethnographic comparisons, as well as later Classical Greek comparisons. More specifically, as mentioned in the Analysis Chapter, an iconographic analysis of Hathor, Isis, and Aphrodite would be a beneficial counterpart to the Mesopotamian and Levantine deities in this study.

Another possible research opportunity to better understand the ritual actions possibly related to the Minoan sea goddess could involve an analysis of votive offerings at peak sanctuaries, cave shrines, domestic shrines, and burials. In particular, sea pebbles, triton shells, and boat models have been discovered at these ritual sites, indicating that specified rituals had maritime connections (Shaw 2004:143-144; Kyriakidis 2005a:143-144, 149, 156, 162; Soles 2012:188, 197-198). It would be interesting to discover if these votive offerings and grave goods exhibited patterns or displayed connections to the Minoan sea goddess who is apparent in ritual iconography, thereby possibly confirming ritual performance of the Minoan populace.

### **Final Thoughts**

The results of this study indicate that there was a repeated iconographical theme of a female figure and tree in boat that potentially referenced the Aegean version of Asherah in the Bronze Age. Again, this does not mean that the deity referenced by the motifs in this study was actually Asherah, but rather that the Aegeans would have likely recognized the similarities of the two deities. The results from this study reflect a *koine* that likely existed throughout the Late Bronze Age Mediterranean regarding a tree deity who is also associated with trees, along the same veins as the *koine* argued by Marinatos (2010) for the Minoan solar deity. These results are, surprisingly, congruent with many of the seemingly disassociated interpretations of the iconography in this study as described in the Literature Review chapter, and may serve as a

bridge between the images that are not often considered together. The ritual event depicted in the Ship Procession fresco, Candia ring, and Tiryns ring, for example, are likely a similar event because of similar iconographic constructs. These depictions also recall the same festivals that occurred in the Near East that reinforce the ruler's leadership. These festivals had overt tones of fertility and renewal as they relate to the Queen of Heaven, most overtly with the Mesopotamian New Year's festival and Inanna-Ishtar. Therefore, the fertility or vegetation festival proposed by Wachsmann (1998) or the renewal of the sailing season proposed by Morgan (1988) and Davaras (2004) for the Ship Procession fresco and Stathatos seal may not be as seemingly dissimilar to the *hieros gamos* scene proposed by Mylonas (1945) for the Candia and Tiryns rings.

The same deity relating to the sea is referenced in the remaining images in this study through the repetition of tree and animal motifs associated with the heightened ritual significance of the ships. These classifying motifs are also depicted in images with contexts relating to tree-shaking, presentation, or epiphany scenes, indicating that the deity in this study is a local manifestation of the same goddess with several permutations who appealed to a broad swath of society. Though Tully's (2016) analysis has drawn a similar conclusion, namely the connection of Asherah to the elite and protection of sailors, this study proposes an important difference. This study suggests the iconographic theme of the tree and female figure in a boat is not a projection of Cretan power abroad, but rather an elite ideology distributed throughout their sphere of influence to broadcast their power to other Minoan subcultures through the prosperity provided by their patron deity.

This deity referenced is at times depicted as a female meant to represent the goddess, but she is also referenced by motifs meant to evoke her presence, such as an aniconic tree. The iconographic theme of the female figure and tree in a boat, therefore, connects these ritual ship

images to the broader context of Minoan ritual iconography. The ethnographic comparison to the Near East suggests that the referent goddess held significance in protecting the Aegean elite as well as sailors, similar to the role of Asherah in the Levant and other goddesses in the Late Bronze Age and beyond.

## REFERENCES

Albright, W. F.

1939 Astarte Plaque Figurines from Tell Beit Mirsim. In *Mélanges Syriens Offerts à Monsieur René Dussaud*. Franz Cumont, editor, pp. 117-120. Geuthner, Paris, FR.

Alexiou, Stylianos

1958 I minoiki thea meth' ypsomenon xeiron. *Kretika Chronika* 12:179-299.

Amar Annus

2002 *The God Ninurta in the Mythology and Royal Ideology of Ancient Mesopotamia*. State Archives of Assyria Studies, Volume XIV. The Neo-Assyrian Text Corpus Project, Helsinki, FI.

Anderson, Romola and R. C.

1963 *The Sailing-Ship: Six Thousand Years of History*. Bonanza Books, Prineville, OR.

Anthonioz, Stéphanie

2014 Astarte in the Bible and her Relation to Asherah. In *Transformation of a Goddess: Ishtar-Astarte-Aphrodite*, David T. Sugimoto, editor, pp. 125-140. Göttingen, Fribourg, CH.

Archi, Alfonso

2011 The Gods of Elba. In *Annual Report NINO and NIT 2010*. Jesper Eidem and Carolien van Zoest, editors, pp. 3-12. The Netherlands Institute for the Near East, Leiden, NL.

ARTSTOR

2022 ARTSTOR: Art and Media from Public Collections. ARTSTOR, ITHAKA® <<https://library.artstor.org/#/home>>. Accessed 25 March 2022.

Assmann, Jan

1999 Isis. In *Dictionary of Deities and Demons in the Bible*. Karel van der Toorn, Bob Becking, and Pieter W. van der Horst, editors, pp. 456-458. Eerdmans, Leiden, NL.

Barnard, Kellee A., Thomas M. Brogan, Ann M. Nicgorski, Mary Ellen Soles, and Jeffery S. Soles

2003 The Neopalatial Pottery: A Catalog. In *Mochlos IB: Period III. Neopalatial Settlement on the Coast: The Artisans' Quarter and the Farmhouse at Chalinomouri. The Neopalatial Pottery*. Vol. 8. Jeffrey S. Sole and Costis Davaras, series editors, pp. 33-98. INSTAP Academic Press, Philadelphia, PA.

Basch, Lucien

1987 *Le Musée imaginaire de la marine antique*. Hellenic Institute for the Preservation of the Nautical Tradition, Athens, GR.

Bass, George F.

1998 Forward. In *Seagoing Ships and Seamanship in the Bronze Age Levant*, pp. ix-x. Texas A&M University Press, College Station, TX.



Bell, Catherine

1992 *Ritual Theory, Ritual Practice*. Oxford University Press, New York, NY.

1997 *Ritual: Perspectives and Dimensions*. Oxford University Press, Oxford, UK.

Berg, Ina

2019 *The Cycladic and Aegean Islands in Prehistory*. Routledge, New York, NY.

Betancourt, Philip P.

2008 Minoan Trade. In *The Cambridge Companion to the Aegean Bronze Age*. Cynthia W. Shelmerdine, editor, pp. 209-229. Cambridge University Press, Cambridge, UK.

Betts, John H.

1968 Trees in the Wind on Cretan Sealings. *American Journal of Archaeology* 72(2):149-150.

1973 Ships on Minoan Seals. In *Marine Archaeology*. D. J. Blackman, editor, pp. 325-338.

Archon Books, Hamden, CT

Binger, Tilde

1997 *Asherah: Goddesses in Ugarit, Israel and the Old Testament*. Journal for the Study of the Old Testament Supplement Series, 232. Sheffield Academic Press Ltd, Sheffield, UK.

Black, Jeremy and Anthony Green

1992 *Gods, Demons and Symbols of Ancient Mesopotamia: An Illustrated Dictionary*. The British Museum Press, London, UK.

Blakely, Sandra

2017 Maritime Risk and Ritual Responses: Sailing with the Gods in the Ancient Mediterranean. In *The Sea in History – The Ancient World*. Philip de Souza, Pascal Arnaud, Christian Buchet, editors, pp. 362-379. Boydell and Brewer Press, Suffolk, UK.

Blakolmer, Fritz

2017 Image and Architecture: Reflections of Mural Iconography in Seal Images and Other Art Forms of Minoan Crete. In *Minoan Realities: Approaches to Images, Architecture, and Society in the Aegean Bronze Age*. Diamantis Panagiotopoulos and Ute Güntel-Maschek, editors, pp.83-114. Presses Universitaires de Louvain, Louvain-la-Neuve, BE.

Bosanquet, Robert C., and Richard M. Dawkins

1923 *The Unpublished Objects from the Palaikastro Excavations, 1902-1906*. BSA Suppl. No. 1. Macmillan & Co., London, UK.

Bradley, Richard

2003 A Life Less Ordinary: the Ritualization of the Domestic Sphere in Later Prehistoric Europe. *Cambridge Archaeological Journal* 13(1):5-23.

- Brecoulaki, Hariclia, Sharon R. Stocker, Jack L. Davis, and Emily C. Egan  
 2015 An Unprecedented Naval Scene from Pylos: First Considerations. In *Mycenean Wall Painting in Context. New Discoveries, Old Finds Reconsidered*. Hariclia Brecoulaki, Jack L. Davis, and Sharon R. Stocker, editors. pp. 257-287. National Hellenic Research Foundation, Institute of Historical Research, Athens, GR.
- Brody, Aaron Jed  
 1998 "Each Man Cried Out to His God": *The Specialized Religion of Canaanite and Phoenician Seafarers*. Harvard Semitic Museum Monographs, No. 58. Scholars Press, Atlanta, GA.
- Broodbank, Cyprian  
 1989 The Longboat and Society in the Cyclades in the Keros-Syros Culture. *American Journal of Archaeology*, July 93(3):319-337.
- 2004 Minoanisation. *Proceedings of the Cambridge Philological Society* 50:46-91.
- 2013 *The Making of the Middle Sea: A History of the Mediterranean from the Beginning to the Emergence of the Classical World*. Oxford University Press, New York, NY.
- Budin, Stephanie L.  
 2004 A Reconsideration of the Aphrodite-Ashtart Syncretism. *Numen* 51(2):95-145.
- 2011 Review of Nanno Marinatos, *Minoan Kingship and the Solar Goddess: A Near Eastern Koine*. *The Classical Review* 61(2): 576-578.
- 2014 Before Kypris was Aphrodite. In *Transformation of a Goddess: Ishtar-Astarte-Aphrodite*, David T. Sugimoto, editor, pp. 195-216. Göttingen, Fribourg, CH.
- Buhl, Marie-Louise  
 1947 The Goddesses of the Egyptian Tree Cult. *Journal of Near Eastern Studies* 6(2):80-97.
- Canney, M. A.  
 1938 Boats and Ships in Processions. *Folklore* 49(2):132-147.
- Caquot, André and Maurice Sznycer  
 1980 *Ugaritic Religion*. E. J. Brill, Leiden, NL.
- Casson, Lionel  
 1971 *Ships and Seamanship in the Ancient World*. Princeton University Press, Princeton, NJ.
- 1975 Bronze Age Ships. The Evidence of the Thera Wall Paintings. *International Journal of Nautical Archaeology* 4(1):3-10.

- Chapin, Anne P.  
2016 Into the Labyrinth: Research Methods and the Study of Minoan Iconography. *Pharos* 22(1):9-26.
- Cherry, John F.  
1986 Politics and Palaces: Some Problems in Minoan State Formation. In *Peer Polity Interaction and Socio-political Change*. Colin Renfrew and John F. Cherry, editors, pp. 19-45. Cambridge University Press, Cambridge, UK.
- Childe, V. Gordon  
1925 *The Dawn of European Civilization*. K. Paul, Trench, Trubner & Co., London, UK.
- Christian, Mark A.  
2013 Phoenician Maritime Religion: Sailors, Goddess Worship, and the Grotta Regina. *Die Welt des Orients* 43(2):179-205.
- Christian, Mark A., and Rüdiger Schmitt  
2013 Permutations of ‘A š tarte: Introduction. *Die Welt des Orients* 43(2):150-152.
- Cornelius, Izak  
1993 Anat and Qudshu as the ‘Mistress of Animals’: Aspects of the Iconography of the Canaanite Goddesses. *Studi Epigrafici e Linguistici* 10:21-45.
- 2008 *The Many Faces of the Goddess: The Iconography of the Syro-Palestinian Goddesses Anat, Astarte, Qedeshet, and Asherah c. 1500-1000 BCE*. Göttingen, Fribourg, CH.
- 2014a “Trading Religions” and “Visible Religion” in the Ancient Near East. In *Religions and Trade: Religious Formation, Transformation and Cross-Cultural Exchange between East and West*. Peter Wick and Volker Rabens, editors, pp. 141-166. Koninklijke Brill NV, Leiden, NL.
- 2014b “Revisiting” Astarte in the Iconography of the Bronze Age Levant. In *Transformation of a Goddess: Ishtar-Astarte-Aphrodite*, David T. Sugimoto, editor, pp. 87-101. Göttingen, Fribourg, CH.
- Crowley, Janice L.  
1977 *The Aegean and the East: An Investigation into the Exchange of Artistic Motifs between the Aegean, Egypt, and the Near East*. PhD thesis, University of Tasmania, Hobart, AU.
- 2008 Mycenaean Art and Architecture. In *The Cambridge Companion to the Aegean Bronze Age*. Cynthia W. Shelmerdine, editor, pp. 258-288. Cambridge University Press, Cambridge, UK.
- Cunningham, Graham  
2013 Sumerian Religion. In *The Cambridge History of Religions in the Ancient World. Volume I: From the Bronze Age to the Hellenistic Age*. Michele Renee Salzman and Marvin A. Sweeney, editors, pp. 31-53. Cambridge University Press, Cambridge, UK.

Daniels, Megan Johanna

2016 *The Queen of Heaven and a Goddess for all the People: Kingship, Religion, and Cultural Evolution between Greece and the Near East, 3000-500 BCE*. Doctoral dissertation, Department of Classics, Stanford University. ProQuest Dissertations Publishing, Ann Arbor, MI.

Davaras, Costis

1980 Une Ancre Minoenne Sacrée? *Bulletin de Correspondance Hellénique* 104(1):47-71.

1997 The “Cult Villa” at Makrygialos. In *The Function of the “Minoan Villa”*: Proceedings of the Eight International Symposium at the Swedish Institute at Athens, 6-8 June 1992. Robin Hägg, editor, pp. 117-135. Paul Åströms Förlag, SE.

2004 The Mochlos Ship Cup. In *Mochlos IC Peroid III. Neopalatial Settlement on the Coast, the Artisans’ Quarter and the Farmhouse at Chalinomouri: the Small Finds*. Jeffrey S. Soles and Costis Davaras, series editors, pp. 3-15. INSTAP Academic Press, Philadelphia, PA.

Davis, Jack L.

2008 Minoan Crete and the Aegean Islands. In *The Cambridge Companion to the Aegean Bronze Age*. Cynthia W. Shelmerdine, editor, pp. 186-208. Cambridge University Press, Cambridge, UK.

Davis, Jack L., and Sharon R. Stocker

2016 The Lord of the Gold Rings: The Griffon Warrior of Pylos. *Hesperia: The Journal of the American School of Classical Studies at Athens* 85(4):627-655.

Day, Jo

2012 “Caught in a Web of a Living World”: Tree-Human Interaction in Minoan Crete. *PAN: Philosophy, Activism, Nature* 9:11-21.

Day, Peggy L.

1999 Anat. In *Dictionary of Deities and Demons in the Bible*. Karel van der Toorn, Bob Becking, and Pieter W. van der Horst, editors, pp. 36-43. Eerdmans, Leiden, NL.

De Moor, Johannes Cornelis

1971 *The Seasonal Pattern in the Ugaritic Myth of Ba ‘lu, According to the Version of Ilimilku*. Butzon & Bercker, Kevelaer, DE.

De Shong Meador, Betty

2000 *Inanna: Lady of Largest Heart. Poems of the Sumerian High Priestess, Enheduanna*. University of Texas Press, Austin, TX.

Demetriou, Denise

2010 Τῆς πάσης ναυτιλῆς φύλαξ: Aphrodite and the Sea. *Kernos* 23:67-89.

Dever, William G.

1984 Asherah, Consort of Yahweh? New Evidence from Kuntillet 'Ajûrd. *Bulletin of the American Schools of Oriental Research* 255:21-37.

2005 *Did God Have a Wife?: Archaeology and Folk Religion in Ancient Israel*. William B. Eerdmans Publishing Company, Grand Rapids, MI.

Dickinson, Oliver

1994 *The Aegean Bronze Age*. Cambridge University Press, Cambridge, UK.

Drijvers, Han J. W.

1999 Atargatis. In *Dictionary of Deities and Demons in the Bible*. Karel van der Toorn, Bob Becking, and Pieter W. van der Horst, editors, pp. 114-116. Eerdmans, Leiden, NL.

Eaton, Alfred Wade

1964 *The Goddess Anat: The History of Her Cult, Her Mythology and Her Iconography*. Doctoral dissertation, Department of Classical Language and Literature, Yale University. University Microfilms International, Ann Arbor, MI.

Evans, Arthur J.

1901 The Mycenaean Tree and Pillar Cult. *Journal of Hellenic Studies* 21:99-204.

1902-1903 The Palace of Knossos. Provisional Report for the Year 1903. *Annual of the British School of Athens* 9:1-153.

1921 *The Palace of Minos: a Comparative Account of the Successive Stages of the Early Cretan Civilization as Illustrated by the Discoveries at Knossos*, Volume I, the Neolithic and Early and Middle Minoan Ages. Mac Millan and Co., London, UK.

1928 *The Palace of Minos: a Comparative Account of the Successive Stages of the Early Cretan Civilization as Illustrated by the Discoveries at Knossos*, Volume II: Part I. Mac Millan and Co., London, UK.

1935 *The Palace of Minos: a Comparative Account of the Successive Stages of the Early Cretan Civilization as Illustrated by the Discoveries at Knossos*, Volume IV. Mac Millan and Co., London, UK.

Faure, Paul

1963 Peak Cults and Cave Cults on Crete, in *Bulletin de Correspondance Hellénique* 87:493-508.

Fogelin, Lars

2007 The Archaeology of Religious Ritual. *Annual Review of Anthropology* 36:55-71.

Foster, Karen Polinger

2018 Mari and the Minoans. *Groneik* 217:343-362.

Furumark, Arne

1950 The Settlement of Ialysos and Aegean History c. 1550-1400. *Opuscula Archaeologica* 6:140-271.

Galanakis, Konstantinos

2009 The “Goddess from Beyond the Sea”: Iconographical Analysis and Interpretation of a Group of Narrative Scenes Involving Female Divinities in Minoan-Mycenaean Glyptic. In *SOMA 2007: Proceedings of the XI International Symposium on Mediterranean Archaeology*, Çiğdem Özkan Aygün, editor, pp. 124-130. Archaeopress, Oxford, UK.

Gaster, Theodor H.

1946 A Canaanite Ritual Drama: The Spring Festival at Ugarit. *Journal of the American Oriental Society* 66(1):49-76.

Gazin-Schwartz, Amy

2001 Archaeology and Folklore of Material Culture, Ritual, and Everyday Life, *International Journal of Historical Archaeology* 5(4):263-279.

Gesell, Geraldine C.

1985 *Town, Palace and House Cult*. SIMA Pocket Book 67. Paul Åströms Förlag, Göteborg, SE.

2004 History of American Excavations on Crete. In *Crete Beyond the Palaces: Proceedings of the Crete 2000 Conference*, Leslie Preston Day, Margaret S. Mook, and James D. Muhly, editors, pp. 1-18. INSTAP Academic Press, Philadelphia, PA.

Gill, M. A. V., Walter Müller, and Ingo Pini

2002 *Corpus der minoischen und mykenischen Siegel II,8. Iraklion, Archäologisches Museum. Teil 8. Die Siegelabdrücke von Knossos, unter Einbeziehung von Funden aus anderen Museen, CMS II-8*. Verlag Philipp von Zabern, Mainz, DE.

Gillmer, Thomas C.

1975 The Thera Ship. *Mariner's Mirror* 61(4):321-329.

Girella, Luca, Evi Gorogianni, and Peter Pavúk

2016 Introduction: Methodological Considerations. In *Beyond Thalassocracies: Understanding Processes of Minoanisation and Mycenaeanisation in the Aegean*, Evi Gorogianni, Peter Pavuk, and Luca Girella, editors, pp. 1-14. Oxbow Books, Philadelphia, PA.

Goodison, Lucy

1989 *Death, Women and the Sun: Symbolism of Regeneration in Early Aegean Religion*. Bulletin Supplement 53. University of London, Institute of Classical Studies, London, UK.

Goodnick Westenholz, Joan

1998 Goddesses of the Ancient Near East 3000-1000 BC. In *Ancient Goddesses: The Myths*

*and the Evidence*. Lucy Goodison and Christine Morris, editors, pp.63-82. University of Wisconsin Press, Madison, WI.

2014 Trading the Symbols of the Goddess Nanaya. In *Religions and Trade: Religious Formation, Transformation and Cross-Cultural Exchange between East and West*. Peter Wick and Volker Rabens, editors, pp. 167-198. Koninklijke Brill NV, Leiden, NL.

Google Earth Pro

2021 Map Data Image © 2021 DigitalGlobe © 2021 Google. Accessed 17 March 2022.

Graf, Fritz

1999 Aphrodite. In *Dictionary of Deities and Demons in the Bible*. Karel van der Toorn, Bob Becking, and Pieter W. van der Horst, editors, pp. 64-68. Eerdmans, Leiden, NL.

Gray, Dorothea

1974 *Seewesen, Archaeologia Homerica*. Vandenhoeck & Ruprecht, Göttingen, DE.

Günkel-Maschek, Ute

2017 Spirals, Bulls, and Sacred Landscapes: The Meaningful Appearance of Pictorial Objects within their Spatial and Social Contexts. In *Minoan Realities: Approaches to Images, Architecture, and Society in the Aegean Bronze Age*. Diamantis Panagiotopoulos and Ute Günkel-Maschek, editors, pp.115-139. Presses Universitaires de Louvain, Louvain-la-Neuve, BE.

Hadley, Judith M.

2000 *The Cult of Asherah in Ancient Israel and Judah: Evidence for a Hebrew Goddess*. Cambridge University Press, Cambridge, UK.

Heerma van Voss, Matthiew S. H. G.

1999 Hathor. In *Dictionary of Deities and Demons in the Bible*. Karel van der Toorn, Bob Becking, and Pieter W. van der Horst, editors, pp. 385-386. Eerdmans, Leiden, NL.

Hestrin, Ruth

1987 The Lachish Ewer and the 'Asherah. *Israel Exploration Journal* 37(4):212-223.

Hodder, Ian

1986 *Reading the Past: Current Approaches to Interpretation in Archaeology*. Cambridge University Press, Cambridge, UK.

Hollis, Susan Tower

2009 Hathor and Isis in Byblos in the Second and First Millennia BCE. *Journal of Ancient Egyptian Interconnections* 1(2):1-8.

Hornell, James

1946 *Water Transport: Origins and Early Evolution*. Cambridge University Press, Cambridge, UK.

Hughes-Brock, Helen, and John Boardman

2009 *Corpus der minoischen und mykenischen Siegel VI*. Oxford. The Ashmolean Museum, CMS VI. Verlag Philipp von Zabern, Mainz, DE.

Immerwahr, Sara Anderson

1990 *Aegean Painting in the Bronze Age*. The Pennsylvania State University Press, University Park, PA.

Insoll, Timothy

2004 *Archaeology, Ritual, Religion*. Routledge, London, UK.

Jacobson, Howard

2015 Asherah and Aphrodite: A Coincidence? *The Classical Quarterly*, New Series 65 (1): 355-356.

Keel, Othmar

1998 *Goddess and Trees, New Moon and Yahweh: Ancient Near Eastern Art and the Hebrew Bible*. Sheffield Academic Press, Sheffield, UK.

Kenna, V. E. G.

1972 *Corpus der minoischen und mykenischen Siegel XII. Nordamerika I*. New York, The Metropolitan Museum of Art, CMS XII. Gebr. Mann Verlag, Berlin, DE.

Kerr, Robert M.

2013 Notre-Dame-de-la-Huronie? A note on 'Štrt ḫr. *Die Welt des Orients* 43(2):206-212.

Kirk, G. S.

1949 Ships on Geometric Vases. *The Annual of the British School at Athens* 44:93-153.

Knappett, Carl

2018 From Network Connectivity to Human Mobility: Models for Minoanization. *Journal of Archaeological Method and Theory*, September 25:974-995.

Knight, Vernon James, Jr.

2013 *Iconographic Method in New World Prehistory*. Cambridge University Press, Cambridge, UK.

Kokkinou, Angeliki

2014 Of Horses, Earthquakes, and the Sea: Poseidon and His Worshipers in Ancient Greece. In *Poseidon and the Sea: Myth, Cult, and Daily Life*. Seth D. Pevnick, editor, pp. 51-64. D. Giles, London, UK.

Krzyszowska, Olga

2005 Aegean Seals: An Introduction. *Bulletin of the Institute of Classical Studies, Supplement* 85:1-429.



Kubler, George

1969 *Studies in Classic Maya Iconography*. Memoirs of the Connecticut Academy of Arts and Sciences No. 18. Connecticut Academy of Arts and Sciences, New Haven, CT.

Kyriakidis, Evangelos

2005a *Ritual in the Bronze Age Aegean: The Minoan Peak Sanctuaries*. Gerald Duckwork & Co., London, UK.

2005b Unidentified Floating Objects on Minoan Seals. *American Journal of Archaeology* 109(2):137-154.

2018 Situations in the Study of Minoan Iconography: The Situation of the Baetyls. In *Paintbrushes: Wall-painting and Vase-painting of the Second Millennium BC*. Andrea G. Vlachopoulos, editor, pp. 243-250. University of Ionnina/Hellenic Ministry of Culture and Sports, Athens, GR.

Leick, Gwendolyn

1991 *A Dictionary of Ancient Near Eastern Mythology*. Routledge, London, UK.

Lovett, Miranda

2020 *Environment in Miniature: Iconography of Setting in Late Bronze Age Aegean Engraved Seal Stones and Signet Rings*. Master's thesis, Department of Religious Studies and Classics, The University of Arizona. University Microfilms International, Ann Arbor, MI.

Lupack, Susan

2012 Minoan Religion. In *The Oxford Handbook of the Bronze Age Aegean*, Eric H. Cline, editor, pp. 251-262. Oxford University Press, Oxford, UK.

Manning, Sturt W.

2008 Protopalatial Crete: Formation of the Palaces. In *The Cambridge Companion to the Aegean Bronze Age*. Cynthia W. Shelmerdine, editor, pp. 105-120. Cambridge University Press, Cambridge, UK.

2012 Chronology and Terminology. In *The Oxford Handbook of the Bronze Age Aegean*. Eric H. Cline, editor, pp. 11-29. Oxford University Press, Oxford, UK.

Maran, Joseph

2006 Coming to Terms with the Past: Ideology and Power in Late Helladic IIIC. In *Ancient Greece: From the Mycenaean Palaces to the Age of Homer*. Edinburgh Leventis Studies 3. Sigrid Deger-Jalkotzy and Irene S. Lemos, editors, pp. 123-150. Edinburgh University Press, Edinburgh, UK.

Maier, Walter A., III

1986 *'Ašerah: Extrabiblical Evidence*. Brill, Leiden, NL.

Marcovish, Miroslav

1996 From Ishtar to Aphrodite. *The Journal of Aesthetic Education* 30(2):43-59.

Marinatos, Nanno

1984a *Art and Religion in Thera: Reconstructing a Bronze Age Society*. D. & I. Mathioulakis, Athens, GR.

1984b Minoan Threskeiocracy on Thera. In *The Minoan Thalassocracy: Myth and Reality. Proceedings of the Third International Symposium at the Swedish Institute in Athens, 31 May-5 June, 1982, Svenska Institutet i Athen 4<sup>o</sup>, 32*. Robin Hägg and Nanno Marinatos, editors, pp. 167-178. Paul Åströms Förlag, Stockholm, SE.

1989 The Tree as Focus of Ritual Action in Minoan Glyptic Art. In *Fragen und Probleme der Bronzezeitlichen Ägäischen Glyptik: Beiträge zum 3. Internationalen Marburger Siegel-Symposium 5-7 September 1985*, Walter Müller, editor, pp. 127-143. Gebr. Mann, Berlin, DE.

1993 *Minoan Religion, Ritual Image, and Symbol*. University of South Carolina Press, Columbia, SC.

2010 *Minoan Kingship and the Solar Goddess: A Near Eastern Koine*. University of Illinois Press, Urbana, IL.

2013 Minoan Religion. In *The Cambridge History of Religions in the Ancient World. Volume I: From the Bronze Age to the Hellenistic Age*. Michele Renee Salzman and Marvin A. Sweeney, editors, pp. 237-255. Cambridge University Press, Cambridge, UK.

Marinatos, Spyridon

1933 La marine créto-mycénienne. *Bulletin de correspondance hellénique* 57:170-235.

1974 *Excavations at Thera VI (1972 Season), Text and Plates*. Athens, GR.

Matz, Friedrich

1962 *The Art of Crete and Early Greece*. Holle and Co. Verlag, Baden-Baden, DE.

Mazar, Amihai

2006 "Clay Figurines and a Zoomorphic Vessel." In *Tel Batash (Timnah) Volume III. Finds from the Second Millennium BCE*. Nava Panitz-Cohen and Amihai Mazar, editors, pp. 251-254. Old City Press, Jerusalem, IL.

Moody, Jennifer

2009 Environmental Change and Minoan Sacred Landscapes. *Hesperia Supplements* 42:241-249.

Morgan, Lyvia

1985 Idea, Idiom and Iconography. *Bulletin de Correspondance Hellénique, Supplément* 11(1):5-19.

1988 *The Miniature Wall Paintings of Thera: A Study in Aegean Culture and Iconography*. Cambridge University Press, Cambridge, UK.

Mountjoy, Penelope A., and Matthew J. Ponting

2000 The Minoan Thalassocracy Reconsidered: Provenance Studies of LH II A/LM I B Pottery from Phylakpoi, Ay. Irini and Athens. *The Annual of the British School at Athens*, 2000 95:141-184.

Müller, Walter and Ingo Pini

1999 *Corpus der minoischen und mykenischen Siegel II,6. Iraklion, Archäologisches Museum. Teil 6. Die Siegelabdrücke von Aj. Triada und anderen zentral- und ostkretischen Fundorten, unter Einbeziehung von Funden aus anderen Museen*, CMS II-6. Gebr. Mann Verlag, Berlin, DE.

2007 *Corpus der minoischen und mykenischen Siegel III. Iraklion, Archäologisches Museum. Sammlung Giamalakis*, CMS III. Verlag Philipp von Zabern, Mainz, DE.

Murray, Suzanne Peterson

2016 Patterned Textiles as Costumes in Aegean Art. In *Woven Threads: Patterned Textiles of the Aegean Bronze Age*. Maria C. Shaw and Anne P. Chapin, editors, pp. 43-104. Oxbow Books, Oxford, UK.

Mylonas, George E.

1945 A Signet-Ring in the City Art Museum of St. Louis. *American Journal of Archaeology* 49(4):557-569.

Natan-Yulzary, Shirley

2020 Lady Athirat of the Sea – A New Look at KTU 1.4 ii 3-11. *Aula Orientalis* 38(1):131-146.

Nilsson, Martin

1927 *The Minoan-Mycenean Religion and its Survival in Greek Religion*. C. W. K. Gleerup, Lund, SE.

Oddo, Emilia

2019 Pottery Styles and Social Dynamics at Neopalatial Myrtos-Pyrgos: Identifying Southeast Crete as a Ceramic Region. *American Journal of Archaeology* 123(1):19-44.

Onassoglou, Artemis

1985 *Die 'Talismanischen' Siegel*, CMS Beiheft 2, Berlin, DE.

Ornan, Tallay

2005 *The Triumph of the Symbol: Pictorial Representations of Deities in Mesopotamia and the Biblical Image Ban*. Academic Press Fribourg, Fribourg, CH.

Palaima, Thomas G.

2008 Mycenaean Religion. In *The Cambridge Companion to the Aegean Bronze Age*. Cynthia W. Shelmerdine, editor, pp. 342-361. Cambridge University Press, Cambridge, UK.

Paliou, Eleftheria

2011 The Communicative Potential of the Theran Murals in Late Bronze Age Akrotiri: Applying Viewshed Analysis in 3D Townscapes. *Oxford Journal of Archaeology* 30(3): 247-272.

Palyvou, Clairry

2005 *Akrotiri Thera: An Architecture of Affluence 3,500 Years Old*. Prehistory Monographs 15. INSTAP Academic Press, Philadelphia, PA.

Panofsky, Erwin

1939 *Studies in Iconology: Humanistic Themes in the Art of the Renaissance*. Oxford University Press, New York, NY.

1955 *Meaning in the Visual Arts: Papers in and on Art History*. Doubleday, Garden City, NY.

Papadatos, Yiannis

2012 An Early Minoan Boat Model from Kephala Petras, Siteia. In *PHILISTOR: Studies in Honor of Costis Davaras*. Eleni Mantzourani and Philip P. Betancourt, editors, pp. 155-159. INSTAP Academic Press, Philadelphia, PA.

Parpola, Simo

2000 "Monotheism in Ancient Assyria." In *One God or Many? Concepts of Divinity in the Ancient World*. Barbara Nevling Porter, editor, pp. 165-209. Transactions of the Casco Bay Assyriological Institute, Vol. 1. Casco Bay Assyriological Institute, Chebeague Island, ME.

Pearce, Ariel L.

2017 *Fresh Water Scenes in Minoan Art*. Doctoral dissertation, Art History Department, Temple University. University Microfilms International, Ann Arbor, MI.

Pearson, Charlotte, Matthew Salzer, Lukas Wacker, Peter Brewer, Adam Sookdeo, and Peter Kuniholm

2020 Securing Timelines in the Ancient Mediterranean Using Multiproxy Annual Tree-Ring Data. *Proceedings of the National Academy of Sciences* 117(15):8410-8415.

Peatfield, Alan

1995 Water, Fertility, and Purification in Minoan Religion. In *Klados: Essays in Honour of J. N. Coldstream*, Bulletin of the Institute of Classical Studies, Supplement 63. J. N. Coldstream and Christine Morris, editors, pp. 217-227. University of London, Institute of Classical Studies, London, UK.

Persson, Axel W.

1942 *The Religion of Greece in Prehistoric Times*. University of California Press, Berkeley, CA.

Petrakis, Vassilis P.

2011 Politics of the Sea in the Late Bronze Age II-III Aegean: Iconographic Preferences and Textual Perspectives. In *The Seascape in Aegean Prehistory, Monographs of the Danish Institute at Athens, Volume 14*, Giorgos Vavouranakis, editor, pp. 185-234. The Danish Institute at Athens, Athens, GR.

Pettey, Richard J.

1990 *Asherah: Goddess of Israel*. Lang, New York, NY.

Picard, Charles

1948 *Les religions préhelléniques (Crète et Mycènes)*. Presses Universitaires de France, Paris, FR.

Pini, Ingo

1975 *Corpus der minoischen und mykenischen Siegel V. Kleinere Griechische Sammlungen, CMS V*. Gebr. Mann Verlag, Berlin, DE.

1988 *Corpus der minoischen und mykenischen Siegel XI. Kleinere Europäische Sammlungen, CMS XI*. Gebr. Mann Verlag, Berlin, DE.

1992 *Corpus der minoischen und mykenischen Siegel V. Kleinere Griechische Sammlungen, Sammlungen, Supplementum 1 A. Ägina - Korinth*. CMS VS1A. Mann Verlag, Berlin, DE.

1993 *Corpus der minoischen und mykenischen Siegel V. Kleinere Griechische Sammlungen. Supplementum 1 B. Lamia – Zakynthos und weitere Länder des Ostmittelmeerraums*, CMS VS1B. Gebr. Mann Verlag, Berlin, DE.

Pini, Ingo, John L. Caskey, Miriam Caskey, Olivier Pelon, John G. Younger, and Martha Heath Wiencke

1975 *Kleinere Griechische Sammlungen, CMS V*. Mann Verlag, Berlin, DE.

Pini, Ingo, and Walter Müller

2009 *Oxford Ashmolean Museum. Die Bedeutung der Minoischen und Mykenischen Gliptik*, CMS VI. Philipp von Zabern, Mainz, DE.

Platon, Nikolaos

1951 To Ieron Maza kai ta Minoika Iera Koryfis. *CretChron* 5:96-160.

1954 Ta minoika oikiaka iera. *CretChron* 8:428-483.

Platon, Nikolaos, and Ingo Pini

1984 *Corpus der minoischen und mykenischen Siegel II,3. Iraklion, Archäologisches Museum. Teil 3. Die Siegel der Neupalastzeit*, CMS II-3. Gebr. Mann Verlag, Berlin, DE.

1985 *Corpus der minoischen und mykenischen Siegel II,4. Iraklion, Archäologisches Museum. Teil 4. A. Die Siegel der Nachpalastzeit, B. Undatierbare Spätminoische Siegel*, CMS II-4. Gebr. Mann Verlag, Berlin, DE.

Platon, Nikolaos, M. A. V. Gill, Walter Müller, and Ingo Pini

2002 *Herakleion Archäologisches Museum. Vol. 8, Die Siegelabdrücke von Knossos unter Einbeziehung von Funden aus anderen Museen*, CMS II. von Zabern, Mainz, DE.

Platon, Nikolaos, Walter Müller, and Ingo Pini

1999 *Iraklion, Archäologisches Museum. Vol. 6, Die Siegel von Aj. Triada*. CMS II-6. Mann Verlag, Berlin, DE.

Porter, Barbara Nevling

1993 Sacred Trees, Date Palms, and the Royal Persona of Ashurnasirpal II. *Journal of Near Eastern Studies*, 52(2):129-139.

Preston, Laura

2008 Late Minoan II to IIIB Crete. In *The Cambridge Companion to the Aegean Bronze Age*. Cynthia W. Shelmerdine, editor, pp. 310-326. Cambridge University Press, Cambridge, UK.

Pulak, Cemal

1998 The Uluburun Shipwreck: An Overview. *The International Journal of Nautical Archaeology* 27(3):188-224.

Raban, Avner

1984 The Thera Ships: Another Interpretation. *American Journal of Archaeology* 88(1):11-19.

Raban, Avner and Ya'acov Kahanov

2021 Clay Models of Phoenician Vessels in the Hecht Museum at the University of Haifa, Israel. *The International Journal of Nautical Archaeology* 32(1):61-72.

Rackham, Oliver, and Jennifer Moody

1996 *The Making of the Cretan Landscape*. Manchester University Press, Manchester, UK.

Rappaport, Roy A.

1999 *Ritual and Religion in the Making of Humanity*. Cambridge University Press, Cambridge, UK.

Reade, Julian

2005 The Ishtar Temple at Nineveh. *Iraq* 67(1):347-390.

Rehak, Paul

1997 The Role of Religious Painting in the Function of the Minoan Villa: the Case of Ayia Triadha. In *The Function of the 'Minoan Villa'*. Robin Hägg, editor, pp. 163-175. Svenska Institutet i Athen, Stockholm, SE.

Rehak, Paul and John G. Younger

1998 Review of Aegean Prehistory VII: Neopalatial, Final Palatial, and Postpalatial Crete. *American Journal of Archaeology* 102(1):91-173.

Renfrew, Colin

1985 *The Archaeology of Cult: The Sanctuary at Phylakopi*. The British School of Archaeology at Athens, London, UK.

2007 The Archaeology of Ritual, of Cult, and of Religion, In *The Archaeology of Ritual*. Evangelos Kyriakidis, editor, pp. 109-122. Cotsen Institute of Archaeology, University of California, Los Angeles, CA.

2018 Introduction: Play as the Precursor of Ritual in Early Human Societies. In *Ritual, Play and Belief, in Evolution and Early Human Societies*. Colin Renfrew, Iain Morley, and Michael Boyd, editors, pp. 9-22. Cambridge University Press, Cambridge, UK.

Renfrew, Colin and Paul Bahn

2000 *Archaeology Theories, Methods, and Practice*. Third Edition. Thames and Hudson, London, UK.

Renfrew, Colin, Michael Boyd and Christopher Bronk Ramsey

2012 The Oldest Maritime Sanctuary? Dating the Sanctuary at Keros and the Cycladic Early Bronze Age. *Antiquity* 86:144-160.

Rich, Sara A.

2012 'She who Treads on Water': Religious Metaphor in Seafaring Phoenicia. *Journal of Ancient West and East* 11:19-34.

2013 *Ship Timber as Symbol? Dendro-provenancing & Contextualizing Ancient Cedar Ship Remains from the Eastern Mediterranean / Near East*. Doctoral dissertation, Department of Eastern Studies: Ancient Near Eastern Studies, KU Leuven. University Microfilms International, Ann Arbor, MI.

2017 *Cedar Forests, Cedar Ships: Allure, Lore, and Metaphor in the Mediterranean Near East*. Archaeopress Publishing, Oxford, UK.

Rosenfeld, Silvana A., and Stefanie L. Bautista

2017 An Archaeology of Rituals. In *Rituals of the Past: Prehispanic and Colonial Case Studies in Andean Archaeology*. Silvana A. Rosenfeld and Stefanie L. Bautista, editors, pp. 3-20. University Press of Colorado, Boulder, CO.

Rutherford, Ian

2013 Mycenaean Religion. In *The Cambridge History of Religions in the Ancient World. Volume I: From the Bronze Age to the Hellenistic Age*. Michele Renee Salzman and Marvin A. Sweeney, editors, pp. 256-279. Cambridge University Press, Cambridge, UK.

Rutkowski, Bogdan

1984 Report on Investigations in Greece. I. Studies in 1977-1982. *Archelogia* 35:173-192.

1986 *The Cult Places of the Aegean*. Yale University Press, New Haven, CT.

Sakellarakis, J. A.

1982 *Corpus der minoischen und mykenischen Siegel I. Athen, Nationalmuseum, Supplementum*, CMS IS. Mann Verlag, Berlin, DE.

Sakellarakis, Yannis, and Efi Sapouna-Sakellarakis

1981 Drama of Death in a Minoan Temple. *National Geographic Magazine* 159(2):205-223.

Sakellariou, Agnes

1964 *Corpus der minoischen und mykenischen Siegel I. Die Minoischen und Mykenischen Siegel des Nationalmuseums in Athen*, CMS I. Gebr. Mann Verlag, Berlin, DE.

Sauvage, Caroline

2015 A Maritime Ceremony to Aphrodite/Astarte: A Note on the Dor Scapula. *Israel Exploration Journal* 65(1):69-89.

2017 The Development of Maritime Exchange in the Bronze Age Eastern Mediterranean. In *The Sea in History – The Ancient World*. Philip de Souza, Pascal Arnaud, and Christian Buchet, editors, pp. 151-164. The Boydell Press, Woodbridge, UK.

Schmitt, Rüdiger

2013 Astarte, Mistress of Horses, Lady of the Chariot: The Warrior Aspect of Astarte. *Die Welt des Orients* 43(2):213-225.

Schneider, Tammi J.

2013 Assyrian and Babylonian Religions. In *The Cambridge History of Religions in the Ancient World. Volume I: From the Bronze Age to the Hellenistic Age*. Michele Renee Salzman and Marvin A. Sweeney, editors, pp.54-83. Cambridge University Press, Cambridge, UK.

Schoep, Ilse

2018 Building the Labyrinth: Arthur Evans and the Construction of Minoan Civilization. *American Journal of Archaeology* 122(1):5-32.

Seager, Richard

1912 *Explorations in the Island of Mochlos*. The American School of Classical Studies at Athens, Boston, MA.



Serwint, Nancy

2002 Aphrodite and her Near Eastern Sisters; Spheres of Influence. In *Engendering Aphrodite: Women and Society in Ancient Cyprus*. Diane L. Bolger and Nancy Serwint, editors, pp. 325-350. American Schools of Oriental Research, Boston, MA.

Shank, Elizabeth B.

2016 Depictions of Water in Aegean Miniature-Style Wall Paintings. In *Studies in Aegean Art and Culture: A New York Aegean Bronze Age Colloquium in Memory of Ellen N. Davis*. Robert B. Koehl, editor, pp. 77-92. INSTAP Academic Press, Philadelphia, PA.

Sharon, Ilan

2013 Levantine Chronology. In *The Oxford Handbook of the Archaeology of the Levant: c. 8000-332 CE*. Ann E. Killebrew and Margreet Steiner, editors, pp. 44-65. Oxford University Press, Oxford, UK.

Shaw, Maria

1980 Painted "Ikria" at Mycenae?. *American Journal of Archaeology* 84(2):167-179.

2004 Religion at Minoan Kommos. In *Crete Beyond the Palaces: Proceedings of the Crete 2000 Conference*. Leslie Preston Day, Margaret S. Mook, and James D. Muhly, editors, pp. 137-150. INSTAP Academic Press, Philadelphia, PA

Shaw, Maria C., and Anne P. Chapin

2016 Palace and Household Textiles in Aegean Bronze Age Art. In *Woven Threads: Patterned Textiles of the Aegean Bronze Age*. Maria C. Shaw and Anne P. Chapin, editors, pp. 105-130. Oxbow Books, Oxford, UK.

Shelmerdine, Cynthia

2008 Background, Sources, and Methods. In *The Cambridge Companion to the Aegean Bronze Age*. Cynthia W. Shelmerdine, editor, pp. 1-18. Cambridge University Press, Cambridge, UK.

Smith, Joanna S.

2006 A Cypriot Cylinder Seal. In *Tel Batash (Timnah) Volume III. Finds from the Second Millennium BCE*. Nava Panitz-Cohen and Amihai Mazar, editors. pp. 245-250. Old City Press, Jerusalem, IL.

Smith, Mark S.

2014 'Athtart in Late Bronze Age Syrian Texts. In *Transformation of a Goddess: Ishtar-Astarte-Aphrodite*, David T. Sugimoto, editor, pp. 33-86. Göttingen, Fribourg, CH.

Soetens, Steven

2009 Juktas and Kophinas: Two Ritual Landscapes out of the Ordinary. *Hesperia Supplements* 42:261-268.

Soles, Jeffrey S.

2003 The Artisans' Quarter: Building A. In *Mochlos IA: Period III. Neopalatial Settlement on*

*the Coast: The Artisans' Quarter and the Farmhouse at Chalinomouri. The Sites*. Vol. 7. Jeffrey S. Soles and Costis Davaras, series editors, pp. 7-40. INSTAP Academic Press, Philadelphia, PA.

2012 Mochlos Boats. In *PHILISTOR: Studies in Honor of Costis Davaras*. Eleni Mantzourani and Philip P. Betancourt, editors, pp. 187-199. INSTAP Academic Press, Philadelphia, PA.

2016 Hero, Goddess, Priestess: New Evidence for Minoan Religion and Social Organization. In *Metaphysis: Ritual, Myth and Symbolism in the Aegean Bronze Age*. Proceedings of the 15<sup>th</sup> International Aegean Conference, April 2014. Eva Alram-Stern, Fritz Blakolmer, Sigrid Deger-Jalkotzy, Robert Laffineur, and Jörg Weilhartner, editors, pp. 247-254. Peeters Publishers, Leuven, BE.

Sourvinou-Inwood, Christiane

1973 On the Lost 'Boat' Ring from Mochlos. *Kadmos* 12(2):149-158.

1989 Boat, Tree and Shrine: the Mochlos Ring and the Makrygialos Seal. *Kadmos* 281(2):97-100.

Sugimoto, David T.

2012 "Tree of Life" Decoration on Iron Age Pottery from the Southern Levant. *Orient* 47:125-146.

2014 The Judean Pillar Figurines and the "Queen of Heaven". In *Transformation of a Goddess: Ishtar-Astarte-Aphrodite*, David T. Sugimoto, editor, pp.141-165. Göttingen, Fribourg, CH.

Swedish Institute at Athens

2020 Kastelli Hill, Chania (1969-2014). Archaeological Projects, Swedish Institute at Athens <<https://www.sia.gr/en/articles.php?tid=366&page=1>>. Accessed 8 January 2021.

Stuckey, Johanna H.

2003 The Great Goddesses of the Levant. *Journal for the Society for the Study of Egyptian Antiquities*, 30:127-157.

Tartaron, Thomas F.

2008 Aegean Prehistory as World Archaeology: Recent Trends in the Archaeology of Bronze Age Greece. *Journal of Archaeological Research* 16(2):83-161.

2013 *Maritime Networks in the Mycenaean World*. Cambridge University Press, Cambridge, UK.

Tazawa, Keiko

2014 Astarte in New Kingdom Egypt: Reconsideration of her Role and Function. In *Transformation of a Goddess: Ishtar-Astarte-Aphrodite*, David T. Sugimoto, editor, pp. 103-124. Göttingen, Fribourg, CH.

Tilley, A. F., and Paul Johnstone

1976 A Minoan Naval Triumph? *International Journal of Nautical Archaeology* 5(4):285-292.

Tully, Caroline

2016 Thalassocratic Charms: Trees, Boats, Women and the Sea in Minoan Glyptic Art. In *Proceedings of the 12<sup>th</sup> International Congress of Cretan Studies*, Heraklion, GR.

Tzalas, H.

1995 On the Obsidian Trail: With a Papyrus Craft in the Cyclades. In *Tropis III: 3<sup>rd</sup> International Symposium on Ship Construction in Antiquity, Athens, August 1989*. H.Tzalas, editor, pp. 441-469. Hellenic Institute for the Preservation of Nautical Tradition, Athens, GR.

Van de Moortel, Aleydis

2017 A New Typology of Bronze Age Aegean Ships: Developments in Aegean Shipbuilding in Their Historical Context. In *Baltic and Beyond: Change and Continuity in Shipbuilding*. Proceedings of the Fourteenth International Symposium on Boat and Ship Archaeology Gdańsk 2015, Jerzy Litwin, editor, pp. 263-268. National Maritime Museum, Gdańsk, PL.

Van der Toorn, Karel

1998 Goddesses in Early Israelite Religion. In *Ancient Goddesses: The Myths and the Evidence*. Lucy Goodison and Christine Morris, editors, pp. 83-97. University of Wisconsin Press, Madison, WI.

Vlachopoulos, Andreas G.

2016 Purple Rosettes/ Πορφυροί ρόδακες: New Data on Polychromy and Perception in the Thera Wall Paintings. In *Studies in Aegean Art and Culture: A New York Aegean Bronze Age Colloquium in Memory of Ellen N. Davis*. Robert B. Koehl, editor, pp. 59-76. INSTAP Academic Press, Philadelphia, PA.

Wachsmann, Shelley

1998 *Seagoing Ships and Seamanship in the Bronze Age Levant*. Texas A&M University Press, College Station, TX.

Walker, William H.

1998 Where Are the Witches of Prehistory? *Journal of Archaeological Method and Theory* 5(3):245-308.

Walls, Neal Hugh, Jr.

1991 *The Goddess Anat in Ugaritic Myth*. PhD Dissertation, Johns Hopkins University. UMI Academic Press, Ann Arbor, MI.

Warren, Peter

1981 Minoan Crete and Ecstatic Religion. In *Sanctuaries and Cults in the Aegean Bronze Age*, edited by Robin Hägg and Nano Marinatos, pp. 155-166. Acts of the Swedish Institute at Athens 4°, XXVIII. Swedish Institute at Athens Stockholm, SE.

- 1986 *Minoan Religion as Ritual Action*. SIMA Pocket Book 72. Paul Åströms Förlag, Göteborg, SE.
- 1990 Of Baetyls. *Opuscula Atheniensia* 18(14):193-206.
- Watrous, L. Vance  
 1994 Review of Aegean Prehistory III: Crete from Earliest Prehistory through the Protopalatial Period. *American Journal of Archaeology* 98(4):695-753.
- Wedde, Michael  
 2000 *Towards a Hermeneutics of Aegean Bronze Age Ship Imagery*. (Peleus: Studien zur Archäologie und Geschichte Griechenlands und Zyperns, Band 6.) Bibliopolis, Mannheim, DE.  
 2004 On the Road to the Godhead: Aegean Bronze Age Glyptic Procession Scenes. In *Celebrations: Sanctuaries and the Vestiges of Cult Activity*. Michael Wedde, editor. pp. 151-186. The Norwegian Institute at Athens, Athens, GR.  
 2005 The Mycenaean Galley in Context: From Fact to *Idée Fixe*. In *Emporia, Aegeans in the Central and Eastern Mediterranean, Aegaeum 25*. Robert Laffineur and Emmanuel Greco, editors, pp. 29-37, University of Liège, Liège, BE.
- Weingarten, Judith  
 2006 Review of Olga Kryszkowska, Aegean Seals: An Introduction. *American Journal of Archaeology* 110(2):320-322.
- Wilson, David  
 2008 Early Prepalatial Crete. In *The Cambridge Companion to the Aegean Bronze Age*. Cynthia W. Shelmerdine, editor, pp. 77-104. Cambridge University Press, Cambridge, UK.
- Witt, Reginald E.  
 1971 *Isis in the Graeco-Roman World*. Cornell University Press, Ithaca, NY.
- Wolkstein, Diane and Samuel Noah Kramer  
 1983 *Inanna: Queen of Heaven and Earth. Her Stories and Hymns from Sumer*. Harper & Row Publishers, New York, NY.
- Wright, David P.  
 2013 Syro-Canaanite Religions. In *The Cambridge History of Religions in the Ancient World. Volume I: From the Bronze Age to the Hellenistic Age*. Michele Renee Salzman and Marvin A. Sweeney, editors, pp. 129-150. Cambridge University Press, Cambridge, UK.
- Wyatt, Nicholas  
 1999a "Asherah". In *Dictionary of Deities and Demons in the Bible*. Karel van der Toorn, Bob Becking, and Pieter W. van der Horst, editors, pp. 99-105. Eerdmans, Leiden, NL.

Wyatt, Nicholas

1999b “Astarte”. In *Dictionary of Deities and Demons in the Bible*. Karel van der Toorn, Bob Becking, and Pieter W. van der Horst, editors, pp. 109-114. Eerdmans, Leiden, NL.

Younger, John G.

2011 A View from the Sea. In *The Seascapes in Aegean Prehistory, Monographs of the Danish Institute at Athens, Volume 14*, Giorgos Vavouranakis, editor, pp. 161-183. The Danish Institute at Athens, Athens, GR.

Younger, John G., and Paul Rehak

2008a The Material Culture of Neopalatial Crete. In *The Cambridge Companion to the Aegean Bronze Age*. Cynthia W. Shelmerdine, editor, pp. 140-164. Cambridge University Press, Cambridge, UK.

Younger, John G., and Paul Rehak

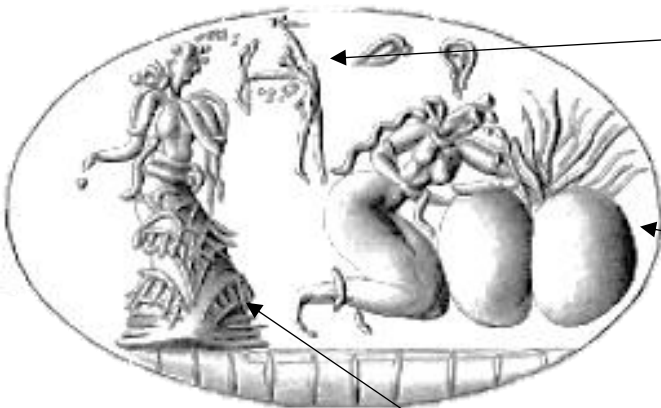
2008b Minoan Culture: Religion, Burial Customs, and Administration. In *The Cambridge Companion to the Aegean Bronze Age*, Cynthia W. Shelmerdine, editor, pp. 165-185. Cambridge University Press, Cambridge, UK.

Ziffer, Irit

2010 Western Asiatic Tree-Goddesses. *Ägypten Und Levante / Egypt and the Levant* 20:411-430

**APPENDIX A: MOTIF REFERENCE GUIDE**

**Minoan Ritual Imagery Examples:**



**Epiphanic Figure**

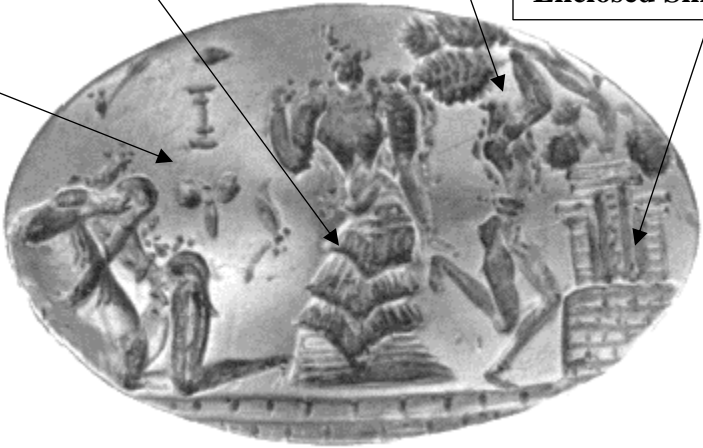
**Double Baetyl**

**Flounced Skirt**

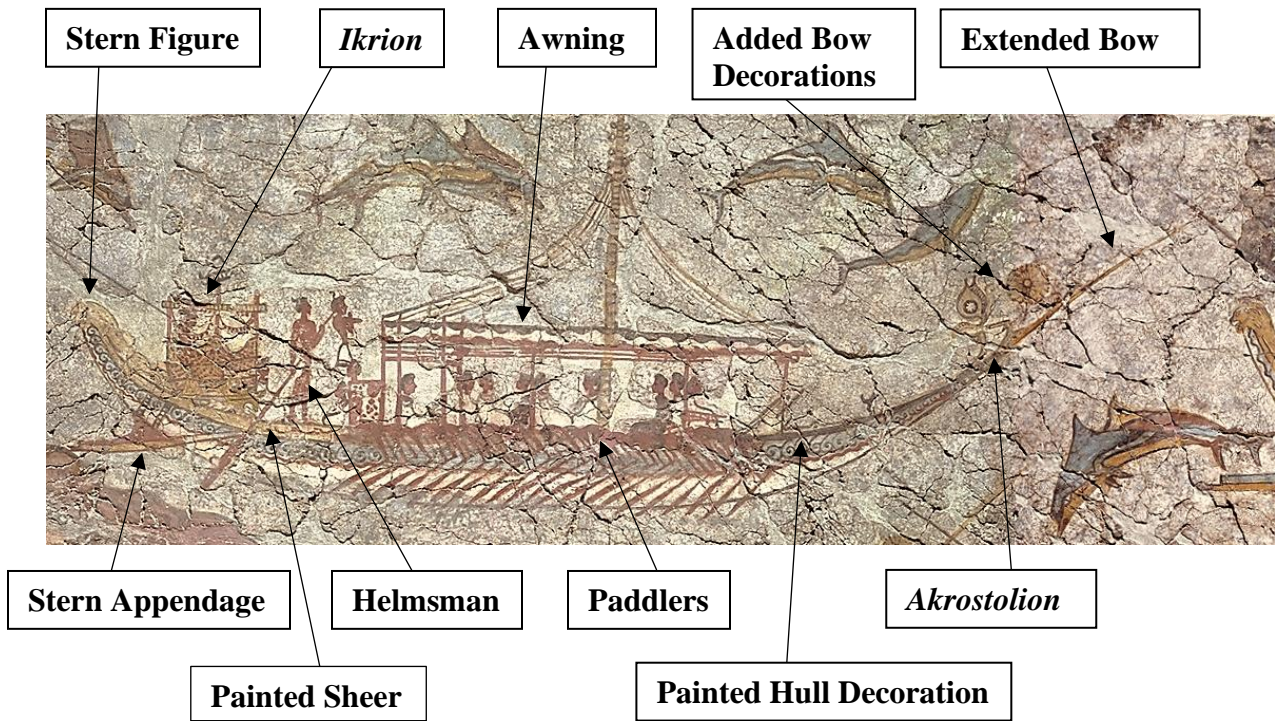
**Tree-Shaking Ritual**

**Enclosed Shrine**

**Floating Objects**



Aegean Ritual Ship Example:



Mesopotamian Ritual Imagery Example:



