Gesture, Stance, and Movement

Communicating Bodies in the Aegean Bronze Age

Acts of the International Conference
at the University of Heidelberg,
11–13 November 2021

Edited by
Ute Günkel-Maschek
Céline Murphy
Fritz Blakolmer
Diamantis Panagiotopoulos

Gesture, Stance, and Movement. Communicating Bodies in the Aegean Bronze Age

Gesture, Stance, and Movement

Communicating Bodies in the Aegean Bronze Age

Acts of the International Conference at
the University of Heidelberg, 11–13 November 2021

edited by

Ute Günkel-Maschek, Céline Murphy, Fritz Blakolmer,
and Diamantis Panagiotopoulos

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at https://dnb.dnb.de.

Propylaeum
SPECIALIZED INFORMATION
SERVICE ANCIENT STUDIES

Contents

Contents

Preface

This volume contains the papers presented at the *Gesture – Stance – Movement. Communicating Bodies in the Aegean Bronze Age* conference, which was hosted by the University of Heidelberg between 11th and 13th November 2021 as an online event due to the ongoing constraints caused by the coronavirus pandemic. As the organisers of the original conference and editors of the present volume, we would like to use this opportunity to thank all participants – both speakers and non-speakers – for attending the conference from all over the world. In keeping with a spirit of global open access research, we have opted for a hybrid publication format, making the proceedings available both online (free access – all rights reserved) and in print. We are therefore grateful to the open access platform Propylaeum-eBOOKS for including the volume in their repertoire, and to the publishing team for their continued support.

The publication would not have been possible without the generous financial support of the Institute for Aegean Prehistory (INSTAP) and the Freundeskreis FORUM ANTIKE and we also wish to express our deep gratitude to Robert B. Koehl and Stelios Manolakakis for their generous support during our final stage of the volume's preparation. Particular thanks are owed to Alexia Spiliotopoulou and the Heraklion Archaeological Museum for the permission to reproduce the excellent photograph of the Tylissos bronze adorant on the cover of this volume. Last but not least, we would like to thank Roman Jacobek for his meticulous and patient work on the layout and typesetting.

Our citation style and abbreviations have been modelled on those of the American Journal of Archaeology (https://www.ajaonline.org/submissions/abbreviations). Standardisation of terms and spelling has been applied throughout the volume, but a few formulas idiosyncratic to certain authors were preserved for reasons of practicality. We take responsibility for any errors or oversights.

Responsibility for the content of the articles, for the reproduction of third-party images, and for the content of linked pages lies solely with the individual authors.

Heidelberg, Heraklion, and Vienna   Ute Günkel-Maschek
May 2024   Céline Murphy
                                              Fritz Blakolmer
                                 Diamantis Panagiotopoulos
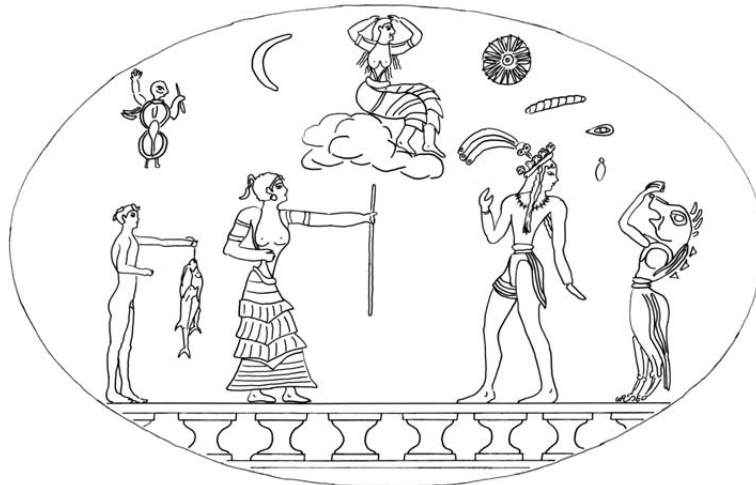
The Gestures Chaos Ring. Signet-ring said to have been found at Heidelberg, LM I (?). Drawing by Fritz Blakolmer.

Introduction: Communicating Bodies in Aegean Bronze Age Archaeology

Ute Günkel-Maschek, Céline Murphy, Fritz Blakolmer, and Diamantis Panagiotopoulos

Gestures, facial expressions, postures, and other aspects of bodily communication are among the most important means through which intentions, feelings, or thoughts are shared without the use of spoken language. In real life and representation, such non-verbal cues, which may be as subtle as the positioning of a finger or the orienting of the shoulders and torso, play a salient role in the characterisation of the tone of the interaction, of its participants' roles, and of the message conveyed. Defining a framework within which to decipher the workings and meanings of bodily communication is consequently a fundamental necessity for the study of any culture's art, and especially for cultures from which no – or very limited – written sources remain, such as those which thrived in the Aegean during the Bronze Age. Careful analyses of gesture, facial expression, posture, stance, and movement can provide essential information about what symbolic and non-verbal communicative behaviour was considered appropriate, purposeful, and narratively relevant to these cultures, and how these social attitudes may have varied regionally or changed over time.

Gestures in Aegean Bronze Age Archaeology

The first scholarly treatments of gesture and posture in Aegean Bronze Age art appeared in the late 19th century, when the discovery of a number of hitherto unknown figurine types presented archaeologists with new interpretive challenges. While Heinrich Schliemann (1878, 11–15) initially considered the curved excrescences apparent on the torsos of the Mycenaean 'psi' figurines as horns rather than limbs, it was soon proposed that they in fact represented raised arms. In carefully examining the artefacts, Maximilian Mayer (1892) and Wolfgang Reichel (1897) argued that the gesture was of a 'pathetic' nature, and that these pieces consequently represented mourners and lamenters or deities accompanying the deceased. Similarly, the gestures of bronze figurines, such as that of the Late Minoan I piece from the Troad (Fig. 1) acquired by the Berlin Antikensammlung in 1888, and another contemporaneous piece from Smyrna, were also rapidly associated with mourning (see *e.g.* Furtwängler 1889, 1900; Mayer 1892; Collignon 1903; Verlinden 1984, cat. nos. 23, 33).

   With the turn of the century, and with the extensive archaeological undertakings occurring in Crete, interest in gestures persisted but also took new directions. For example, in his account on the Minoan peak sanctuary of Petsophas, John Myres (1902/1903) proposed that the gestures performed by the terracotta figurines represented attitudes of adoration, supplication or prayer, and that the artefacts thus represented votaries. This argument was constructed both in consideration of the figurines' find place, but also on the assumption that they fulfilled similar functions to modern Christian effigies or Greek Orthodox 'tamata' (Myres 1902/1903, 368; *cf.* Rutkowski 1986, 87–88; 1991a, 52–56; for critique see Morris 2001, 246; 2009, 182). In a similar vein, Arthur Evans argued that figures depicted on Minoan signet-rings, seal-stones, and bronze figurines communicated attitudes of adoration (*e.g.* Evans 1901; 1930, 461, 463). Nevertheless, drawing on academic works in other fields (such as Andrea de Jorio's 1832 volume on *La mimica degli antichi investigata nel gestire napoletano*) and through comparison with later archaeological material, Evans also attempted to associate gestures rendered in Aegean Bronze Age iconography with 'universal' and 'primitive' forms of bodily comportment recognisable in all cultures. For example, he argued that the arms raised sideways on the Ring of Nestor represented "a universal primitive sign of surprise" (Evans 1930, 57–58, 152 with n. 1), and that the crossed forearms and

Fig. 1: LM I bronze figurine from the Troad (© Antikensammlung. Staatliche Museen zu Berlin – Preussischer Kulturbesitz; photographer: Johannes Laurentius; inv. Misc. 8092).

Fig. 2: Gold signet-ring from Mycenae (CMS I, no. 101; courtesy of the CMS Heidelberg).

joined thumbs and forefingers on a gold ring from Mycenae (Fig. 2; CMS I, no. 101) depicted "a very widespread expedient of sign-language for indicating agreement" (Evans 1901, 176; cf. Evans 1928, 832; 1930, 464).

Following Myres' and Evans' work, it became common to interpret the non-verbal cues depicted in different iconographic media as expressions of 'worship', 'adoration', 'supplication', 'respect', 'salute' or 'command', but also as the representation of dance movements. In most cases, these gestures were considered as religious and ritual in nature, representing for example the performance of ecstatic dances, the summoning of epiphanies, and the divine sanctioning of rulership. Similarly, the same non-verbal cues were also understood as indicative of the role or of the position held by the depicted figures in Aegean Bronze Age society or cosmology. Consequently, gesturing figures often became described as 'gods' or 'goddesses', 'priests' or 'priestesses', 'rulers', 'heroes', 'adorants', or 'votaries'. Such treatments of gestures thus not only allowed for developments in the field of iconographic research, but they also played a consequential role in reconstructions of Aegean Bronze Age religious rituals or systems as a whole. These approaches indeed contributed to the consolidation of concepts such as epiphany, ecstatic performance and rites of passage (see e.g. Nilsson [1927] 1950; Matz 1959; Brandt 1965; Marinatos 1993).

Although these concepts have persisted, shaping to some extent the ways in which interpretations on Aegean Bronze Age iconography are still presently developed, a notable theoretical and methodological shift occurring towards the end of the 20th century nevertheless allowed for new considerations. The influence of semiotics and structuralism led to a greater interest in the spatial and structural patterns observed in the use of certain gestures, both in images and in archaeological contexts. Lyvia Morgan (1985, 14–16), for example, highlighted the importance of considering recurrent syntactic associations in reconstructing meaning in images, using the example of the raised hand gesture in the miniature frieze from the West House at Akrotiri. Wolf-Dietrich Niemeier (1989) included a consideration on gestures in his iconographical review of deities and adorants in Minoan and Mycenaean glyptic scenes, and in his reconstruction of the Knossos 'Prince of the Lilies' fresco (Niemeier 1987). Bogdan Rutkowski (1991b) devoted an article to prayer gestures in prehistoric Greece, whereas questions of rulership were again addressed by John Younger (1995). Furthermore, in her publication on bronze figurines, Efi Sapouna-Sakellaraki included a discussion on gesture, for which she identified seven general types, or sixteen subtypes (Sapouna-Sakellarakis 1995, 106–111; see also Sapouna-Sakellaraki 2012; for gestures on

clay figurines see Rethemiotakis 1998, 2001). Colette Verlinden (1984), on the other hand, distinguished no more than six gesture classes, which were later used by Louise Hitchcock (1997) in her analysis of gender on bronze figurines. Finally, it is also noticeable that even without forming the main subject of discussion, bodily comportment also became more frequently addressed in research on Aegean Bronze Age iconography (*e.g.* Coulomb 1981; Ulanowska 1993; Morgan 1995, 2000; German 1999, 2007). Despite these significant shifts, it is nevertheless apparent that the interpretations on the inferred meaning and function of gestures advanced in these studies still heavily relied on the inferred meaning of the pictorial context in which they were represented, on the nature of the archaeological contexts in which the artefacts were found, and on the latter's presumed function within these contexts. Less common were examinations of the actual communicative quality of the depicted non-verbal cues. In fact, the only area of research in which such approaches have remained unproblematic is that of painted larnakes: owing to the funerary function of these artefacts and the parallels that the figures depicted on them bear with figurines of mourners also discovered in funerary contexts, the represented gestures and postures were confidently interpreted as expressive of mourning and lamentation (see Iakovidis 1966; Vermeule 1991; Cavanagh and Mee 1995; Kramer-Hajos 2015; Dakouri-Hild 2021).

With the advent of the new millennium, more works were explicitly devoted to gesture. Michael Wedde (1999) took a first step towards deciphering the function of individual ritual gestures by classifying the evidence into types and studying them on the basis of their integration into more complex scenes of interaction. Christine Morris (2001) subsequently discussed the necessity of studying the 'language of gesture' in Minoan iconography, while challenging the strong influence of Western religious traditions on scholarship on Aegean Bronze Age depictions of the body. Drawing on shamanic concepts of religious practice, Morris together with Alan Peatfield interpreted the gestures and postures rendered on Minoan clay figurines and on signet-rings as embodiments of altered states of consciousness allowing for healing or divine visions (Morris and Peatfield 2002, 2004, 2022; Peatfield and Morris 2012). Since then, further studies of selected gestures and forms of bodily comportment, which bring individual arm postures into focus, have been developed (*e.g.* Murphy 2015; MacGillivray 2018), as well as comparative studies (Kekes 2016, 2018, 2021), or new methodological approaches which draw on interpretive models from ethology, sociology, and linguistics (*e.g.* Poole 2020) or on experimental practice (McGowan 2006; Steel 2020; Morris and Goodison 2022). These recent developments reflect a growing awareness of the salience of gesture and bodily comportment in representations of the anthropomorphic (and anthropomorphised) body, and of the need to challenge established hypotheses on religion and ritual action. They also evidence a rising interest in the use of the types of vocabulary employed in discussions on bodily comportment, and in the exploration of analytical methods drawn from fields beyond that of Aegean Bronze Age iconography.

The Challenges of Studying Gesture and Bodily Comportment

While the above overview of how gestures have been examined throughout the history of the discipline shows increasing and varied progress in the understanding of Minoan figural representations (and, interestingly, drastically less in Mycenaean representations where the focus remains on mourning), it also highlights the challenges that research on gestures and bodily comportment still faces. In effectively dealing with a 'picture book without text' (Nilsson 1950, 7) which still withholds many of its secrets, we have not yet been able to develop a standardised approach to the study of non-verbal cues and bodily comportment. It is indeed evident that, despite their value, the above studies presently represent a collection of varying, somewhat idiosyncratic, and often discordant, accounts. Outlined below are some of the specific difficulties posed by the studied material and which have to date impeded the creation of more harmonised approaches to gesture and posture in Aegean Bronze Age imagery.

One problem concerns the criteria by which different gestures, postures, and stances can be distinguished from one another. In many cases, it is difficult to assess whether a range of slightly

varying bodily placements represent a single motif or whether they represent different moments of an act or of an event otherwise characterised by the same features. For example, a gesture may either form part of a still attitude or signify movement and effectively consist of a 'snapshot' selected from a dynamic sequence of gestures and postures. Most gestures occurring in Aegean iconography might consequently reflect a characteristic moment of a more complex cycle of movements.

Another problem relates to whether it is possible to tell if a gesture was merely an iconographic convention or if it was also performed in real life. Indeed, gestures, of which the representation flourished when a highly standardised form of Aegean Bronze Age imagery developed, do not in themselves provide information about whether or not they were also used in practice by the people who rendered them. To date, depictions of gesture have been principally regarded as images of actual events, such as ritual and religious activities, funerary practices, or combats, yet the possibility that some of these in fact rendered mythological scenes has only been briefly addressed.

One of the solutions found to the above problems has been to compare Aegean Bronze Age iconography with contemporary Egyptian and Near Eastern imagery for which more archaeological information and textual explanations exist (*e.g.* Sapouna-Sakellarakis 1995; Kekes 2016, 2018, 2021). However, these comparisons, as some of the papers collected in this volume demonstrate, do require caution. Indeed, while Nanno Marinatos (2013, 253) argued that "Near Eastern texts and representations offer an invaluable guide for the 'reading' of Minoan images and religion", it equally remains unclear whether the Aegean 'imported' versions of Egyptian and Near Eastern gestures were also practiced or whether they were only adopted as pictorial formula, and whether or not these 'imports' bore the same meanings and visual functions as they did in their 'original' contexts. Consequently, suggesting the occurrence of a cultural transfer between the Aegean and other cultures invites us to reflect on the Aegean specificities of a 'language of gestures', on how and where these specificities were compatible with Egyptian and Near Eastern ones, and on whether an Eastern Mediterranean 'koine' of gestures existed.

Towards an Agenda for Aegean Bronze Age Gestures Studies and the Scope of the 2021 Conference

In view of the above, it becomes clear that the study of gesture, posture, and stance in Aegean Bronze Age iconography, despite the progress made in recent decades, is still in a formative phase due to its complexity. Nevertheless, it is also presently possible to tell which aspects of this field require particular attention and what form further developments might take. In particular, there are three main objectives that research might work towards in the near future. The first consists of the creation of a standardised formula according to which Aegean Bronze Age depictions of bodily comportment and non-verbal communication can be classified and described. The second objective consists in systematically pursuing the identification of subtle iconographic conventions hidden in depictions of the moving or still anthropomorphic or anthropomorphised body. Finally, the third step consists in initiating more careful chronological and geographical analyses of Aegean Bronze Age depictions of non-verbal communication as it is conspicuous that similar, if not identical, gestures appear in different parts of the Aegean and beyond, in different contexts, and over a broad period. Engagement with these goals will consequently allow for the progressive construction of solid factual foundations upon which new interpretations can be proposed and against which established views and concepts can be assessed.

The *Gesture – Stance – Movement. Communicating Bodies in the Aegean Bronze Age* international conference marked a first step in this direction. By creating a platform via which current theoretical, methodological, and interpretive perspectives could be discussed and articulated collectively it allowed for the initiation of a new phase of research. The enthusiastic participation of thirty-eight contributors and of a broad audience in the online event evidences the interest that gesture, posture, and bodily communication still generate today, and demonstrates this field's relevance not only to research on iconography but also on Aegean Bronze Age social organisation,

identities and inter-regional contacts among other topics. This volume, with papers grouped into eight thematic clusters, contains the fruits of three days of lively presentations and discussions.

Thematic cluster 1: Frameworks of analysis for communicating bodies
The volume opens with three theoretically informed approaches which both address the methodological challenges of studying non-verbal communication and utilise novel methodological tools for fresh readings of pertinent archaeological sources. **Diamantis Panagiotopoulos** problematises the notion of ambiguity in Aegean imagery. Given their semantic fuzziness, the majority of figurative scenes and especially gestures and stances do not convey a straightforward message to the modern viewer and are consequently open to more than one interpretation. The author discusses selected cases of ambiguous/unambiguous imagery and explores the hermeneutical potential of a historical versus an ahistorical reading. Advocating a 'synthetic' approach, **Anna Simandiraki-Grimshaw** argues that a proper understanding of the role(s) that the human body played in Bronze Age Cretan imagery is only possible through a combination and contextualisation of heterogeneous data sets. Based on an elaborate methodology and a thoughtful deployment of theoretical notions, she discerns perceptible shifts in the variety and audiences of overt and covert bodily communication through time that can be symptomatic of developments in wider social and political contexts. The significance of arms and hands as main media in non-verbal forms of communication at both levels of reality and representation form the topic of **Katerina Giannaki**'s contribution. Starting with a comprehensive overview of Minoan hand gestures and highlighting their role as semiotic codes of visual communication, the author distinguishes two main configurations: open (extroverted) and closed (introverted) hand gestures. Through the use of the notion of 'energy management factor', she tackles the question of how arms and hands were used for articulating social interaction and the self-perception of the Minoan body.

Thematic cluster 2: Communication through expression and movement
The notion of gesture is not limited to arms and hands but refers to the entire body and the manifold ways in which it was shaped, framed, and presented to the observer, as the contributions of this section lucidly demonstrate. **Fritz Blakolmer** takes us through a richly detailed investigation of alterations in mimic features such as open mouth, closed eyes, and other non-canonic physiognomic expressions that deviate from the standardised depictions of the human face with no mimic. The author discusses how and why facial expressions were attributed to selected figures and addresses the most crucial issues that arise from this small corpus of mimics. These include their role as indicators of acoustic and/or atmospheric components of a depicted action, and as visualisers of verbal expressions. **Lyvia Morgan**'s thought-provoking article is a powerful acknowledgement of the communicative potential of movement and gesture in Minoan and Cycladic wall-paintings. Based on the premise that the perception of figurative mural art was a sequential, interactive experience, the author explores the different impacts that large-scale and small-scale figures might have born on viewers physically moving through architectural space and visually moving through an image. This subtle analysis shows that movement, stance, and gesture functioned not only as bearers of symbolic meaning but also as directives of viewing. Body postures also comprise one of the tools implemented by **Lucie Valentinová** in her reassessment of the much-discussed Xeste 3 Adorants Fresco from Akrotiri. Drawing on the absence of a discernible narrative, on the body comportment of the 'Seated Woman', and by revisiting some anachronistic arguments advanced in previous studies, the author questions the traditional interpretation of the scene as a female rite of passage and instead proposes that it served to depict different aspects of female identity. In a discussion on Minoan sacred caves, **Maria Mina** suggests that the figurines found therein served as stimulants for multi-sensorial religious experiences. Assuming that these objects were handled by the participants of the ritual, she conjectures that the figurines' postures (and gestures) instigated a form of bodily movement essential for attaining an ecstatic state in the course of the ritual experience in enclosed spaces.

Thematic cluster 3: Gesture, posture, and societal matters

In situating depictions of non-verbal communication and bodily comportment within the social contexts they were created and consumed, the three following papers demonstrate that representations of the gesturing body reveal aspects of social relevance beyond the immediate meaning of the posture or action shown. **Céline Murphy**'s contribution sensitises us to the importance of the torso's orientation and posture. Her rigorous analysis of the visual conventions for depicting different modes of communication between pairs of figures or within groups of figures (direct interaction, indirect interaction, no interaction) reveals the existence of a standardised iconographic tradition articulating social differentiation and social collaboration. Following the author's argumentation, these visual strategies were employed to legitimise a strongly hierarchical Neopalatial social model. **Diana Wolf** re-evaluates gestures performed by female figures and traditionally interpreted as representations of adoration, processions, or dances, rendered on Neopalatial softstone seals ('Cretan Popular Group'). The social implications of the inconspicuous medium (in terms of material and manufacture) and the correspondence of its imagery with gestures found in elite media, such as signet-rings and frescoes, provide the key for its understanding. According to the author, the seals displayed choreographed and staged social action that fostered social cohesion between groups of different ranks. Rewinding to the Prepalatial period, **Susan Ferrence, Philip Betancourt, Alessandra Giumlia-Mair, James Muhly, Metaxia Tsipopoulou,** and **David Rupp** discuss an intriguing new find from the cemetery of Petras: a miniature cast gold pendant amulet in the shape of two male bearded figures positioned in an embrace. Based on a fine-grained stylistic and technological analysis, the authors make a convincing argument for the foreign (probably Mesopotamian) origin of both the pendant and the depicted gesture and try to elucidate the biography and symbolism of this exotic piece.

Thematic cluster 4: Of deities and humans

This section includes papers that revolve around gestures articulating symbolic messages of (divine or human) identity, status, and power. **Eleni Drakaki** studies a selection of seal motifs presenting the so-called 'chest gesture' or 'hands to the chest gesture', frequently shown on male figures in 'Master of the Animals' compositions. The main claim of the paper rests on the existence of two distinct regional variations of this emblematic depiction of human strength in Aegean glyptic (Central Cretan and Western Cretan/Greek Mainland). **Alexia Spiliotopoulou** offers a meticulous analysis of the well-known male bronze figurine from Katsambas, focusing on its unique gesture that – despite intensive discussion over the previous decades – remains enigmatic. Drawing on insights from her systematic study of the gestures of the anthropomorphic figurines from the peak sanctuary of Kophinas, the author highlights their affinities with the Katsambas piece and makes a new suggestion as to the figure's identity as a boxer. **Louise Hitchcock** and **Madaline Harris-Schober**'s contribution focuses on a small bronze figurine discovered in a pit bearing obvious ritual associations, in a Neopalatial house at Palaikastro. The authors attempt to demonstrate why this remarkable female figure, whose hands rest on her hips, should be interpreted as the depiction of the most powerful woman of Minoan Crete. **Bernice Jones**' paper offers a thorough and insightful reassessment of the three faience Snake Goddess figurines from the Temple Repositories at Knossos. This detailed study of the figurines' gesture, stance, movement, and other attributes exposes the weaknesses of some modern reconstructions of these pieces, and leads to different suggestions on their identity. **Philip Betancourt** introduces an important assemblage of standing female figures performing the distinctive 'upraised arms' gesture from the cave shrine of Eileithyia at Inatos (southern Crete) known to have been in use between LH III B to the Early Geometric period. The author argues that the figures' bodily comportment and physical attributes, alongside their find context, provide a straightforward argument for identifying them as goddesses.

Thematic cluster 5: Communication in ritual action

Ranging from close readings of the most iconic gestures of Minoan iconography to stimulating analyses of Aegean ritual as depicted action and embodied experience, the contributions of this section explore the religious significance of gestures and stances. **Stephanie Aulsebrook** applies a practice-oriented approach to vessel-based gestures. Her careful analysis examines the two main modes of handling vases – presentation/transport and use – and focuses on the variety of the depicted types and their praxeological context. An interesting insight is provided on the role that handles acquired as nodal points in the depicted action. **Caroline Tully** examines scenes in which humans ritually interact with trees on Minoan gold signet-rings. Concentrating on examples showing a vigorous clasping, pulling or shaking of the tree, the author relates the figures' bodily comportment to that of figures rendered in scenes of agonistic sports. Moreover, assuming that the Minoans conceived of their world from an animistic perspective, and drawing on pertinent Near Eastern evidence, she argues that tree-shaking served to express a ritual control over the natural world through aggression and domination. Similarly concerned with trees, but also with architectural features, **Laetitia Phialon** examines the gestures of both humans and fantastic beings in Aegean glyptic imagery. Following an overview of expressive action (trees shaken or pulled by human figures), calm gestures (columns touched by human figures and by a sphinx) and antithetical group compositions, the paper discusses the symbolic significance of tactile gestures and suggests that trees, pillars, and columns might have functioned as interchangeable motifs in these glyptic scenes. **Tina Boloti** engages with the iconography of ritual processions, a pictorial theme that features prominently in Late Bronze Age wall-paintings and other media. Her review of the relevant sources focuses on the main pictorial formula for depicting the gestures commonly performed by humans and supernatural creatures in procession.

Thematic cluster 6: Gesture, posture, sex, and gender

Bodily comportment forms the starting point for three contributions exploring its significance in the visual representation of sex and gender. **Paz Ramirez-Valiente** focuses on Neolithic anthropomorphic figurines of clay and stone. A survey of relevant evidence demonstrates that the rendering of specific postures and gestures might have been determined by the biological sex, gender (male, female, or asexual), and age of the depicted figure, but also by other parameters such as the figurine's chronology and material. Shared gestures and postures among figurines of different sexual categories might have served to represent similar gender identities or roles. In an attempt to unveil the polysemy of the 'hands on the abdomen' – a common gestural type for Minoan (Protopalatial to Postpalatial) and Mycenaean (LH III A–B) figurines – **Christos Kekes** critically reappraises previous interpretations and weaves a methodology combining archaeological and ethnographic evidence. The author concludes that – depending on the context – this gesture can be interpreted as an expression of reverence, as an indication of female coming-of-age rites performed in Aegean sanctuaries, or as a symbolic reference to social status. **Michele Mitrovich** proposes a new pathway for reading body language in Minoan imagery, by exploring how important messages about health, physical fertility, and sexual attractiveness could be communicated by figurines. Drawing on insights from the fields of Sociobiology and Evolutionary Psychology, she proposes that specific gestures, stances, and comportment articulated mate selection strategies which constituted one of the core mechanisms of Minoan religious practices, social cohesion, and cultural identity.

Thematic cluster 7: Stances of triumph, defeat, and combat

Several papers of this volume are dedicated to combat scenes and discuss how the iconography of violence conveyed symbolic messages relating to domination and defeat. The common denominator of the following four papers is that they treat Aegean martial images drawing extensively on Egyptian/Near Eastern comparanda. **Filip Franković** and **Uroš Matić** explore how body poses, stances, and movement were utilised for expressing victory, domination, defeat, and submission

15

in Late Bronze Age Aegean iconography. Concentrating on the body poses of victorious swordsmen, the authors argue that these images show an appropriation of the Egyptian motif of the 'pharaoh smiting his enemies'. Furthermore, they detect a similar case of artistic transfer in the case of the Aegean depictions of defeated warriors that correlate with poses related with defeat, death, fear, and deprivation of freedom in Egyptian imagery. Also focusing on gestures that signify dominance and submission, **Nanno Marinatos** strives to track transcultural encounters between Aegean and Egyptian iconography, arguing, like the aforementioned paper, that some of these gestures can be explained as appropriation of the diachronic Egyptian template for domination over foreign foes. The author underlines, however, that there are further gestures that seem to have emerged in the Minoan tradition, thus implying the existence of a warrior imagery in Neopalatial Crete and – by expanding this argument – suggesting some sort of Minoan dominance in the Aegean and part of the Peloponnese. The problem of the 'missing ruler' in Aegean imagery is revisited by **Veronika Verešová** who approaches this long-standing riddle by adopting a comparative perspective. Through a systematic juxtaposition of Aegean and Near Eastern images showing standing male figures in a dynamic pose alongside kneeling/lying enemies, the author claims that Minoan and Mycenaean motifs of triumph and defeat were emulations of oriental prototypes. Furthermore, she discusses their occurrence in different pictorial settings (beyond combat scenes) and explores the possible reasons for their adoption and adaptation. The case treated by **Robert Koehl** reminds us how the study of a specific gesture can be utilised for the detection of a regional artistic tradition and consequently for pinpointing the artefacts' provenance. The author focuses on duel scenes depicting the 'lunge and thrust' posture, which he identifies – after a survey of the relevant evidence – as the Mycenaean formula for showing the moment of the kill in face-to-face combat.

Thematic cluster 8: Death and the communicative body
The volume closes with three papers that turn the attention to gesture in the context of death. **Sotiria Kiorpe** expands the analytical scope of the present volume beyond the realm of iconography, dealing with anthropological material that provides an unexpected field of evidence for our topic. The author examines particular gestures and stances evident in the few primary burials of the Petras cemetery, their iconographical counterparts, and different modes of placing and interacting with defleshed or still decomposing human remains. Gestures emerge here as entangled expressions of embodied identities in both imagery and burial ritual. **Jacob E. Heywood** returns to the much-discussed Agia Triada sarcophagus and engages with the long-standing dilemma over whether its iconography can be related with funerary rites or – alternatively – with the biography of the deceased. Drawing on the iconographical composition and the attributes and gestures of the sarcophagus' key figures, the author argues that the imagery conveyed a biographical statement referring to the status and social role of the deceased, who in turn can be identified as a female member of the local elite. Finally, challenging traditional assumptions, **Ute Günkel-Maschek** presents a multi-faceted exploration of gestures in Middle and Late Minoan religious iconography which were previously related to the adoration and/or invocation of divine epiphanies. She draws our attention on the fact that self-touching gestures are regularly associated with negative emotional states and stress, and accordingly proposes that, in the context of Minoan imagery, they expressed sadness or grief, addressing a dead hero or a deity absent from this world. With this compelling argument, the author re-introduces mourning and lamentation as indispensable components of Minoan religion.

Concluding Remarks

In conclusion to these introductory remarks and rapid overview of the contributions, a few final words on this volume's character and achievements must be advanced. First, a noticeable feature of this collection of papers is its general departure from a prevalent focus on worship, adoration, and religious ritual. In comparison to earlier studies on gesture, posture, and stance, concern with the religious meaning of bodily comportment is here lesser, although religion is certainly addressed in a number of the papers. Indeed, only in a few cases do the authors seek to differentiate deities from humans and votaries from priestesses – an elementary problem in Aegean iconography. Rather, the majority of the contributions express a strong interest in Aegean Bronze Age social and political matters, which they articulate through discussions on hierarchy and identity. Second, it is conspicuous that mourning is also less frequently addressed. It instead appears that depictions of gesture, posture, and stance in situations which may lead to death are of more interest. Noticeable is also the very sparce mention of Mycenaean figurines, and of Mycenaean material generally. A continued interest in the Near East and Egypt is nonetheless apparent.

Finally, in shedding new light on the many dimensions of the 'language of the body' in Aegean Bronze Age imagery, its problems, and the trajectories it may take, this volume shows how much work this field of research still deserves. Our task is consequently to continue systematically exploring the clues that the imagery offers us, to carefully examine the bodies of evidence, in an attempt to slowly but surely decipher the meaning of the rich and varied iconography.

References

Brandt, E. 1965. *Gruss und Gebet. Eine Studie zu Gebärden in der minoisch-mykenischen und frühgriechischen Kunst.* Munich: Waldsassen.

Cavanagh, W., and Ch. Mee 1995. "Mourning before and after the Dark Ages." *BICS* Suppl. 63: 45–61.

Collignon, M. 1903. "De l'origine du type des pleureuses dans l'art grec." *RÉG* 16: 299–322.

Coulomb, J. 1981. "Les boxeurs minoens." *BCH* 105.1: 27–40.

Dakouri-Hild, A. 2021. "The most discouraged Mycenaeans: performing emotion and death in Late Bronze Age Tanagra, Greece." *JFA* 46.6: 349–381.

Evans, A. J. 1901. *The Mycenaean tree and pillar cult and its Mediterranean relations.* London: Macmillan.

Evans, A. 1928. *The Palace of Minos at Knossos,* Vol. 2. London: Macmillan.

Evans, A. 1930. *The Palace of Minos at Knossos,* Vol. 3. London: Macmillan.

Furtwängler, A. 1889. "Erwerbungen der Antikensammlungen in Deutschland. I. Berlin 1888, 2. Antiquarium." *AA* 4: 87–94.

Furtwängler, A. 1900. "Neue Denkmäler antikischer Kunst II." In *Kleine Schriften von Adolf Furtwängler.* Vol. II, edited by J. Sieveking and L. Curtius, 453–486.

German, S. C. 1999. "The politics of dancing: a reconsideration of the motif of dancing in Bronze Age Greece." In *Meletemata. Studies in Aegean Archaeology presented to Malcolm H. Wiener as he enters his 65th year,* edited by Ph. P. Betancourt, V. Karageorghis, R. Laffineur, and W.-D. Niemeier, 279–282. *Aegaeum* 20. Liège and Austin: Université de Liège and University of Texas at Austin.

German. S. 2007. "Dance in Bronze Age Greece." *Dance Research Journal* 39: 23–42.

Hitchcock, L. 1997. "Engendering domination: a structural and contextual analysis of Minoan Neopalatial bronze figurines." In *Invisible people and processes: writing gender and childhood into European Archaeology,* edited by J. Moore and E. Scott, 113–130. London: Leicester University Press.

Iakovidis, S. E. 1966. "A Mycenaean mourning custom." *AJA* 70: 43–50.

Kekes, Ch. 2016. „Αιγαιακές χειρονομίες (συν)ομιλίας και δέησης: αιγυπτιακές επιρροές και διαχρονικότητα." In *Πεπραγμένα 12ου Διεθνούς Κρητολογικού Συνεδρίου, Ηράκλειο Κρήτης, 21–25 Σεπτεμβρίου 2016.* https://12iccs.proceedings.gr/el/proceedings/category/38/32/263.

Kekes, Ch. 2018. „Διαβάζοντας την ανθρώπινη «σωματική συμπεριφορά». Μια μεθοδολογική προσέγγιση των χειρονομιών του αρχαίου κόσμου." *Θέματα Αρχαιολογίας* 2(2): 222–239.

Kekes, Ch. 2021. "Speaking bodies: an approach to the Egyptian and Aegean ritual gestures of the Bronze Age (preliminary remarks)." In *Current research in Egyptology 2021: proceedings of the twentieth Annual Symposium, University of Alcalá, 17–21 June 2019,* edited by M. A. Cárcamo, R. Sánchez Casado, A. Planelles Orozco, S. Alarcón Robledo, J. Ortiz García, and P. Mora Riudavets, 1–11. Oxford: Archaeopress.

Kramer-Hajos, M. 2015. "Mourning on the larnakes at Tanagra: gender and agency in Late Bronze Age Greece." *Hesperia* 84: 627–667.

MacGillivray, J. A. 2018. "The Minoan salute." In *Rhadamanthys: Studi di archeologia minoica in onore di Filippo Carinci per il suo 70° compleanno. Studies in Minoan archaeology in honour of Filippo Carinci on the occasion of his 70th birthday,* edited by G. Baldacci and I. Caloi, 231–235. *BAR-IS* 2884. Oxford: BAR Publishing.

Marinatos, N. 1993. *Minoan religion. Ritual, image, and symbol.* Columbia, SC: University of South Carolina Press.

Marinatos, N. 2013. "Minoan religion." In *The Cambridge History of Religion in the Ancient World I: From the Bronze Age to the Hellenistic Age,* edited by M. R. Salzmann and M. A. Sweeney, 237–255. Cambridge: Cambridge University Press.

Matz, F. 1959. *Göttererscheinung und Kultbild im minoischen Kreta.* Wiesbaden: Steiner.

Mayer, M. 1892. "Mykenische Beiträge II." *JdI* 7: 189–202.

McGowan, E. R. 2006. "Experiencing and experimenting with embodied archaeology: Re-embodying the sacred gestures of Neopalatial Minoan Crete." *Archaeological Review from Cambridge* 21.2: 32–57.

Morgan, L. 1985. "Idea, idiom and iconography." In *L'iconographie minoenne. Actes de la table ronde d'Athènes (21–22 avril 1983),* edited by P. Darcque and J.-C. Poursat, 5–19. *BCH* Suppl. 11. Athens: École française d'Athènes.

Morgan, L. 2000. "Form and meaning in figurative painting." In *The wall paintings of Thera. Proceedings of the first international symposium, Petros M. Nomikos Conference Centre, Thera, Hellas, 30 August–4 September 1997,* edited by S. Sherratt, 925–946. Athens: Petros M. Nomikos and The Thera Foundation.

Morris, Ch. 2001. "The language of gesture in Minoan religion." In *Potnia: deities and religion in the Aegean Bronze Age. Proceedings of the 8th International Aegean Conference. Göteborg, Göteborg University, 12–15 April 2000,* edited by R. Laffineur and R. Hägg, 245–251. *Aegaeum* 22. Liège: Université de Liège.

Morris, Ch. 2009. "Configuring the individual: bodies of figurines in Minoan Crete." In *Archaeologies of cult: essays on ritual and cult in Crete in honor of Geraldine C. Gesell,* edited by A. L. D'Agata and A. Van de Moortel, 179–187. *Hesperia* Suppl. 42, Princeton: The American School of Classical Studies at Athens.

Morris, Ch., and L. Goodison 2022. "In touch with the Minoans: gestural performance and experience in Bronze Age Crete. Tracing gestures." In *The art and archaeology of bodily communication,* edited by A. J. Maitland Gardner and C. Walsh, 13–30. *UCL World Archaeology Series* 1. London: Bloomsbury Academic.

Morris, Ch., and A. Peatfield 2002. "Feeling through the body: gesture in Cretan Bronze Age religion." In *Thinking through the body. Archaeologies of corporeality,* edited by Y. Hamilakis, M. Pluciennik, and S. Tarlow, 105–120. New York: Kluwer Academic and Plenum Publishers.

Morris, Ch., and A. Peatfield 2004. "Experiencing ritual: shamanic elements in Minoan religion." In *Celebrations: Selected papers and discussions from the Tenth Anniversary Symposion of the Norwegian Institute at Athens, 12–16 May 1999,* edited by M. Wedde, 35–59. *Papers from the Norwegian Institute at Athens* 6. Bergen: The Norwegian Institute at Athens.

Morris, Ch., and A. Peatfield 2022. "Bodies in ecstacy: shamanic elements in Minoan Religion." In *The Routledge companion to ecstatic experience in the Ancient World,* edited by D. L. Stein, S. Kielt Costello, and K. Polinger Foster, 264–283. London and New York: Routledge.

Murphy, C. 2015 "(A) choreographed frenzy: a sequence of steps towards understanding movement and dance in Aegean Bronze Age iconography." In *Minoan archaeology: perspectives for the 21st century. Proceedings of the international PhD and post-doc conference at Heidelberg, 23–27 March 2011,* edited by S. Cappel, U. Günkel-Maschek, and D. Panagiotopoulos, 311–318. *Aegis* 8. Louvain-la-Neuve: Presses universitaires de Louvain.

Myres, J. L. 1902/1903. "Excavations at Palaikastro II: the sanctuary site at Petsofa." *BSA* 9: 356–387.

Niemeier, W.-D. 1987. "Das Stuckrelief des ‚Prinzen mit der Federkrone' aus Knossos und minoische Götterdarstellungen." *AM* 102: 65–98.

Niemeier, W.-D. 1989. "Zur Ikonographie von Gottheiten und Adoranten in den Kultszenen auf minoischen und mykenischen Siegeln." In *Fragen und Probleme der bronzezeitlichen ägäischen Glyptik. 3. Internationales Marburger Siegel-Symposium, 5.–7. September 1985,* edited by I. Pini, 163–186. *CMS* Beih. 3. Berlin: Gebr. Mann Verlag.

Nilsson, M. P. 1950. *The Minoan-Mycenaean religion and its survival in Greek religion.* 2nd rev. ed., Lund: Glerup.

Peatfield, A. A. D., and Ch. Morris 2012. "Dynamic spirituality on Minoan peak sanctuaries." In *Archaeology of spiritualities,* edited by K. Rountree, Ch. Morris, and A. A. D. Peatfield, 227–245. New York: Springer.

Poole, S. 2020. *A consideration of gender roles and relations in the Aegean Bronze Age interpreted from gestures and proxemics in art.* Oxford: BAR Publishing.

Reichel, W. 1897. *Über vorhellenische Götterculte.* Vienna: Hölder.

Rethemiotakis, G. 1998. *Ανθρωπομορφική πηλοπλαστική στην Κρήτη από τη νεοανακτορική εως την υπομινωική περίοδο*. Αρχαιολογική Εταιρεία 174. Athens: Βιβλιοθήκη της εν Αθήναις αρχαιολογικής Εταιρείας.

Rethemiotakis, G. 2001. *Minoan clay figures and figurines from the Neopalatial to the Subminoan period. The Archaeological Society at Athens Library* 219. Athens: The Archaeological Society at Athens.

Rutkowski, B. 1986. *The cult places of the Aegean.* New Haven: Yale University Press.

Rutkowski, B. 1991a. *Petsofas. A Cretan peak sanctuary. Studies and Monographs in Mediterranean Archaeology and Civilization* I. 1. Warsaw: Polish Academy of Sciences.

Rutkowski, B. 1991b. "Prayer (adoration) gestures in prehistoric Greece." *ArcheologiaWar* 41: 9–20.

Sapouna-Sakellaraki, E. 2012. *Κύθηρα: το μινωικό ιερό κορυφής στον Άγιο Γεώργιο στο βουνό. Τα ευρήματα.* Athens: Βιβλιοθήκη της εν Αθήναις αρχαιολογικής Εταιρείας.

Sapouna-Sakellarakis, E. 1995. *Die bronzenen Menschenfiguren auf Kreta und in der Ägäis.* Stuttgart: Steiner.

Schliemann, H. 1878. *Mykenae: Bericht über meine Forschungen und Entdeckungen in Mykenae und Tiryns,* Leipzig: Brockhaus.

Steel, L. 2020. "'Little women': gender, performance, and gesture in Mycenaean female figurines." *JAnthArch* 58: 101–161.

Ulanowska, A. 1993. "The gold ring from Mycenae. Some remarks about dance." *ArcheologiaWar* 44: 113–117.

Verlinden, C. 1984. *Les statuettes anthropomorphes crétoises en bronze et en plomb, du IIIe millénaire au VIIe siècle av. J.-C., Publication d'Histoire de l'art et d'archéologie de l'Université catholique de Louvain* 41. Providence, Rhode Island: Brown University Center for Old World Archaeology and Art.

Vermeule, E. 1991. "Myth and tradition from Mycenae to Homer." *Marsyas* 32: 98–121.

Wedde, M. 1999. "Talking hands: a study of Minoan and Mycenaean ritual gesture – some preliminary notes." In *Meletemata. Studies in Aegean Archaeology presented to Malcolm H. Wiener as he enters his 65th year.* Vol. III, edited by Ph. P. Betancourt, V. Karageorghis, R. Laffineur, and W.-D. Niemeier, 911–920. *Aegaeum* 20. Liège and Austin: Université de Liège and University of Texas at Austin.

Younger, J. G. 1995. "The iconography of rulership in the Aegean: a conspectus." In *The role of the ruler in the prehistoric Aegean. Proceedings of a panel discussion presented at the Annual Meeting of the Archaeological Institute of America, New Orleans, Louisiana, 28 December 1992,* edited by P. Rehak, 151–211. *Aegaeum* 11. Liège and Austin: Université de Liège and University of Texas at Austin.

I. Frameworks of Analysis for Communicating Bodies

Powerless Images. (Mis-)Reading Gestures and Stances in Aegean Iconography

Diamantis Panagiotopoulos

"I thought, as I wiped my eyes on the corner of my apron:
Penelope did this too.
… This is an ancient gesture, authentic, antique,
In the very best tradition, classic, Greek;
Ulysses did this too".
Edna St. Vincent Millay, An Ancient Gesture
(from *Mine the Harvest* [1954]; cited in Purves 2021, 1)

Abstract *In recent years, the 'power of images' became a dominant buzzword in Classical Archaeology and related disciplines, referring to the 'magnetic' force that images unfolded by informing, educating, and manipulating the ancient viewer. So far, however, little or no attention has been given to the other direction of this visual interaction, namely the agency that human actors exercised on images, when the first implemented the latter as a medium of visual communication. In most of these cases, the depicted figures or actions were as a rule totally powerless against any attempt by the viewers to understand, translate, or fill them with new meaning. The inability of images to resist alternative readings becomes very obvious especially when modern scholars try to impose on them their own understanding, by providing new – and sometimes arbitrary and far-fetched – interpretations. The present paper strives to address this hermeneutical problem, focusing on specific gestures and stances in Aegean imagery that have attracted increased scholarly attention in recent years. The discussion revolves around the following key questions: is the semantic ambiguity of Aegean gestures and stances intended or just an unavoidable obstacle of our etic perspective? What makes a gesture/stance an image of a straightforward visual message that defies erroneous or new readings? And, finally, is there any possibility to predict whether old and new interpretations that are presented in this volume will be valid in the future?*

Addressing the Problem

The 'power of images' has emerged as one of the most viral concepts in Classical Archaeology and Art History since the late 1980s, referring to the undeniable communicative potential of pictures in pre-modern and modern societies. Paul Zanker's classical study "Augustus und die Macht der Bilder" (Zanker 1987) was followed only two years later by David Freedberg's inspiring and provocative book "The Power of Images. Studies in the History and Theory of Response" (Freedberg 1989). Both initiated a thorough engagement with the visual agency that iconography possesses and furthermore with the responses of the recipients who believed that "images are indeed endowed with qualities and forces that seem to transcend the everyday" (Freedberg 1989, XXIII). Yet, while images seem capable to do almost anything with the viewers, there is something that they certainly cannot do, namely, to defend themselves, when the viewers abuse the depicted, by ignoring their original meaning, the mere reason of its existence, and invest it with a new and totally alien symbolic content. In most of these cases, images seem to have no intrinsic power for safeguarding their original visual message and appear to be totally powerless against any new reading or appropriation. Actually, we cannot exclude that artists from an-

cient to modern times produced images that could have been open to different readings (see Günther 2021, 3 with n. 9 and 12; for the Minoan context, see McGowan 2011, esp. 66–67; Koehl 2016).[1] Yet, even if elusiveness and ambiguity were in some cases intended, the majority of ancient images must have been produced with only one definite meaning. The present paper focuses on such representations that – by their own authority – could not resist alternative interpretations during their biography.[2] It is a type of ambiguity that emerges not on the level of an image's production but on that of its perception.[3] From an inexhaustible reservoir of pertinent evidence from antiquity to modern times, it would suffice to mention two characteristic examples: the head of one of the almost life-sized female clay statues from Late Bronze Age Agia Irini on Keos was misappropriated approximately eight centuries later in a Late Geometric Greek temple for Dionysus at the same site, when undoubtedly it was believed to be an image of this male god (Caskey 1986, 39–41, pls. 1 b, 7a–b). Interestingly, this is how the excavators of Agia Irini interpreted this head upon its discovery (Caskey 1986, 39). A second telling example provides the Hellenistic royal couple on the famous Ptolemy Cameo from the late 3rd century BCE with a depiction of Zeus Ammon's head on the cheek guard of the male figure's helmet (Zwierlein-Diehl 2012, 59–62). More than one and a half millennia later, this magnificently engraved gem acquired a totally new interpretation when it was mounted as centrepiece on the shrine of the Three Kings at the Cologne Cathedral and was presented to the Christians as a representation of the Three Kings (Perse 2017, 31–33). These are only two random instances among innumerable images that acquired a fundamentally different meaning across space and time.

Notwithstanding how important and intriguing this diachronic phenomenon may be, the present paper adopts not a historical but an epistemological perspective, dealing not with past and present viewers in general but with ourselves, archaeologists, who never hesitate to attribute new meanings to ancient pictures. By focusing on the topic of our volume, *i.e.* gestures, stances, and movement, it is worthwhile to engage with the question of whether we can confirm the rather pessimistic premise that Aegean gestures are powerless against idiosyncratic readings. Can this statement be valid or is there anything that makes a gesture/stance an image of a straightforward visual message that defies erroneous or new interpretations? At a quite theoretical level, the success or failure of every attempt to invest Aegean images with meaning has to be measured by reference to what Michael Baxandall formulated in his seminal study "Patterns of Intention. On the Historical Explanation of Pictures" (Baxandall 1985, 105) as the two key challenges in Art History:

1) How far can we penetrate into the intentional fabric of painters living in cultures or periods remote from our own?
2) Can we in any sense or degree verify or validate our explanations?

As to the first question, the answer is predictable and rather discouraging. Without any written sources informing us about the intentions of the artists, the impact of an image on the viewer, and the cultural framing of iconography, the possibilities of modern scholars are rather limited, when they seek to understand an image. For making things worse, several specialists, with their pervasive habit of looking for meaning, tend to overinterpret, striving to deduce symbolic significance from every single detail of an image.[4] The more they engage in an – often futile – attempt

---

1 Yet, as far as ancient art is concerned, intentional ambiguity is not very easy to detect, see Günther 2021, 13–15; further Osborne 2012. For the discussion of the tension between intentionality and reception in art historical theory see Lynch 2017.

2 Lyvia Morgan defines ambiguity at the level of perception/interpretation as 'subjective ambiguity', see Morgan 1989, 145. Figurines are not considered in this discussion because three-dimensional representations of the body require a different form of analysis.

3 A specific phenomenon of the general practice of investing images with new meaning is 'iconatrophy': "… one specific process of oral tradition by which new stories arise as explanations for old monuments that (for whatever reason) no longer make sense to their viewers" (Keesling 2005, esp. 43, 71).

4 For a plea against 'aggressive hermeneutics' (a term coined by Sontag 1966, 6–7) in archaeology, see Olsen 2015, 185–186.

to decipher the roles of individuals or the character of the depicted actions, the more they are relying on wild assumptions and anachronisms. This problem becomes even more complicated, since the symbolic meaning of an image is a matter of both intention (of the artist) and perception (of the viewer) that, depending on the context, might either overlap or diverge.[5]

Baxandall's second question forces us to give a no less disappointing answer, since it seems virtually impossible to verify or validate our explanations. Modern readings of Aegean imagery are based on analogical reasoning (see below) that unavoidably creates a web – or better say a mesh – of hypotheses which cannot be confirmed and quite often contradict themselves. It is enlightening in this respect to compare the broad spectrum and specific roles of gestures in Egyptian iconography with the hypothetical reading of Aegean gestures in previous research. While the actual significance of the first can be validated by ample evidence of accompanying inscriptions, including gestures of honoration, grief, joy, speaking and greeting, preventing evil, related with punishment or competition, showing, counting/calculating, music, and dance (Dominicus 1994),[6] the latter are quite often interpreted as gestures that express status. Such interpretations actually reveal less about the actual meaning of the depicted and more about the inability of modern scholars to understand the specific intended message of a scene. So, is there any hope at all? Can we approach images – and to be more specific gestures and stances – by trying to minimize the risk of misinterpretation or overinterpretation and to verify or validate our assumptions?

Methodological Challenges

Before we engage with these questions, we need to clarify the meaning of the key term of 'ambiguity', one of the most frequently mentioned words in this volume. It is a truism that Aegean images show a profound ambiguity in terms of (social) identity and role, gestures, action, and perhaps even age or sex, a fact that makes the task of iconic identification a tricky matter (Morgan 1989, 2000; Blakolmer 2010; McGowan 2011; Chountasi 2015; Koehl 2016). Anonymous actors engage in indeterminate actions, demanding from modern scholars more creative fantasy than knowledge. Numerous colleagues have expressed their frustration towards this problem of semantically opaque representations, yet only Emily Vermeule, the master wordsmith of Aegean Archaeology, addressed it with commanding witticism, when she described a Mycenaean terracotta model with a depiction of a couple under a blanket (Fig. 1) with the following words: "a couple in bed or dead or both" (Vermeule 1979, 54, fig. 10).

Recent research in several scientific fields – with an impact on archaeological disciplines – has contributed to a more accurate definition of ambiguity and related concepts. The most important among them – and most useful in the Aegean context – refers to the clear distinction between the terms 'ambiguous' and 'vague' which have to be utilized as two precisely defined *termini technici* of archaeological interpretation. This clarification is necessary,
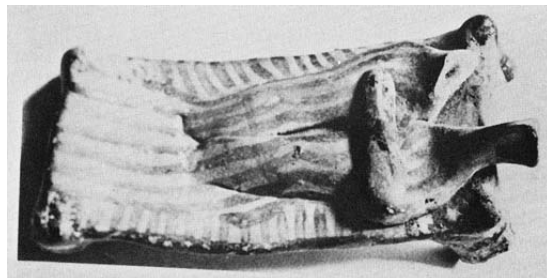
Fig. 1: Covert meaning in Aegean imagery: "a couple in bed or dead or both". Mycenaean terracotta model (after Vermeule 1979, 54, fig. 10).

5 See also above, n. 1. These are the two most important points of reference at a general level. However, the list of potential interpretive paths is much longer, as Kathleen Lynch has insightfully demonstrated in the case of Athenian vase painting (Lynch 2017, 128): hermeneutic, actual or absolute intentionalism, anti-intentionalism, modest actual intentionalism, hypothetical intentionalism, actual viewer, implicit viewer, hypothetical viewer, plural or individual viewer, generic Greek or Athenian viewer,

absolute perception, omniscient modern viewer. Given this impressively wide range of possibilities, it becomes evident how problematic previous approaches may be, when they – more implicitly than explicitly – adopt only one of these hermeneutic angles.

6 *Cf.* here the – descriptive and thus neutral – categorisation of Homeric gestures in a recent comprehensive study that divides them into the following types: falling, standing, leaping, reaching, and bearing, see Purves 2021.

since the term 'ambiguity' has often been used indiscriminately – not only in archaeology but also in modern language usage – to denote both ambiguity and vagueness (see Günther 2021, 5–9; furthermore Gillon 1990; Sørensen 2016),[7] *i.e.* two distinguishable varieties of interpretive uncertainty. Ambiguity refers to situations in which a word or phrase can have more than one specific meaning, whereas these meanings are semantically distinct and unrelated to each other. For example, the word 'bank' can refer to a financial institution or a riverside. Vagueness occurs when the boundaries of a word's meaning are not well defined, as in the words, 'grey', 'tall', or 'strong', the exact meaning of which cannot be defined precisely (van Deemter 2010, 8–10) but depends on the perspective of the person who makes this statement and can considerably differ from case to case. Vagueness refers thus to multiple meanings that are semantically related to each other or in a general uncertainty about the precise meaning of particular terms or images. Exactly the same distinction between ambiguity and vagueness can be drawn for ancient images. In relation to the topic of this volume, we can ascertain that in our attempt to understand Aegean gestures we are struggling with problems of both ambiguity and vagueness, whereas the first seem to prevail. Ambiguous are for instance isolated figures with gestures, stances, or mimic which could denote either joy or grief (see for instance the open mouth). Vague are gestures like the embrace that can denote love, amity, or kinship. What should give in our case rise to optimism is, on the one hand, the fact that, as Sørensen (2016, 748) has underlined, ambiguity can be resolved, but vagueness cannot. On the other hand, even a "fuzzier version of truth including multiple variants" (Sørensen 2016, 746) is a satisfying result, since it is impossible to grasp truth as an absolute value (if there is such a thing) in archaeology.[8]

The discussion of both terms can help us to circumscribe some crucial interpretive problems when engaging with ancient images, yet it cannot provide in itself a proper methodological approach. An attempt towards this direction has been recently undertaken by Elisabeth Günther (2021) in her introductory paper to a collective volume focusing on ambiguity and vagueness in ancient art (Günther and Fabricius 2021). Günther (2021, 16–23) proposes an integrative method combining the notions of 'affordance' and 'frame'. Affordance refers to the inherent capacity of a thing to enable one or more functions (Fox *et al.* 2015) – in the case of ancient iconography, accordingly, the capacity of an image to afford a clear message. On the other hand, Erving Goffman's frame theory stresses the significance of frames, *i.e.* cognitive structures that provide a scaffold for our perception. In the case of ancient images, it is the 'framing' of a specific motif within a scene and the cognitive background which determines the meaning of the depicted (Goffman 1974). Günther (2021, 28–31) combines both concepts with the context of perception as a third parameter that determines meaning. In the search for a clear terminological definition, we could define this third component as 'situationality', a term that in Translation Studies refers to "the location of a text in a discrete sociocultural context in a real time and place" (Neubert and Shreve 1992, 85; furthermore Beaugrande and Dressler 1992, 163). This definition is also fitting for images and can provide a useful analytical tool in the study of iconography.[9] Since images are always situated in specific communicative and social settings, situationality refers to the paramount significance of the spatial/sociocultural embedment for their reception and understanding. Different contexts can imbue different meaning in the image and allow or foster different readings.

---

7 The very brief analysis of ambiguity and vagueness undertaken here is only an oversimplification of an intense discussion in different scientific fields (cognitive semantics, linguistic theory, law, etc.), in which several subvariants of both terms as well as the related concepts of polysemy and indeterminacy are discussed, see Lakoff 1970; Tuggy 1993; Zhang 1998; Dunbar 2001; Sennet 2016. The main objective of their admittedly extremely superfluous treatment in the present paper is to provide an easy understanding of

their semantic divergence and – more important still – to facilitate their sensible application in the analysis of Aegean images and gestures.

8 For this 'fuzzy logic' as a theoretical approach in analytical philosophy, see Sørensen 2016, 746.

9 This term is very close to what Matthias Grawehr defines as 'performative framing', distinguishing it from 'cognitive framing' (Grawehr 2021, 227).

How can these three notions be implemented in the study of Aegean images and gestures? First, affordance can be applied in order to refer to their inherent communicative potential and – to be more specific – their capacity to convey a clear and unambiguous message. Gestures with strong affordance as modes of non-verbal communication are for example the body poses of victorious and defeated warriors (Franković and Matić, Koehl, Marinatos, Verešová, all in this volume), the kneeling embrace of the Petras pendant, the general meaning of which as expression of amity, kinship, peace, brotherhood, or alliance, cannot be misunderstood (see Ferrence *et al.,* in this volume), or hands to head and bloodied cheeks from scratching the face as visualization of mourning (Hoffman 2002, 542). Gestures with weak affordance include, on the other hand, bodily communication such as hands-on-hips (Hitchcock, in this volume), hands-on-abdomen (Kekes, in this volume), hands-on-chest (see Drakaki and Kiorpe, both in this volume) or raising both hands (Morgan 2000, 926, n. 2) which – especially as isolated forms of body comportment – cannot be clearly associated with a specific meaning. What makes things complicated in such (and many other) gestures is not only their polysemy but also the possibility that they might have been either the depiction of a static stance in real life or, alternatively, a set/sequence of movements that at the level of imagery was frozen into a single gesture (see also Introduction and Giannaki, in this volume).[10]

Even more decisive than the affordance of gestures or stances as self-contained configurations of the human body are the cognitive frames in which they were embedded. These include their 'framing' within a figurative scene ('visual frame') as well as the cognitive background of their producers and recipients ('cognitive frame'). Both frames determine the production of social meaning, thus turning a gesture into a communicative act. The importance of the visual frame (the iconographic context of a gesture) becomes evident especially in the case of its absence, when images appear fragmented and isolated as the result of disintegration from larger scenes (see Blakolmer, in this volume) and are depicted without a frame of meaningful (inter-)action. In most of the cases, such isolated gestures/stances have to remain open to a larger variety of interpretations (see Morgan 1989, 148–149). On the other hand, the cognitive frame of the producers and/or recipients of images is directly relevant to the most serious obstacle in any attempt to understand ancient gestures: the unquestionable divergence between the ancient and modern cognitive background that forces the modern scholar into adopting an etic perspective. The agreed-upon meanings of gestures can be decoded only by those who share an understanding of the relevant codes for communicating intentions, emotions, and responses to events and to other people.[11] Since most gestures both in life and representation are culturally determined, their meaning may differ dramatically between then (antiquity) and now (modern era). Yet, divergences in terms of the cognitive frame are possible even within one and the same chronological horizon, in our case the Aegean Bronze Age. When modern scholars study Aegean images and establish iconographic associations between them, they tend to forget that these representations compile a heterogeneous body of evidence, in terms of space, time, and context, and consequently they presuppose that the ancient viewer possessed the bird's eye view of an archaeologist. Therefore, it is important to keep in mind that the development of a common repertoire of gestures, stances, or mimic expressions does not necessarily mean that every specific type of them was implemented or understood in the same way by different Bronze Age artists and audiences.

---

10 See further Cartmill and Byrne 2011, 17: "Imagine, for example, if we were to group all oscillating movements of the head into a single gesture type. In this case, nodding and shaking the head would be considered to be the same gesture, and we would conclude that it had a very ambiguous meaning".

11 For the cultural embeddedness of gestures as a factor that instigates multivalent meanings, see Morgan 2000, 926: "Beckoning, greetings and farewells, which might

seem straightforwardly functional, are actually amongst the most varied gestures worldwide, while, as northern Europeans and Greeks well know, fundamental misunderstanding can arise from differences of meaning in simple head nods and shakes or gestures such as 'thumbs up'… A raised hand or hands, palm(s) outward, can express adoration (Egyptian), prayer and supplication (Near Eastern and Early Christian), benefaction (Byzantine) or greeting".

The implicit assumption of an instant and straightforward recognition of every pictorial theme in an ancient society would have required an abundant reservoir of repetitive images (see Osborne 2012, 179). Given the largely non-repetitive nature of Aegean and especially Minoan art, it is however questionable whether gestures were standardized and employed like hieroglyphic determinatives (Morgan 2000, 932). Therefore, an unequivocal response by the Bronze Age viewers is more a matter of archaeological 'wishful thinking' than an evident fact. Every attempt to dissect scenes into their components and then undertake a cross-sectional reading of the pattern treating only selected parts of a whole bears the risk of misinterpretation. Such hermeneutical pursuits tend to mystify rather than clarify the iconographic evidence. The same applies to any effort to define specific gestures as mutually exclusive categories. The Egyptian evidence shows that gestures can have not one but multiple meanings as the accompanying inscriptions reveal (Dominicus 1994, esp. 184–185) and therefore cannot be truly 'categorical'.

Finally, the significance of situationality as an analytical tool becomes crucial, especially in the case of mobile image-bearers like seals or stone and clay vases. Images, the perception of which was detached from a specific place, could have had not a fixed but only a vague meaning that was determined by the context of perception/use. As a consequence, such mobile images demand a more pluralistic explanation than, for instance, wall paintings. The necessity of an interpretive flexibility is even more pressing in the case of gestures/stances with weak semantic affordance, for instance an open mouth which depending on the medium and/or the context of perception could be 'read' as expression of joy or grief. Several papers in this volume stress the fact that context can transform the significance of a gesture and – vice versa – that a gesture can gain only through its reference to a specific context the acquired semantic precision.[12]

Affordance, frames, and situationality provide a hermeneutical matrix that enables us to approach gestures and stances with methodological instruments that can be precisely defined by referring to already existing theoretical concepts. This clarification is necessary for underlining that these terms do not refer to something entirely new, since they correspond to established methodologies of previous research[13] and to the way in which several contributions in this volume engage with Aegean gestures and stances. What they actually can contribute, is to help us systematize different approaches and especially to highlight the tension between artistic intention and audience perception as well as their convergences and divergences. Furthermore, the triangle 'affordance-frame-situationality' has the capacity of shaping a self-sustained methodological approach, in which the interdependence of the three poles would be the path that every interpretive attempt should follow. Only through a holistic engagement with Aegean gestures and stances, may it be possible to elucidate their meaning, since specific cognitive frames and/or contexts of perception impact – in different ways and with different intensity – the affordance of a gesture.

If we agree that this conceptual triangle can constitute the core of an interpretive method, then we have two different ways at our disposal for implementing it, *i.e.* the historical and the ahistorical/athematic approach. The historical approach refers to the method of comparative iconography, which was very lucidly explained by Lyvia Morgan and Michael Wedde more than 30 years ago and has prevailed in our discipline during the last decades (see Panagiotopoulos 2020, 389–390). Even if Morgan and Wedde used different terms, both meant a relational approach that systematically explores the position of an image within a cautiously woven web of visual representation and its juxtaposition in relation to other images (Morgan 1985, esp. 9, 14, 18–19; 1988, esp. 11–12; 1989, 2000; Wedde 1992, esp. 182–185). Following this methodological premise, the starting point of any iconographic analysis should be the study of associations

---

12 See Morgan 2000, 932 who warns us against the potential risks of the method of analogic reasoning: "… supportive cross-referencing is sometimes insufficient to establish unequivocal meaning".

13 In his unpublished PhD dissertation on Egyptian and Aegean ritual gestures, Ch. Kekes has implemented a well thought-out and very detailed analytical framework, several parameters of which resemble the notions of affordance, frames, and situationality, see for a summary Kekes 2018, esp. 228 table 1.

that relate to "the syntactic structures which generate complex meaning" (Morgan 1985, 14). The search for iconographic associations is a form of analogical reasoning that has as its main objective the iconic identification and thus a basic understanding of persons, roles, gestures, and activities. The only critique that one might raise against 'comparative iconography' relates less to its methodological principles and more to the way in which it is frequently applied. Previous and recent scholarship has shown a tendency for engaging with images not for their own sake but for using them as historical sources in order to elucidate different aspects of Aegean societies. This scientific attitude has two consequences:

a) it treats iconography as mere documentary evidence, downgrading images to a means to an end rather than the actual object of scientific enquiry and leaving aside their significance as medium of communication, and

b) it brings with it the risk of a circular argument. From a methodological point of view, it is highly problematic to use gestures and stances for understanding social identities and roles, gender issues, and related open questions of current research, if the latter cannot be clarified and confirmed by other sources.

Despite these problems, there can be no doubt that the established method of iconographic associations – when applied in a rigid and systematic manner avoiding to build 'towers of cards' that are created from hypotheses resting upon other hypotheses – can reveal semantic correspondences and ancient 'webs of significance' (see Geertz 1973; Günkel-Maschek, in this volume). This is demonstrated for example by Alexia Spiliotopoulou (in this volume) who explains the enigmatic gesture of the male bronze figurine from Katsambas through analogic reasoning, discussing a series of parallels that can be securely interpreted by reference to their context of perception/use.

The alternative to this historical approach is one that goes beyond the purely contextual level, adopting an ahistorical/athematic reading (Panagiotopoulos 2020, 397–399).[14] This methodological path does not seek for iconographic associations but rather discusses and evaluates gestures on the basis of their aesthetic and semiotic capacities at a diachronic and intercultural level, by employing the entire arsenal of theoretical models at our disposal. In contrast to the traditional method of inference, which is based on the alleged meaning of related images, this approach relies not on hypotheses, but on observations that can be better verifiable. An athematic reading could foster and enhance a more anthropological or humanistic engagement with Aegean gestures by developing different research questions that call on collective and individual imagination at a diachronic level. The best example for an insightful athematic reading of Aegean imagery is Henriette Groenewegen-Frankfort's classical study "Arrest and Movement" (Groenewegen-Frankfort 1951), in which she explored the idiosyncrasies of spatial rendering and their implicit meaning in different artistic traditions, elucidating how Minoan artists employed space and movement for conveying dramatic tension. Several contributions of this volume follow a similar line of argumentation (see for example Mina, Mitrovich, and Morgan), implying that the response of the ancient and modern viewer to specific semantic and/or aesthetic dimensions of the image might be the same. Assuming that visual perception has facets that can bridge the gap between past and present, we can establish a phenomenological continuum as an apposite field for diachronic analytical approaches. This may foster novel hypotheses on Aegean imagery that can be corroborated by modern experiences. Consequently, instead of striving to understand Aegean gestures as social codes and to deduce 'historical' information from them, we could move towards an Aegean phenomenology of gesture, by asking more overarching questions from an athematic point of view. By compiling a new, theoretically informed research questionnaire, we can enhance the interpretive potential of traditional approaches, as the aforementioned contributions in this volume clearly demonstrate. The following examples delineate some potential topics of an

---

14   The notions of 'ahistorical' and 'athematic' approach are used in this paper as overlapping terms.

athematic approach in future research: one key question that needs to be addressed more systematically in the coming years is the relation between gestures and speech as two modes of communication that are inextricably bound together. In everyday life, gestures co-occur with speech by complementing, ornamenting, or substituting it. Only in specific cases, for instance pantomime, sign-language, or dance, gestures do not accompany speech. It is therefore crucial to discuss the contrast between co-verbal and non-verbal gestures in Aegean imagery. The fact that Aegean figures gesture regularly yet move their mouth (for talking, singing, or screaming) only occasionally, cannot but be a matter of artistic tradition and/or iconographic conventions. In previous research, there is, however, an implicit tendency to separate gestures from speech and perceive them as a sort of self-sufficient non-verbal communication. Only sporadically have attempts for a relational approach linking gestures with speech been undertaken (see Kekes 2017, 1–7; Blakolmer, in this volume; Günkel-Maschek, in this volume). These two potential functions of gestures, *i.e.* co-verbal and non-verbal communication, generate two different interpretive challenges: a) to consider most of the Aegean gestures as depiction of a communication that integrated also speech and b) to ask in which specific contexts the necessity of sign language or gestural action without speech could arise. For the latter option, the examples from real life are numerous, including, for instance, hunting, occasions in which people wish to communicate without being overheard, mourning habits that prohibit people from speaking, rules of silence between members of a monastic order, or inter-tribal/inter-cultural communication among social group with different languages. Yet, the only cases of non-verbal communication, which we could realistically expect to find in Aegean imagery, are either dance, ritual acts, or, possibly, communicating over long distances, a daily practice in a rural environment. For the rest of the depicted gestures (actually the majority), we have to assume that they must have served – as in most cultures – as an add-on to spoken language and, consequently, to raise the question of how this fusion of both communication modes could have been manifested in the pictorial evidence. There is, however, a third alternative: it is theoretically possible that what we see in the images – or at least in some of them – is a formulaic language of bodily movement, the basic aim of which was less to imitate gestures and stances of real life and more to convey an overt message to the viewer.[15] In other words, the grammar of gestures in Aegean imagery could have been shaped by an Aegean 'visual rhetoric', the aim of which was to guide the viewer's understanding in an intended way (Murphy 2018, esp. 9–10, 14).

A further field of inquiry that can produce fruitful insights is the study of proxemics, which next to kinesics (body movement) provides another important subcategory in the study of non-verbal communication. The term, which was coined by Edward T. Hall (1966; see also Letesson and Vansteenhuyse 2006, 97), refers to the human use of space and its impact on behaviour, interpersonal communication, and social interaction in general. Hall classified the interpersonal distances of humans in four distinct zones: (1) intimate space, (2) personal space, (3) social space, and (4) public space. Since all these categories are represented in Aegean iconography, they might help us to structure the variety of gestures and stances accordingly.[16]

Beyond these two issues (the gesture-speech relation and proxemics), that should be prioritized in future research, there are numerous further questions which promise to instigate new ways of looking at Aegean gestures and stances: Are there any indications of left/right symbolism through left- or right-handed gestures? To what extent is Aegean iconography dominated by scenes that depict the expressive operation of the human body? Do we recognize any pathos or even a 'pathos formula', for example gestures as an impulse and not as a rational action? Do Aegean images convey the impression of an autonomous conception of the human body or does

---

15 This is implied by Morgan (2000, 927): "Stasis and mobility, posture and gesture, rhythms and repetitions in the motions of bodies all combine to produce a language of the figure, visual and without speech, yet effective in its communicative power".

16 Even in seal imagery, where, despite the miniature format, there was an apparent interest to visualize space, we can discern the intimate, personal, and social sphere of Hall's categorization.

the latter as a whole come into focus only through its parts and the tracking of movement and gesture, as Bruno Snell suggested for the Homeric body (Snell 1955; for the implementation of this concept in Classical Archaeology see Himmelmann-Wildschütz 1964, 13, 17; Dietrich 2018, 33–35, n. 104–105)? Can the same gesture be both deeply meaningful in one case and learned or formulaic in another? These are only some potential topics for athematic approaches to Aegean gestures in future research. At the end of this theoretical discussion, it must be stressed once again that the implementation of the aforementioned theoretical concepts and the methodologies related to them cannot provide us with straightforward answers to the open questions about the meaning of Aegean gestures. Yet, they can be used as a complementary tool to the most reliable traditional approaches and significantly enhance them, since they address in a very enlightening way some crucial issues of interpretation which must be considered in every attempt to disclose the symbolism behind the wide spectrum of gestural communication in Minoan and Mycenaean images.

(Mis-)Reading Gestures

The second part of the paper focuses on selected images and seeks to explore how an integrative approach combining the historical and ahistorical/athematical method can stimulate the ongoing discussion on Aegean gestures and stances. This brief overview will start with images that do possess an intrinsic power to defend their original message against any alternative reading by virtue of their affordance, frame, and situationality. Some characteristic examples comprise the aforementioned gestures of domination and defeat or offering and presentation gestures (see Morgan 2000, 933; Aulsebrook, in this volume). Among such gestures/stances with strong semantic affordance, the scenes of mourning on the Tanagra larnakes represent a case of entirely straightforward meaning (Cavanagh and Mee 1995; Panagiotopoulos 2007; Kramer-Hajos 2015; Dakouri-Hild 2021). In the most drastic of these pictorial compositions, two figures, obviously the closest relatives of the dead child, lean over the body and touch it (Fig. 2). Their bodies are reduced to one of the most dramatic and emotive stances ever depicted in Aegean art. The visual economy of the scene is stunning. Any additional line or ornament would have been simply too much, since the painter conveyed, by means of silhouettes, a message that is unequivocal both for the ancient and the modern viewer: the unbearable pain caused by the untimely death of the beloved child. The affordance of the isolated mourning gesture/stance alone would suffice to defy any erroneous reading. In this case, the visual framing of the scene (burial ritual), which coincides with its situational context (tomb/cemetery), only enhances the immersive quality of the scene.

An equally penetrating visual power that can resist alternative readings is evident in two remarkable scenes at the other end of the emotional scale. The group of merry harvesters on the Agia Triada relief stone vase who march in very orderly front rows that disintegrate towards the procession's end, resembling the parade of an unruly school class, is undoubtedly one of the most joyful scenes of Aegean imagery (Blakolmer, in this volume; further 2007, with earlier bibliography). In the very middle of this disorder lies its peak – or perhaps even its cause – showing a hilarious moment of em-

Fig. 2: The most tragic scene of Aegean imagery: a Mycenaean painted larnax from Tanagra (after Aravantinos 2010, 114).

---

17 As a matter of fact, the assumption that this person was drunk cannot be verified. Yet, in a culture, in which wine production and consumption evidently played a major role, it is justified to assume that at least one among hundreds of depicted individuals was rendered in a boozy state.

Fig. 3: A scene of merriment: detail of the procession of happy harvesters on a relief stone vase from Agia Triada (after Marinatos and Hirmer 1973, pl. 105, bottom).

Fig. 4: Cheering male spectators: 'Sacred Grove and Dance Fresco', Knossos (after Evans 1930, 67, pl. XVIII).

barrassment: one harvester, apparently drunk,[17] loses his balance and falls down opening his mouth in one of the most ridiculous mimic expression which came down to us from the Bronze Age (Fig. 3). Even if this iconographic detail with the man in front of the stumbling figure who turns his head round addressing the first is less anecdotal as one might think at first sight (see Bla-kolmer 2007, 211), the episode possesses a strong portion of spontaneity and joy that amuses the viewer. Within an imagery, in which the body seems programmed to move in generically deter-mined ways and to adopt postures, poses, and gestures within a formulaic system of movement, this deviation represents a precious exception. It demonstrates that the intentionality of Aegean gestures is only assumed and not proven, since not every single depicted bodily action must have been intentional, *i.e.* regulated by convention.[18] Yet, the stumbling harvester is important also for another reason. His uncontested historical value lies less on the level of the modalities of artis-tic production (*i.e.* the use of visual formulas) and more on the level of response, since this image has the capacity to evoke exactly the same reaction to both ancient and modern viewers.

The second jolly scene, in which gesture conveys an unequivocal message, is the Sacred Grove and Dance Fresco at the palace of Knossos (Hood 2005, 63–64, no. 6 with earlier refer-ences; Jacobs 2004). This impressive pictorial composition is animated by a small iconographic detail, skilfully executed by the Minoan painter: some of the spectators standing at the upper edge of the male crowd are depicted with one arm stretched out (Fig. 4), an unmistakable indica-tion for the ancient and modern viewer that the crowd was cheering (Evans 1930, 67, pl. XVIII). The visual 'economy' of the depicted event is also here astonishing. With a minimal use of icono-graphic conventions, the artist captures – and conveys to the viewer – the festive atmosphere and noise of a significant and boisterous public event at the West Court of the palace. In all three cases (Tanagra, Agia Triada, and Knossos), we can be quite confident that we understand the scenes and – more important still – we are capable of being affected by them in a quite similar way to that of a Bronze Age viewer.

Beyond such instances of a straightforward visual message that leaves little or no space for misunderstanding, several Aegean scenes can be definitely regarded as semantically powerless images, since they are characterized by a profound ambiguity (again from the perspective of the modern viewer). This ambiguity occurs both at the level of pre-iconographic and iconographic analysis:[19] in several cases, we are not even capable of identifying the depicted action, gesture, or

---

18 This type of learned gestures is defined as 'em-blems', see Kendon 1982. Furthermore, we have to keep in mind that in real life the same movement can be used by a person as an intentional gesture and by another as a spontaneous, non-intentional reaction.

19 Both terms refer to Panofsky's tripartite analytical scheme (Panofsky 1955) that formed the dominant methodological paradigm in Art History and Classical Ar-chaeology in the second half of the 20th century, referring to three different levels of visual meaning: a) primary or
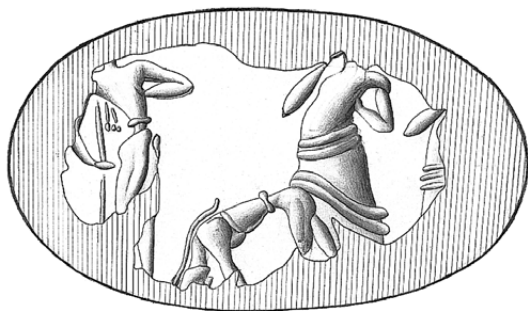
Fig. 5: The most ambiguous Minoan image: seal impression from Kato Zakros (CMS II 7, no. 3; courtesy of the CMS Heidelberg).
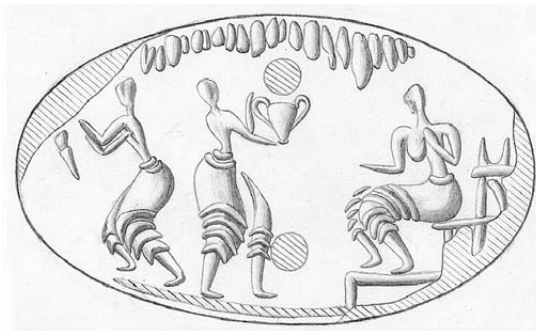

Fig. 6: Practical or symbolic? Gestures on a Knossian seal impression (CMS II 8, no. 268; courtesy of the CMS Heidelberg).

stance before we move to the level of deciphering the image's symbolic message. When the kinesic and proxemic behaviour deviates from known standards, the depicted action may well allow for multiple readings, at least from the view of an ignorant beholder. A sealing from Kato Zakros, showing a male individual in a truly awkward position (*CMS* II 7, no. 3), exemplifies these difficulties and has generated strongly diverging readings by modern scholars (Fig. 5): A young man dressed in a kilt and holding a staff stands on the left. Before him stands another male, likewise dressed in a kilt, who bents down with his head almost touching the ground. Behind him, two further male figures wearing long mantles of the type that is normally designated as priestly garments, are depicted. While Nanno Marinatos (2007) and Ingo Pini (see the description of *CMS* II 7, no. 3), following previous suggestions, read the scene as a prostration/proskynesis, *i.e.* the kissing of the ground as expression of submission, Robert Koehl (2016, 123–128) proposed a totally different interpretation, seeing a depiction of a homosexual act as a male initiation rite. Given these diametrically opposed hypotheses, we can ask ourselves whether the posture affords indeed a multiple reading. This really seems to be the case – apparently for both the modern and the ancient viewer – given the fact that there are no iconographic parallels for either a proskynesis or a homosexual act in Aegean imagery. The interpretation seems in this case to be a matter of the posture's framing and attributes rather than the posture's affordance. This is exactly how Koehl strives to support his argument by focusing on minute details that seem to indicate an erotic background, namely the alleged erect penis of the standing figure and the – also alleged – nudity of two figures in the scene (Koehl 2016, 123–125). However, following the same methodological strategy and focusing on the iconographic context in which this posture is embedded, one is inclined to support Marinatos' and Pini's suggestions: the three figures on the right might have represented a procession for a Minoan nobleman, king, or god who presented himself on the image as recipient of honours and gifts from abroad. The proskynesis, a unique body posture in Minoan imagery, might have reversed the experience of Aegean emissaries in Egypt who either participated themselves in one of these illustrious court ceremonies and witnessed other foreign emissaries in prostration in front of the Egyptian pharaoh or saw a depiction of such an event by visiting the accessible zone of the private tombs of Egyptian high officials at the Theban necropolises.[20] Even if we cannot give a definite answer yet, we can assume that this unparalleled posture may have caused a similar irritation not only to us but also to most of the Minoan viewers.

---

natural subject matter (or pre-iconographic description), in which one has simply to describe and define what is depicted, b) secondary or conventional subject-matter (or iconographic analysis) in which the depicted motif(s) or action(s) have to be identified or named as specific object(s), person(s) or theme(s) and c) intrinsic meaning or content (iconologic interpretation) referring to the un-

derlying principles of an image that reflect the attitude of the social group, in which it was produced, in other words its 'symbolic' values.

20 For prostration as a recurrent motif of these processions and for the accessibility of the front part of the Egyptian private tomb of the 18th Dynasty, see Panagiotopoulos 2001, 262, 269, 272.

Fig. 7: Unfocused interaction: the awkward narrative texture of the scene on the North Wall of the Miniature Fresco, Room 5, West House, Akrotiri (after Doumas 1992, fig. 28).

Yet, the majority of Aegean images lie between these two extremes of the ambiguity scale (from entirely transparent to entirely opaque meaning). In most of these cases, it seems that the key to the understanding of a gesture or stance lies, as we saw in the aforementioned scene on the Zakros sealing, not in its affordance but in its framing. This applies especially to seal imagery, where due to the constraints of space the co-presence and co-action of the depicted figures can regularly be considered as granted. On the so-called clay matrix from Knossos (*CMS* II 8, no. 268), the depicted figures are all engaged in the same action (Fig. 6). Their postures and gestures are orchestrated as part of the same visual narrative. However, if we want to penetrate the semantic fabric of this composition a bit further, we meet the first obstacles. How can we be sure that everything which is depicted was a proper gesture, *i.e.* a deliberate action? On the basis of which criteria do we distinguish between bodily actions which are done for the practical necessities of interaction and those that are shown for the sake of conveying meaning? Purely practical actions may possess a performative quality as purposeful and thus communicative movements, for example pouring wine (see Aulsebrook in this volume on the pouring scene from Xeste 3 at Akrotiri, with further bibliography) or holding the leashes of animals in emblematic scenes (see *CMS* II 8, no. 248; Drakaki, in this volume).[21] A more thorough engagement of the intentionality of bodily movement in Aegean imagery would thus be necessary, before one starts to hypothesize about its alleged symbolic content.

Beyond this key issue of ambiguity and the tireless attempts on the part of archaeologists to elucidate the meaning of the depicted, images deserve, as already mentioned, to be analysed not as 'sources' but as a medium of visual communication and consequently as the main objective of scientific enquiry. A better understanding of the rules that determined the communicative role of iconography could help us to decipher what exactly human figures were doing in scenes of 'opaque' meaning. From this angle, it is interesting to explore to what extend gestures might have supported the narrational process, distributing meaningful information throughout a complex scene. Morgan (in this volume) discusses extensively the role of depicted figures and gestures/stances as 'referents' that lead the viewers' eyes through the semanticized space of a

---

21 See Morgan 2000, 926: "The question of natural versus symbolic arises most forcefully in the case of gesture … Certain movements of the arms and hands are clearly functional and when transferred to art become expressive gestures. But they are not necessarily as 'natural' as one might think …".

composition and help them grasp its meaning. The best examples to study this semantic capacity of gestures are provided by the miniature frescos, the most 'crowded' scenes of Aegean iconography. The largest among them, the superb narrative synthesis on the walls of Room 5 of the West House at Akrotiri (Morgan 1988; Doumas 1992, 46–49, figs. 26–48), shows how the artist/artists took advantage of the eye's tendency to dwell upon the details of a picture, using gesture/stances as a red thread for unfolding the meaning of the depicted story/stories. One part of the Theran pictorial synthesis, however, is striking not because of the depicted gestures but because of their puzzling absence. On the north wall, the drama, which unfolds in the water in the lower part of the scene and penetrates the land through the landing of a group of warriors, does not by any means affect the men and women that are depicted only a couple of centimetres above (Fig. 7).[22] The latter are sunk in the daily routine of a pastoral life (leading of flocks, drawing of water from a well) and remain totally indifferent, despite the fact that the landing troop is at 'striking distance' (see Morgan 1988, 159–160). We see here different groups that are co-present, yet in an unfocused interaction without engaging in a shared activity. One would expect though, that the landing of the troop would have been employed by the artist as an 'event trigger' for articulating cause (presence of an enemy) and effect (fear among the local population). Yet, the depicted events are not rendered in an interrelated position and direction of movement that would have bound them together into a single and coherent narrative.[23] Morgan (1988, 159) assumed that the depicted action was not unified and that the different subgroups of action were not intended to be read as occurring at the same time. What we see here is, according to her, a juxtaposition of only 'subtly interrelated' events with implied rather than visible links, depicting typical elements in the life of a coastal community. For the awkward narrative texture of this composition, there might be, however, an alternative interpretation: We cannot exclude that the artist did really want to depict a coherent action, yet he/she was not able to do so because he/she could not overcome some serious problems in the visual engineering of temporality and plot.[24] Confronted with the task to narrate a dramatic event that gradually unfolded itself from the sea to the land, infiltrating the tranquillity of peaceful pastoral life, the painter tried to do his/her best and probably soon met his/her limits, not being able to produce a well-interwoven spatial narrative. A similar inability to render a realistic flow of dramatic action is evident in modern digital strategy games, in which the implementation of proxemics rules for visualising action in a virtual space poses a real challenge to game developers. The algorithms that define elementary action activate the expressive operation of the body, following the basic rules of immediate proximity to an external stimulus. The result looks in most cases far from realistic, resembling the mutual indifference of figures that are very close to each other in the Theran miniature fresco. Be that as it may, we can assert that in every attempt to extract meaning from such complex narrative images, the modern scholar has to commit him-/herself to methodological flexibility, moving back and forth between the affordance of gestures/stances and their visual (pictorial context) as well as cognitive framing (iconographic conventions as agreed-upon meanings of visual communication) for understanding how these different factors impinged upon the image.

Closing this brief survey of selected gestures/stances and their semantic capacities, it is worthwhile to focus on the phenomenon of frontality, the most immersive case of the depiction of bodily action: several humans, animals, or hybrid creatures (see Morgan 1995) of Aegean imagery are depicted in a frontal position and thus are addressing the viewer. The 'gaze out of the im-

---

22 The following discussion of the scene is based on the fact that the landing troop represented foreigners/enemies and not part of the local population, see Televantou 1990, 319 fig. 9; Koehl 2016, 471.

23 This fact lies in sharp contrast to the focused interaction of the scene on the south wall, in which the inhabitants of both 'towns' are bound through gazing to the composition's main theme, i.e. the flotilla, either as isolated motionless spectators at the Departure Town or as an entire population in great anticipation at the Arrival Town (see Morgan 1988, 161–162).

24 This has been already suggested by Koehl 2016, 471: "The artist(s) of the miniature fresco were apparently unaccustomed to painting historical events or sequential narratives".
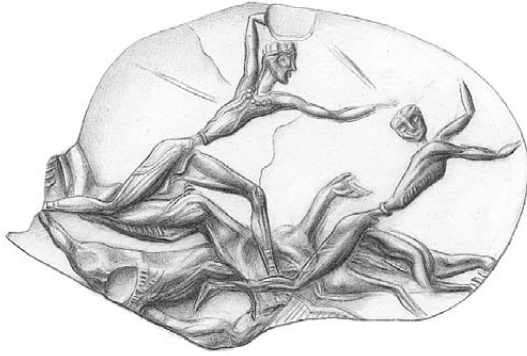
Fig. 8: 'The gaze out of the image': frontal depiction of a male figure on a Neopalatial seal impression (CMS II 6, no. 15 and II 8, no. 279; courtesy of the CMS *Heidelberg*).

age' is not very common in Aegean iconographic tradition, yet it has an "intrinsic arresting effectiveness"[25] on the beholder, demanding his/her full attention. By doing so, it transgresses or even eliminates the barrier between reality and representation (Hedreen 2007, 218; Mackay 2001, 27, 31). We can be confident that the response of modern and ancient viewers to this disruption of the standard form of visual expression must be/have been very similar. The 'gorgoneia'/'masks' on MM II prisms (Anastasiadou 2018, 168–170, fig. 2, a–c), the grotesque figure on the Petras agate seal (Krzyszkowska 2012, 153–155, fig. 8), and several of the Zakros composite 'creatures' (Anastasiadou 2016) leave little space for ambiguity and can be understood as frightening apotropaic images. They share two common elements: a) they are isolated depictions not embedded in larger pictorial scenes, in which they should have had to interact with other depicted figures, and b) they are rendered on mobile objects (seals) and therefore could potentially acquire different meanings, depending on the situationality of their bearers. An intriguing and unique case of a frontal image embedded within a pictorial scene resembles the desperate figure in the duel scene on a ring (Fig. 8) whose impressions were found on seven nodules at Knossos (*CMS* II 8, no. 279) and Agia Triada (*CMS* II 6, no. 15; see also Blakolmer, in this volume; Koehl, in this volume). Even if we cannot be sure about the artist's intention to establish a direct connection between this figure in a moment of fatal danger (see Morgan 1995, 137, 139) and the viewer, there can be no doubt that the frontal mode of depiction increased the dramatic suspense of the scene.[26]

Beyond these cases of direct visual contact between the depicted figure and the viewer, there are further possibilities of how an image was intentionally created for transgressing the border of representation and interacting with the real space, as the large-scale fishermen (Fig. 9a–b)
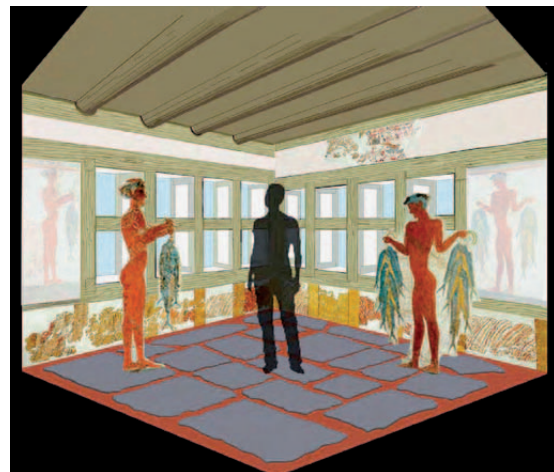
Fig. 9a–b: Guiding the viewer: large-scale fishermen in Room 5 of the West House at Akrotiri (after Palyvou 2012, figs. 5–6).

25 Korshak 1987, 1 (cited in Bracker 2021, 169).

26 The way classical archaeologists comment frontal images (see Bracker 2021, 169–170) is symptomatic for the captivating capacity which the latter must have exercised to ancient viewers. This effect, namely a direct communication between depicted figure and viewer that unified representation and reality into a common space of perception, was undoubtedly intended by the artists.

and the 'priestess' in the West House at Akrotiri on Thera lucidly demonstrate. Both fishermen in the north and south corner of Room 5 face each other, embracing, through their gazes, the viewer, who stands more or less at eye-level in the middle of the room, and creating the illusion that they come out of the walls to move towards him/her, as Palyvou has convincingly argued (Palyvou 2012, 12, figs. 5–6). In the same vein, Morgan stressed that both figures and the 'priestess' at the door jamb between Room 4 and Room 5 guide the eyes of the viewer as he/she moves through this lavish in-

Fig. 10: Images as *exemplum of human behaviour:* Knossian Corridor of the Procession (after Günkel-Maschek 2020, fig. 4.19).

terior space (see Morgan, in this volume). A similar 'dialogue' between image and viewer is instigated by the magnificent procession of hundreds of life-sized images in the Knossian Corridor of the Procession (Günkel-Maschek 2020, 153–275 with earlier bibliography; Morgan, in this volume). This impressive composition (Fig. 10) referred undoubtedly to what regularly happened in this very place, namely dazzling ceremonies with the participation of gift-bearers. Yet, beyond its commemorative role, the depicted procession fulfilled very likely a further function. Through the gravity of their appearance, the symmetry of their stances, and the rigidness of the formal procession, the processional figures instilled respect into anyone who entered the palace, thus prescribing an attitude and stance that was adequate for this place. Consequently, stances in Aegean imagery did not only reflect reality but could also impact it, by imposing to the viewers an apposite body comportment or by guiding them within the built space (see also Morgan, in this volume). According to Maria Mina's provocative hypothesis, figurines in Minoan caves might have been employed in a very similar way, by instigating bodily movement and trance-inducing postures among the ritual participants (see Mina, in this volume). We can deduce from this evidence that images had the capacity to function as *exempla* of human behaviour, especially in the cases of public spaces, where the gravity of the depicted figures constituted a visual code of social acting, invigorating the viewer to adopt an adequate stance and behaviour. In later periods, this assumption finds a welcoming confirmation in the well-known episode from the life of the Attic orator Aischines, who in one of his speeches imitated the moderate posture of Solon's portrait statue, provoking through his mimetic attitude a sarcastic comment by his opponent Demosthenes (Zanker 1995, 52–53; Catoni 2005, 275–276; Hölscher 2018, 232).[27]

Concluding Remarks

Despite the obvious obstacles in the unbroken efforts by specialists to understand Aegean imagery, there is no reason to be pessimistic. In several cases, images – by means of their affordances, frame, and situationality – can maintain their own authority and resist the construction of arbitrary interpretations. But even for the rest, the majority of our pictorial evidence, we do not need to draw any discouraging conclusions, since there are different ways to deal with the problems of ambiguity and vagueness. One of these possibilities is to follow Baxandall's bold statement that art historians (and one could add here archaeologists), when attempting to discuss pictures with the basic aim to interpret them, are not conducting any sort of science but just inferential criticism (Baxandall 1985, 135–137). Yet, for those who are not willing to admit that the archaeological approach to images is not proper science, there is a more balanced alternative, namely to agree at least that we are not conducting an 'exact science'. In this vein, Sørensen is opting, as already mentioned (see above p. 26), for a 'fuzzy' truth (instead of an absolute truth) as a more rea-

27 See further Hölscher 2018, 167–168: "Images represent the reality of personal appearance in significant aspects, while the reality of personal appearance, insofar as it is styled into a significant shape, appears as an image".

Fig. 11: A pastoral encounter: detail from the South Wall of the Miniature Fresco, Room 5, West House, Akrotiri (after Doumas 1992, fig. 44).

listic objective of archaeological enquiry: "The nature of the archaeological record is frequently – maybe always – fragmentary and partial, and instead of lamenting this condition, we might embrace it and explore how one of the assets of archaeology is to be able to build narratives on the basis of what remains unclear" (Sørensen 2016, 759; see also Gero 2007). Consequently, an optimistic stance towards the fragmentary, ambiguous, and vague character of the pictorial evidence would mean to forget the futile chase for an archaeological 'absolute truth', to embrace the limits of our interpretation, and to try to do the best within our field of possibilities. One example that clearly illustrates our hermeneutical potential and limits is a detail from the south wall of the Theran miniature fresco (Fig. 11): outside the Departure Town, two men stand on both sides of a small river (Morgan 1988, 161; Doumas 1992, fig. 44). There can be no doubt about what they are doing: they do not contemplate in pair but they talk to each other. We just do not know what they are saying. The conversation is taking place with both persons standing at a certain distance from each other. The quest for an 'absolute' archaeological truth would have had as objective to formulate a hypothesis about the content/reason of this dialogue, an admittedly impossible task. Yet, if we content ourselves with a 'fuzzier' version of archaeological reality, it would suffice to enjoy the rare visual expressiveness of this bucolic idyll, a possible genre scene that provided a background rhythm for the entire composition. So, instead of trying to interpret what exactly was happening here, we could plead for more fascination and less interpretation (see also Olsen 2015, 188–190), admire the beauty of this river encounter, and perhaps acknowledge its diachronic artistic quality. If someone took both figures and put them in a Byzantine wall painting, no one would raise an eyebrow. And a final point: the study of gestures and stances gives us the possibility to engage with ancient realities by regarding them as a form of shared experience between now and then. This is what Purves implies in his inspiring study of Homeric gestures referring to Millay's poem, which has been employed in the present paper (as in Purves' book) as an epigraph: "By overlaying her [own] gestures onto those of a fictional character, Millay also suggests some form of a shared experience; a common understanding or empathy that can momentarily occur through the reenactment of a bodily phrase" (Purves 2021, 1). This shared experience, which can range from empathy to re-enactment of an ancient bodily gesture, opens the path for a more humanistic approach to ancient people, which is urgently needed in current archaeology.

References

Anastasiadou, M. 2016. "Wings, heads, tails: small puzzles at LM I Zakros." In *Metaphysis. Ritual, myth and symbolism in the Aegean Bronze Age. Proceedings of the 15th International Aegean Conference, Vienna, Institute for Oriental and European Archaeology, Aegean and Anatolia Department, Austrian Academy of Sciences and Institute of Classical Archaeology, University of Vienna, 22–25 April 2014, edited by E. Alram-Stern et al.,* 77–85. *Aegaeum* 39. Leuven and Liège: Peeters.

Anastasiadou, M. 2018. "The origin of the different: 'Gorgos' and 'Minotaurs' of the Aegean Bronze Age." In *Making monsters. A speculative and classical anthology,* edited by E. Bridges and D. al-Ayad, 165–175. Futurefire.net Publishing.

Aravantinos, V. 2010. *The Archaeological Museum of Thebes.* Athens: John S. Latsis Public Benefit Foundation and EFG Eurobank Ergasias S. A.

Baxandall, M. 1985. *Patterns of intention. On the historical explanation of pictures.* New Haven and London: Yale University Press.

Beaugrande, R. de, and W. U. Dressler. 1992. *Introduction to text linguistics.* London and New York: Longman.

Blakolmer, F. 2007. "Die 'Schnittervase' von Agia Triada. Zu Narrativität, Mimik und Prototypen in der minoischen Bildkunst." *CretAnt* 8, 201–242.

Blakolmer, F. 2010. "A pantheon without attributes? Goddesses and gods in Minoan and Mycenaean iconography." In *Divine images and human imaginations in ancient Greece and Rome,* edited by J. Mylonopoulos, 21–61. Leiden and Boston: Brill.

Bracker, J. 2021. "Mehrdeutigkeiten in der Kommunikation mit bildlichen Medien." In *Mehrdeutigkeiten. Rahmentheorien und Affordanzkonzepte in der archäologischen Bildwissenschaft,* edited by E. Günther and J. Fabricius, 163–183. Wiesbaden: Harrassowitz Verlag.

Cartmill, E. A., and R. W. Byrne. 2011. "Addressing the problems of intentionality and granularity in non-human primate gesture." In *Integrating gestures: the interdisciplinary nature of gesture,* edited by G. Stam and M. Ishino, 15–26. Amsterdam and Philadelphia: John Benjamins Publishing Company.

Caskey, M. E. 1986. *The temple at Ayia Irini. The statues. Keos II, I.* Princeton, N. J.: American School of Classical Studies.

Catoni, M. L. 2005. *Schemata. La comunicazione non verbale nella Grecia antica.* Pisa: Edizioni della Normale.

Cavanagh, W., and C. Mee. 1995. "Mourning before and after the Dark Age." In *Klados. Essays in honour of J. N. Coldstream,* edited by C. Morris, 45–61. *BICS Suppl.* 63. London: Institute of Classical Studies, University of London.

Chountasi, M. 2015. "Performance theory in Minoan rituals and the ambiguity of Minoan symbols." In *Minoan archaeology: perspectives for the 21st century. Proceedings of the international PhD and Post-Doc conference at Heidelberg, 23–27 March 2011,* edited by S. Cappel, U. Günkel-Maschek, and D. Panagiotopoulos, 299–310. *Aegis* 8. Louvain-la-Neuve: Presses universitaires de Louvain.

Dakouri-Hild, A. 2021. "The most discouraged Mycenaeans: performing emotion and death in Late Bronze Age Tanagra, Greece." *JFA* 46 (6): 349–381.

Dietrich, N. 2018. *Das Attribut als Problem. Eine bildwissenschaftliche Untersuchung zur griechischen Kunst.* Berlin, Munich, and Boston: De Gruyter.

Dominicus, B. 1994. *Gesten und Gebärden in Darstellungen des Alten und Mittleren Reiches. Studien zur Archäologie und Geschichte Altägyptens* 10. Heidelberg: Heidelberger Orientverlag.

Doumas, Ch. 1992. *The wall paintings of Thera.* Athens: The Thera Foundation, Petros M. Nomikos.

Dunbar, G. 2001. "Towards a cognitive analysis of polysemy, ambiguity, and vagueness." *Cognitive Linguistics* 12 (1): 1–14.

Evans, A. 1930. *The Palace of Minos at Knossos,* vol. III. London: Macmillan and Co.

Fox, R., D. Panagiotopoulos, and Ch. Tsouparpoulou. 2015. "Affordanz." In *Materiale Textkulturen. Konzepte, Materialien, Praktiken,* edited by T. Meier, M. R. Ott, and R. Sauer, 63–70. Berlin and New York: De Gruyter.

Freedberg, D. 1989. *The power of images: studies in the history and theory of response.* Chicago, Ill.: University of Chicago Press.

Geertz, C. 1973. "Thick description. An interpretive theory of culture." In C. Geertz, *The interpretation of cultures,* 310–323. New York: Basic Books.

Gero, J. M. 2007. "Honoring ambiguity/problematizing certitude." *Journal of Archaeological Method and Theory* 14 (3): 311–327.

Gillon, B. S. 1990. "Ambiguity, generality, and indeterminacy: tests and definitions." *Synthese* 85 (3): 391–416.

Goffman, E. 1974. *Frame analysis: an essay on the organization of experience.* New York: Harper and Row.

Groenewegen-Frankfort, H. A. 1951. *Arrest and movement. An essay on space and time in the representational art of the ancient Near East.* London: Faber and Faber.

Grawehr, M. 2021. "Mehrdeutigkeit und Bildpraxis. Überlegungen zu den Interpretationsgrundlagen römischer Bildlampen." In *Mehrdeutigkeiten. Rahmentheorien und Affordanzkonzepte in der archäologischen Bildwissenschaft,* edited by E. Günther and J. Fabricius, 207–244. Wiesbaden: Harrassowitz Verlag.

Günkel-Maschek, U. 2020. *Minoische Bild-Räume. Neue Untersuchungen zu den spätbronzezeitlichen Wandbildern des Palastes von Knossos.* Heidelberg: Heidelberg University Publishing.

Günther, E. 2021. "Mehrdeutigkeiten antiker Bilder als Deutungspotential. Zu den Interdependenzen von Affordanzen und *frames* im Rezeptionsprozess." In *Mehrdeutigkeiten. Rahmentheorien und Affordanzkonzepte in der archäologischen Bildwissenschaft,* edited by E. Günther and J. Fabricius, 1–40. Wiesbaden: Harrassowitz Verlag.

Günther, E., and J. Fabricius, eds. 2021. *Mehrdeutigkeiten. Rahmentheorien und Affordanzkonzepte in der archäologischen Bildwissenschaft.* Wiesbaden: Harrassowitz Verlag.

Hall, E. T. 1963. "A system for the notation of proxemic behavior." *American Anthropologist* 65 (5): 1003–1026.

Hall, E. T. 1966. *The hidden dimension.* Garden City, N. Y.: Doubleday Anchor Books.

Hedreen, G. 2007. "Involved spectatorship in Archaic Greek art." *Art History* 30 (2): 217–246.

Himmelmann-Wildschütz, N. 1964. *Bemerkungen zur geometrischen Plastik.* Berlin: Mann Verlag.

Hölscher, T. 2012. "Bilderwelt, Lebensordnung und die Rolle des Betrachters im antiken Griechenland." In *Bild – Raum – Handlung. Perspektiven der Archäologie,* edited by O. Dally, S. Moraw, and H. Ziemssen, 19–44. *Topoi. Berlin Studies of the Ancient World* 11. Berlin and Boston: De Gruyter.

Hölscher, T. 2018. *Visual power in ancient Greece and Rome. Between art and social reality.* Oakland: University of California Press.

Hoffman, G. L. 2002. "Painted ladies: early Cycladic II mourning figures?" *AJA* 106: 525–550.

Hood, S. 2005. "Dating the Knossos frescoes." In *Aegean wall painting: a tribute to Mark Cameron,* edited by L. Morgan, 45–81. *BSA Studies* 13. London: British School at Athens.

Jacobs, A. 2004. "The Knossos miniature paintings reconsidered." *JPR* 18: 8–20.

Keesling, K. 2005. "Misunderstood gestures: iconatrophy and the reception of Greek sculpture in the Roman Imperial period." *ClAnt* 24 (1): 41–79.

Kekes, Ch. 2017. "Αιγαιακές χειρονομίες (συν)ομιλίας και δέησης: αιγυπτιακές επιρροές και διαχρονικότητα." In *12ᵗʰ International Congress of Cretan Studies, Heraklion 21.–25.9.2016,* 1–13. Heraklion: Εταιρία Κρητικών Ιστορικών Μελετών. https://12iccs.proceedings.gr/el/proceedings/category/38/32/263.

Kekes, Ch. 2018. "Διαβάζοντας την ανθρώπινη 'σωματική συμπεριφορά': μια μεθοδολογική προσέγγιση των χειρονομιών του αρχαίου κόσμου." *Θέματα Αρχαιολογίας* 2 (2): 222–239.

Kendon, A. 1982. "The study of gesture: some remarks on its history." *Semiotic Inquiry* 2: 45–62.

Koehl, R. B. 2016. "The ambiguity of the Minoan mind." In *Metaphysis. Ritual, myth and symbolism in the Aegean Bronze Age. Proceedings of the 15ᵗʰ International Aegean Conference, Vienna, Institute for Oriental and European Archaeology, Aegean and Anatolia Department, Austrian Academy of Sciences and Institute of Classical Archaeology, University of Vienna, 22–25 April 2014,* edited by E. Alram-Stern *et al.,* 469–478. *Aegaeum* 39. Leuven and Liège: Peeters.

Korshak, Y. 1987. *Frontal faces in Attic vase painting of the Archaic period.* Chicago: Ares Publications.

Kramer-Hajos, M. 2015. "Mourning on the larnakes at Tanagra. Gender and agency in Late Bronze Age Greece." *Hesperia* 84: 627–667.

Krzyszkowska, O. 2012. "Seals from the Petras cemetery: a preliminary overview." In *Petras, Siteia – 25 years of excavations and studies. Acts of a two-day conference held at the Danish Institute at Athens, 9–10 October 2010,* edited by M. Tsipopoulou, 145–160. *Monographs of the Danish Institute at Athens* 16. Athens: The Danish Institute at Athens.

Lakoff, G. 1970. "A note on vagueness and ambiguity." *Linguistic Inquiry* 1 (3): 357–359.

Letesson, Q., and K. Vansteenhuyse. "Towards an archaeology of perception: 'looking' at the Minoan palaces." *JMA* 19 (1): 91–119.

Lynch, K. M. 2017. "Reception, intention, and Attic vases." In *Theoretical approaches to the archaeology of ancient Greece. Manipulating material culture,* edited by L. C. Nevett, 124–142. Ann Arbor: University of Michigan Press.

Mackay, E. A. 2001. "The frontal face and 'you'. Narrative disjunction in Early Greek poetry and painting." *Acta Classica* 44: 5–34.

Marinatos, N. 2007. "Proskynesis and Minoan theocracy." In *ΣΤΕΦΑΝΟΣ ΑΡΙΣΤΕΙΟΣ: Archäologische Forschungen zwischen Nil und Istros. Festschrift für Stefan Hiller zum 65. Geburtstag,* edited by F. Lang, C. Reinholdt, and J. Weilhartner, 179–185. Vienna: Phoibos Verlag.

Marinatos, S., and M. Hirmer. 1973. *Kreta, Thera und das mykenische Hellas,* 2ⁿᵈ ed., Munich: Hirmer.

McGowan, E. 2011. *Ambiguity and Minoan Neopalatial seal imagery.* Uppsala: Åströms förlag.

Morgan, L. 1985. "Idea, idiom and iconography." In *L'iconographie minoenne. Actes de la table ronde d'Athènes (21–22 avril 1983),* edited by P. Darcque and J.-C. Poursat, 5–19. *BCH Suppl.* 11. Athens: École française d'Athènes.

Morgan, L. 1988. *The miniature wall paintings of Thera: a study in Aegean culture and iconography.* New York: Cambridge University Press.

Morgan, L. 1989. "Ambiguity and interpretation." In *Fragen und Probleme der bronzezeitlichen ägäischen Glyptik. Beiträge zum 3. Internationalen Marburger Siegel-Symposium 5.–7. September 1985,* edited by I. Pini, 145–161. *CMS* Beiheft 3. Berlin: Mann Verlag.

Morgan, L. 1995. "Frontal face and the symbolism of death in Aegean glyptic." In *Sceaux minoens et mycéniens: IVe symposium international, 10–12 septembre 1992, Clermont-Ferrand,* edited by W. Müller, 135–149. *CMS* Beiheft 5. Berlin: Gebr. Mann Verlag.

Morgan, L. 2000. "Form and meaning in figurative painting." In *The wall paintings of Thera. Proceedings of the first international symposium, Petros M. Nomikos Conference Centre, Thera, Hellas, 30 August–4 September 1997,* vol. II, edited by S. Sherratt, 925–946. Athens: Petros M. Nomikos and the Thera Foundation.

Murphy, C. 2018. "No mouths, just hands: a review of the Minoan fist on chest gestures." In *Πεπραγμένα ΙΑ΄ Διεθνούς Κρητολογικού Συνεδρίου, Ρέθυμνο, 21–27 Οκτωβρίου 2011,* vol. A1.3, edited by E. Gavrilaki, 9–23. Rethymno: Ιστορική και Λαογραφική Εταιρεία Ρεθύμνης.

Neubert, A., and G. M. Shreve. 1992. *Translation as text.* Akron: Kent State University Press.

Olsen, B. 2015. "Die Abkehr vom Sinn? Wunder, Halldors Kipplaster und der Trugschluss der Interpretation." In *Lost in things. Fragen an die Welt des Materiellen,* edited by Ph. Stockhammer and H. Hahn, 181–192. Münster: Waxmann Verlag GmbH.

Osborne, R. 2012. "Polysemy and its limits: controlling the interpretation of Greek vases in changing cultural contexts." In *Vasenbilder im Kulturtransfer. Zirkulation und rezeption griechischer Keramik im Mittelmeerraum,* edited by S. Schmidt and A. Stähli, 177–186. *Beihefte zum Corpus Vasorum Antiquorum* V. Munich: C. H. Beck.

Palyvou, C. 2012. "Wall painting and architecture in the Aegean Bronze Age: connections between illusionary space and built realities." In *Minoan realities: approaches to images, architecture, and society in the Aegean Bronze Age,* edited by D. Panagiotopoulos and U. Günkel-Maschek, 9–26. *Aegis* 5. Louvain-la-Neuve: Presses universitaires de Louvain.

Panagiotopoulos, D. 2001. "Keftiu in context: Theban tomb-paintings as a historical source." *OJA* 20 (3): 263–283.

Panagiotopoulos, D. 2007. "Mykenische Trauerbilder. Zu den Anfängen der griechischen funerären Ikonographie." In *ΣΤΕΦΑΝΟΣ ΑΡΙΣΤΕΙΟΣ. Archäologische Forschungen zwischen Nil und Istros. Festschrift für Stefan Hiller zum 65. Geburtstag,* edited by F. Lang, C. Reinholdt, and J. Weilhartner, 205–214. Vienna: Phoibos Verlag.

Panagiotopoulos, D. 2020. "The 'death of the painter'. Towards a radical archaeology of (Minoan) images." In *Current approaches and new perspectives in Aegean iconography,* edited by F. Blakolmer, 385–406. *Aegis* 18. Louvain-la-Neuve: Presses universitaires de Louvain.

Panofsky, E. 1955. *Meaning in the visual arts.* Garden City, N. Y.: Doubleday Anchor Books.

Perse, M. 2017. "Vom Ptolemäerkönig zum Heiligen: Interpretatio Christiana antiker Prunkkameen." *Antike Welt* 5: 31–36.

Purves, A. C. 2021. *Homer and the poetics of gesture.* New York, NY: Oxford University Press.

Sennet, A. 2021. "Ambiguity." *Stanford Encyclopedia of Philosophy,* edited by E. N. Zalta. https://plato.stanford.edu/entries/ambiguity/.

Snell, B. 1955. *Die Entdeckung des Geistes: Studien zur Entstehung des europäischen Denkens bei den Griechen,* 3rd ed. Göttingen: Vandenhoeck and Ruprecht.

Sontag, S. 1966. *Against Interpretation and other essays.* New York: Farrar, Straus, and Giroux.

Sørensen, T. F. 2016. "In praise of vagueness: uncertainty, ambiguity and archaeological methodology." *Journal of Archaeological Method and Theory* 23: 741–763.

Televantou, C. A. 1990. "New light on the West House wall-paintings." In *Thera and the Aegean World III, vol. 1: Archaeology. Proceedings of the Third International Congress, Santorini, Greece, 3–9 September 1989,* edited by D. A. Hardy *et al.,* 309–326. London: The Thera Foundation.

Tuggy, D. "Ambiguity, polysemy, and vagueness." *Cognitive Linguistics* 4 (3): 273–290.

van Deemter, K. 2010. *Not exactly. In praise of vagueness.* New York: Oxford University Press.

Vermeule, E. 1979. *Aspects of death in early Greek art and poetry.* Berkeley, CA: University of California Press.

Wedde, M. 1992. "Pictorial architecture: for a theory-based analysis of imagery." In *EIKON. Aegean Bronze Age iconography: shaping a methodology. 4th International Aegean Conference, University of Tasmania, Hobart, 6–9 April 1992,* edited by R. Laffineur and J. L. Crowley, 181–203. *Aegaeum* 8. Liège: Annales d'archéologie égéenne de l'Université de Liège.

Zanker, P. 1987. *Augustus und die Macht der Bilder.* Munich: C. H. Beck.

Zanker, P. 1995. *Die Maske des Sokrates. Das Bild des Intellektuellen in der antiken Kunst.* Munich: C. H. Beck.

Zhang, Q. 1998. "Fuzziness – vagueness – generality – ambiguity." *Journal of Pragmatics* 29 (1): 13–31.

Zwierlein-Diehl, E. 2012. *Antike Gemmen und ihr Nachleben.* Berlin and New York: De Gruyter.

Overt and Covert Bodily Communication in Bronze Age Crete

Anna Simandiraki-Grimshaw

Abstract   *Aegean studies of gestures, stance, movement and bodily comportment have mostly examined, thus far: a) certain classes of bodily depictions; b) whole bodies; c) bodily communication in specific eras or genres. While these approaches have produced useful insights, they could be augmented, thus enhancing our understanding of bodily communication in the Aegean Bronze Age.*

This paper draws upon material from Bronze Age Crete. Firstly, I advocate combining and contextualising types of data which have largely been kept separate from a methodological point of view, but which, when combined, indicate overt and (hitherto mostly undervalued) covert bodily communication. To achieve this, the paper utilises a diachronic, inter-site database which the author has been compiling over a number of years, and which includes data across archaeological categories.

Secondly, through this combination of data, my approach identifies several phenomena. These include the diverse employment of body partibility, the deliberately choreographed ergonomy and even the corporeally palimpsestic nature of some finds. This enables me to argue that perceptible shifts in the variety and audiences of overt and covert bodily communication are perhaps symptomatic of developments in wider social and political contexts. Thus, this paper also advocates that such a 'synthetic' approach can shed light onto not only ontological discourses about, but also deliberate instrumentalisation of, the human body in Minoan Crete.

Background to Bodily Communication

Studies of bodily communication in Bronze Age (Minoan) Crete have been numerous in the last century or so. They have used several interconnected methods, even if most of them have tended to emphasise visual (and mostly art-historical) aspects of such communication – and have been overwhelmingly based on specific presuppositions. For example, the majority of studies of bodily communication are premised on the presumed (original) prevalence or importance of whole, artefactual bodies (even if we only mostly find their fragments). This is understandable, because these are the most immediate sources of how Bronze Age Cretans depicted the human form. Specialising further, several studies explore bodily communication in specific eras (*e.g.* the Neopalatial period, Tsangaraki 2010), or genres (*e.g.* frescoes, Jones 2007), but also in certain classes (*e.g.* elite, Steinmann 2014), and therefore audiences. Funerary assemblages have also been used to extrapolate bodily communication: from the early 20th century CE interpretative use of skeletons as almost an addendum to the goods associated with them (*e.g.* Hawes et al. 2014), to the bioarchaeological breakthroughs of the early 21st century CE, which examine osseous material in its own right (*e.g.* Triantaphyllou 2018; Triantaphyllou et al. 2019).

All these extremely useful approaches have developed from different archaeological, art historical, medical-anthropological and ethnographic paradigms, and some continue to reflect their disciplinary history. There are also notable advances which combine some of these approaches (*e.g.* Blakolmer 2010), which problematise the lingering reign of visuality over embodiment (*e.g.* Hamilakis 2013; *cf.* Thomas 2009), and which situate our results of primary approaches into broader archaeological theory (*e.g.* Panagiotopoulos 2012). It is within this group of 'synthetic' studies that this paper and the research behind it sit.
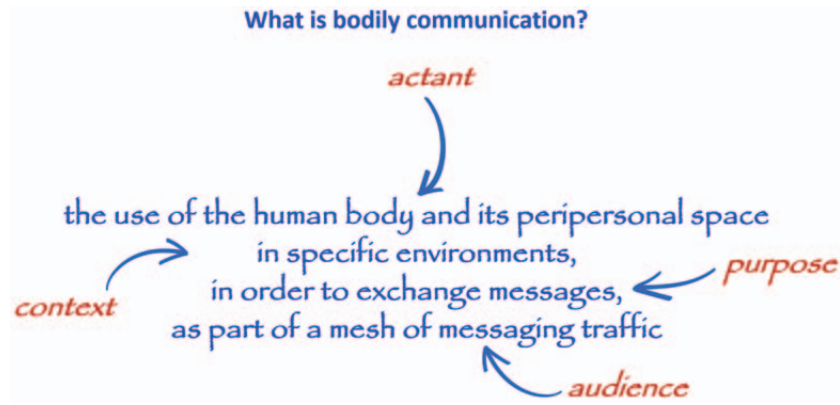
Fig. 1: Conceptualisation of bodily communication (composition by and copyright of the author 2022).

We need specialist tools with which to examine our finds, but we also ought to augment our understanding by combining data from different sources, even sources not immediately connected to visible artefactual and physical (whole) bodies. If we take a wider look at bodily communication based on interdisciplinary bibliography, in the fields of *e.g.* human communication and social psychology (*e.g.* Knapp and Hall 2010), anthropology and epistemological reflection (*cf.* Latimer and Strathern 2019), research on embodiment (*e.g.* Dornan-Fish 2012) and on entanglement (*e.g.* Ingold 2010a, 2010b; Antczak and Beaudry 2019; Hodder 2012; Latimer and Strathern 2019 etc.), we can work with a simple definition for the purposes of this paper.

Bodily communication is defined here as *the use of the human body and its peripersonal space in order to convey and interpret messages, as part of a mesh of messaging traffic* (Fig. 1). This definition encapsulates several important aspects:

• The first one is that the human body and its peripersonal space are the *actant,* in other words, the initiator of this action (that is not to say that it is the centre of agency in the communication, but rather the source of intent).
• The multisensorial environments are the *context.*
• The exchange of messages is the *purpose* of the communication.
• The mesh of messaging traffic is the *entangled audience* (human, non-human), to which the actant is inextricably linked (and who/which are also actants of their own communication, intentionally or not).

Therefore, aspects such as gestures or the manipulation of corpses are manifestations of bodily communication deserving their own specialised studies, but they can also be conceptualised as parts of a wider 'meshwork' of bodily communication.

For someone who studies bodily communication in a contemporaneous context, the inseparable combination of *e.g.* body language and behaviour, as well as words (*e.g.* Knapp and Hall 2010, 10) can be directly observed, leading to an understanding of the purpose, and to knowledge of the audience of this bodily communication (*cf.* Piccini 2015; Fuchs and De Jaegher 2009). However, in our case, some of this original 'package' is missing, and so we are presented with several challenges. One of those is that we cannot be (entirely) sure of the context, the purpose or even the audience. A gesture might be directed at other artefactual and biological humans, such as in the case of a complex of related figurines (such as the Palaikastro dancers, Dimopoulou-Rethemiotaki 2005, 183, bottom); to the divine, in the case of presumed divine invocation (Warren 1988; Morris 2001); or even to oneself, in the possibility of self-induced hallucinations (*e.g.* Morris and Peatfield 2002, 2004). Another challenge is that the same tropes of bodily communication, like a particular gesture, might change according to actor, environment, or occasion. As Knapp and Hall (2010, 11) put it, "the same nonverbal behavior performed in
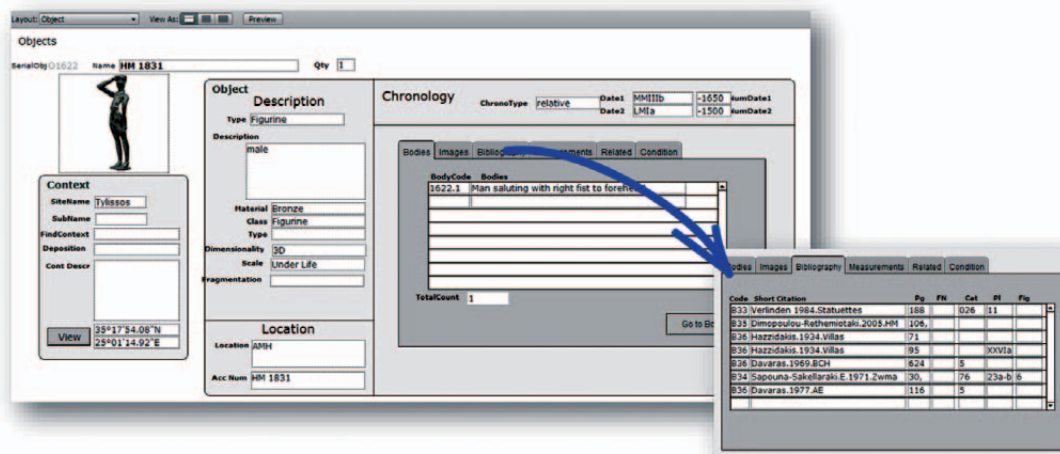
Fig. 2: Snapshot of the Minoan Body *database (images and composition by and copyright of the author 2022).*

different contexts may, like words, receive different attributions of meaning". And, as Jones (2014) has masterfully shown, the same simple gesture, in his case the smile in 18th century CE Paris, can have complex and powerful social, economic and political fluctuations within the space of a few years.

In addition, we often forget that *almost no* human bodies, physical or artefactual, which we retrieve, are primary sources responsible for their own bodily communication. In other words, every figurine and almost all retrieved human remains only represent the bodily communication of separate actants, whose physical bodies shaped and manipulated the ones we do find, for their own purposes and within their own audiences. And, of course, we cannot retrieve, but only partly reconstruct, the bodily communication of those absent bodies. So, we think we know who the actant is, but in reality we usually conflate the communication of *e.g.* the preserved body (a figurine, a skeleton) and the actant behind it (the person[s] who made and/or deposited these). The only exceptions to this observation are perhaps the three of the four skeletons excavated at the temple at Anemospilia (with the exception of the 'victim'); their deposition was the accident which entrapped them all and preserved their last self-guided reactions (Sakellarakis and Sapouna-Sakellaraki 1997: I, 228, 294–311).

Archaeologically speaking, we have been successful in collectively trying to 'reconstitute', as Evans would say, bodily communication. One of the ways we do this is by correlation: we ensure that the bodily communication which we retrieve might be interpreted not just through our own cultural perceptions, which tend to assign certain meanings based on our situatedness, but also through a series of meticulous extrapolations based on Minoan material itself (*e.g.* Hallager 1985; Hitchcock 1997; Wedde 1999; Younger 2020). Another slightly different but related way in which we can interpret surviving parts of a bodily communication meshwork is contextualisation and network mapping. A recent very good example is Günkel-Maschek's work (2020), which plotted known Neopalatial epiphany occurrences, something which this author has also had an interest in (Simandiraki-Grimshaw 2010c, 127). Other excellent examples of this approach include the work of Panagiotopoulos on viewing syntax, in which he rightly reminds us that we should consider "not the isolated image but the complex social interaction among image, viewers and context" as "the only adequate approach, since the dominant meaning emerges from this social interaction" (Panagiotopoulos 2012, 63). Yet another way to explore this meshwork is consideration of corporeality, as has been done by Hamilakis's pioneering work for Aegean archaeology on the senses (Hamilakis 2013, esp. 115–117, 129–203) and on personhood (Hamilakis 2018), as well as insightful work on gesture by Morris, Peatfield, Goodison (Morris 2001; Morris and Peatfield 2002; *cf.* Morris and Goodison 2022), McGowan (2006) and others.

Current Methodology

The methodology and research behind the present paper is a subset of a larger project, entitled *Conceptualising the Minoan Human Body* (*cf.* some of the resulting publications: Simandiraki 2008; Simandiraki-Grimshaw 2010a, 2010b, 2010c, 2013, 2015, 2017, 2018a, 2018b, 2020a, 2020b). For this project, premised on the cataloguing of humans in Bronze Age Crete, the *Minoan Body* database (Fig. 2; Simandiraki-Grimshaw 2010c, 127) has been populated since 2009. It incorporates diverse data: skeletal remains, artefactual bodies (*e.g.* glyptic, frescoes, figurines), but also data from epigraphic records, fingerprints, palmprints and others. The lemmata contain several details, including findspots, bibliographies, photographic records, bodily categorisations, as well as correlations, wherever possible. There are several challenges and limitations regarding the *Minoan Body* database more generally, some more practical, such as funding, some more ontological, such as developing methodologies which encompass disparate types of data. The fact that much relevant excavated material is not yet fully published and the differential publication of the material which has been published (*e.g.* several Mesara tholoi) are also contributing factors to these challenges.

Regarding the present paper, there are some additional limitations. There is a need to restrict ourselves to cases where certain bodily communication 'data' are discernible. For example, we cannot directly compare bodies in scenes of gold rings with commingled skeletal bodies or extremely fragmented figurines, but we can nevertheless extrapolate a so-called 'thick description' of phenomena (*cf.* Geertz 1973, ch. 1). Similarly, we have fluctuations of types of data in different eras and media (also see below). In addition, the patterns identified from the database material need contextualisation within their broader meshworks. Nevertheless, the current paper is intended as an example of how important (and possible) it is to 'query' such a collective corpus of human presence. Consequently, through the combination of data which, thus far, have been kept separate, a discussion of overt and an exploration of (hitherto mostly undervalued) covert bodily communication is possible and is attempted here for selected examples. These were chosen on their merits of comparability and contextualisation.

Possible Groupings of Bodily Communication

There are several ways in which we might systematise our understanding of the available types of data, without necessarily taking a structuralist approach. Firstly, the author assumes that all extant or detectable bodily data from Minoan Crete carry some sort of communicative agency, however random, intended or fragmentary their nature. Every figurine, skeleton, tablet, fresco, seal and fingerprint was once an inextricable part of communicative meshworks, even if fleeting or limited in their scope. If we accept this premise, then the next methodological step is to try and discern which of these data were meant as overt bodily communication, in which the actants and their communications were deliberately and conspicuously employed, and which of these data might be categorised as covert bodily communication, whose effects do not necessarily manifest in direct, conspicuous representation, but in patterns of behaviour, in the manipulation of bodies or even in the in-between space of "common intercorporality" (Fuchs and De Jaegher 2009, 465, 470, 475, also discussing Merleau-Ponty). As Marilyn Strathern puts it (in her case talking about the construction of personhood), "[a] person is a social configuration. It's always a relational construct" (Strathern in Latimer and Strathern 2019).

Overt bodily communication

In the archaeological record of Bronze Age Crete, there are several examples which we can categorise as overt bodily communication: instances where the depiction or treatment of the human body seems to us to lend itself to more immediate interpretation. We can perhaps discern physical bodies (commingled or distinct), and representations (two-dimensional, like frescoes; three-dimensional, like figurines; and containers, like anthropomorphic vessels) as being the overall

categories which provide the most data. One could argue that these groups of data communicate how people wanted to represent themselves and others, through rendition, manipulation and other ways. Epigraphic and sphragistic means of communication should perhaps be considered as separate categories of overt bodily communication, despite the overlap between ring scenes and frescoes or other depictions. This separation is suggested here because such data were distinctly different, and much more limited, in their audiences and purposes. Finally, bodily occurrences such as amulets and fingerprints can perhaps be seen as yet another separate category, with its own further customisable complex messaging roles.

Within these types of overt bodily communication, we have several instances apparently referencing the intentional exceptionalism of a body. An interesting example is a group of rare articulated burials in (the area of) House Tomb 2, at the cemetery of Petras, Siteia. It is important that several 45+ year-old males from five different phases (between EM II and MM II B) were primary, full-bodied, contained interments, in a cemetery where almost every other body was in secondary burial and deliberately disarticulated (including within the same tomb, Tsipopoulou and Rupp 2019; Relaki 2020), a practice which lasted several centuries at Petras. These bodies were associated with incredibly rich and often internationally connected grave goods for their period (from bronze and silver implements to hieroglyphic seals). These bodies and their peripersonal space, therefore, can be argued as being a clear case of overt bodily communication within the wider context of conspicuous performance of (embodied) wealth – and its probable facilitation of cultural memory and social constructs in the political/social lead-up to the palace of Petras being built nearby (in MM II A, see Tsipopoulou and Rupp 2019, 92), especially given potential factional competition detected by Tsipopoulou and Rupp (2019).

We also have cases whereby depictions render bodies in overtly communicated physical states, such as tension and affliction. The tense arms of the Palaikastro Kouros (Musgrave 2000) and similar contemporary parallels from Knossos (such as the low relief fresco fragments of arms or even the legs of the 'Priest-King', Evans 1928, 780 and esp. discussion in 783, figs. 508, 510–511) are meant to convey a particular, in this case transient, condition of the muscles. They are not necessarily tokenistic renditions of what toned limbs might have looked like, if we compare them to other contemporary depictions of such limbs in relatively relaxed states (*cf.* the left arm of the Rhyton Bearer in the homonymous fresco from Knossos, Dimopoulou-Rethemiotaki 2005, 185). Similarly, affliction can most clearly be discerned as a communicative intention in the well-known example of a seated female figurine from Traostalos (Dimopoulou-Rethemiotaki 2005, 95), whose legs are purposefully modelled as disproportionate.

Furthermore, we have numerous depictions of bodily interaction, including presenting procedure, such as in the case of the MM III so-called 'ancestor worship' model from Kamilari (Rethemiotakis 2001, fig. 123), or hierarchy, as in the case of the LM I Chieftain Cup from Agia Triada (Dimopoulou-Rethemiotaki 2005, 154–155). Conversely, there are rare but memorable occasions of overt bodily communication which conveys the subversion of procedure. As was highlighted by several conference participants and as the author has argued previously (Simandiraki-Grimshaw 2010 b, 325–326), the seemingly slapstick vignette from the Harvesters Vase composition, where a man falls down during the procession and the man in front of him turns back, likely in surprise (Dimopoulou-Rethemiotaki 2005, 188), is probably the only clear reaction-inducing (humorous? commemorative? instructive?) scene in Minoan iconography – and serves exactly this purpose of disruption.

By combining data of different types (*e.g.* figurines, osseous material, glyptic etc.), we can perhaps also better plot certain overt patterns and traits, including gesture (*cf.* Simandiraki-Grimshaw 2015). This is more immediately achievable for depictions, such as comparisons between figurines and glyptic, even across presumed classes of artefacts. For example, a Neopalatial figurine from Piskokephalo (Dimopoulou-Rethemiotaki 2005, 98, left) has been widely cited and reproduced in Minoan bibliography, but the connection of its gesture with the gesture of a Neopalatial figurine of different quality (and perhaps class) from Gortys has not been widely ac-

knowledged (Rethemiotakis 2001, fig. 101, also see discussion of the gesture as spanning the Protopalatial to Postpalatial periods in p. 83). This kind of comparison can also be made between different genres of material culture (such as between the groups of women with upraised hands in an MM II model from Agia Triada [La Rosa 2010, 193, fig. 18.4; Cucuzza 2013, 197 and fig. 44] and on the LM I Isopata Ring [*CMS* II 3, no. 51]) or between artefactual and physical bodies (*cf.* Kiorpe, this volume).

In such cases of overt bodily communication, it is perhaps marginally easier to reconstruct the role of the body as an actant in artistic, ceremonial and social contexts and audiences for the purposes of instruction, example, reverence, pleading or amusement. I suggest that one reason for which we may find this kind of interpretation easier is perhaps because of its visuality. Another may be that we expect to see whole bodies, especially bodies interacting either in group scenes or in assemblages of similar bodies (at a cemetery, a peak sanctuary and so on).

Covert bodily communication

A closer look at the human body throughout the Cretan Bronze Age, especially before the Neopalatial period, reveals that its most frequently represented, but covert, bodily concepts are not necessarily of an indivisible entity, but of a body as the sum of its parts (*cf.* Simandiraki-Grimshaw 2015, 273), which could be – and were – dispersed and frequently mixed. As has been argued elsewhere (Simandiraki-Grimshaw 2010a), a prime example were animal-human hybrid depictions, which communicated the conceptual and ontological dissolution and admixture of human bodies. Even in cases where we have an apparently single, complete body, created as one piece, such as a well-known LM I figurine from Tylissos (Dimopoulou-Rethemiotaki 2005, 106, right), the positioning of its necklace, bracelets and anklets denotes a real-life physical, or at least depicted and notional, subdivision of limbs, perhaps a lingering 'hangover' of earlier times. Murphy (2018), Morris, O'Neill, and Peatfield (2019) have shown experimentally that the technology behind the making of even complete figurine bodies requires particular multimodal, multisensorial and multitemporal engagement in making the body parts and then assembling them. It is, therefore, not surprising to find figurines that only consist of limbs, mainly from peak sanctuaries, and particular limbs at that, overwhelmingly legs, arms and heads (famously from Petsophas, Myres 1902/3, pl. XII). It is also not surprising to find that other isolated limbs were being used at the time, such as the similarly dated foot amulets, sometimes sphragistic and sometimes even defined as left or right (*CMS* II 1, no. 407) or Cretan Hieroglyph signs that depict human limbs (CHIC 005, 'eye', on MM II *CMS* II 2, no. 316d, *cf.* Olivier and Godard 1996, 276–277, #295 [4] CR S (4/4) 02, side δ, and pl. 387, #295.δ; *cf.* Simandiraki-Grimshaw 2010b, 324; and 2015, 273–274 on partibility; also see Karnava's point about partibility in human representations in Cretan Hieroglyphs, 2015, 142–143, 146–149, 153–154). One could also argue that the few but important renditions of half bodies (*cf.* an example from Petsophas, Dimopoulou-Rethemiotaki 2005, 95, top right) took this notion of parts as bodies even further ontologically. In these cases, limb figurines or incomplete or divided bodies may be attributed to aesthetic traditions, manufacturing techniques or even some theoretical concept that the Minoans had about the importance of certain limbs in certain contexts. But if we contextualise these artefactual limbs in the overall archaeological record, we can find several contemporary instances of the manipulation and circulation of the physical equivalents of these limbs, especially crania, hands, arms and legs, sometimes even examples of semi-articulated, *i.e.* partially and not fully decomposed limbs having been 'circulated' and deposited. This has been shown to be the case recently at the cemeteries of Petras (Fig. 3, with partially decomposed limbs circled; *cf.* Triantaphyllou 2016; Triantaphyllou et al. 2017, fig. 1b; 2019; Relaki 2020, 325, 328–330) and Sissi (*cf.* Crevecoeur and Schmitt 2009, esp. fig. 4.24). As Hamilakis (2018) has also commented, we can utilise a combination of data towards a broader understanding of social and perhaps conceptual changes through the creation, dissolution or altering of bodies across physical and material culture remains. What is being communicated seems to be a fluctuating notion of the dividual body (and perhaps the sometimes indistinct boundaries of
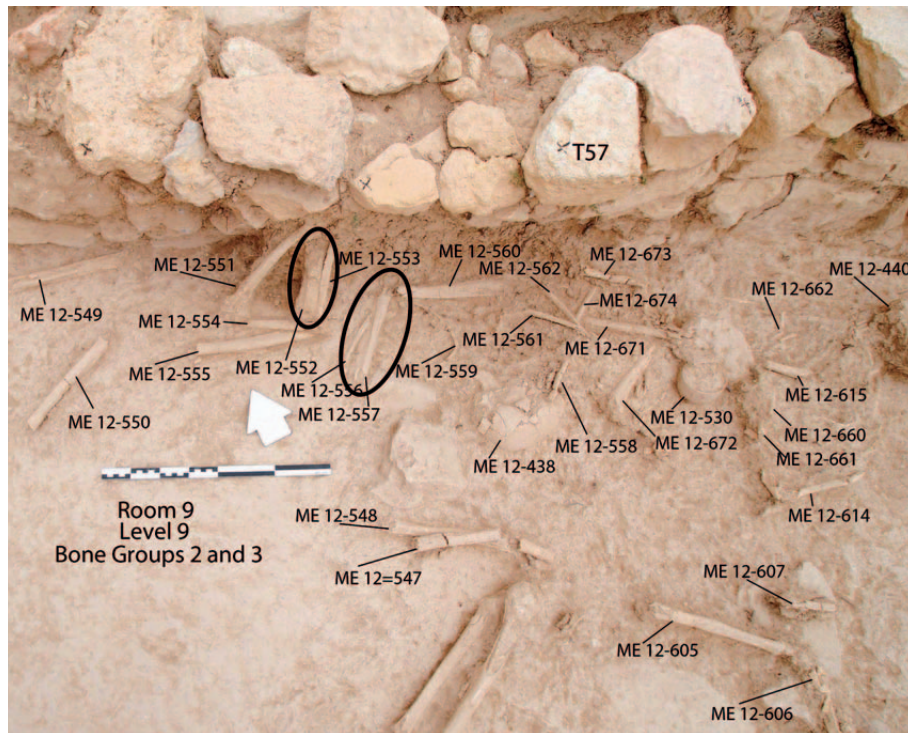
Fig. 3: Partially decomposed limb manipulation at Petras (after Triantaphyllou et al. 2017, fig. 1b; image copyright Petras excavations archive, reproduced here with kind permission from M. Tsipopoulou).

personhood) earlier in the Cretan Bronze Age, towards more clearly defined body ontologies of individuals later on (see discussion below).

We can further and more holistically examine the remnants of actions of dividuality, including violence and fragmentation, on physical and artefactual bodies. Artefact fragmentation has been noted for a number of figurines, only seriously recognised as a deliberate practice recently, before (Rehak 1995), but also largely in the wake of the work by Chapman and Gaydarska (2007; Chapman 2015; also see Vavouranakis and Bourbou 2015). In the case of Minoan Crete, some figurines were even made with the purpose of being broken – perhaps two matching but separate legs from Petsophas illustrate this, as Rutkowski suggests (1991, 103, no. 3.4.5), if their mode of breakage and preservation is not accidentally indicative of this (Rutkowski 1991, pl. XLIV, no. 11). However, deliberate fragmentation, *i.e.* intended partibility as an enacted phenomenon, can also be detected in cases where specific areas of previously integral bodies were targeted, such as faces, necks and waists. For example, aggressive bodily communication of the (literal) defacing of the Palaikastro Kouros has been interpreted as the result of potential frustration against a divine or political authority (Moak 2000, 83; Driessen 2000, 94–95). We should also not preclude the possibility that such aggressive treatment fits into a more general pattern of detectable violence against both artefactual and physical bodies. A closer look at similarly affected bodies (across categories) reveals that other heads were also defaced (like an LM I ivory bull leaper from Knossos, Dimopoulou-Rethemiotaki 2005, 190), were attacked (like a skull from the Agios Charalambos cave, McGeorge in Betancourt et al. 2008, fig. 35), were separated or removed (like the sparse crania and fragmented bodies at the Petras cemetery, see Triantaphyllou 2016). Where is the face of the Palaikastro Kouros and especially the head and left arm of the small Snake Goddess from the Knossos Temple Repositories, the latter found in a closed context (*cf.* Simandiraki-Grimshaw and Stevens 2013)? Why deface, decapitate or mutilate a figurine, if not because it was treated as a proxy for a physical human being who would be – and was – subjected to similar or identical treatment?
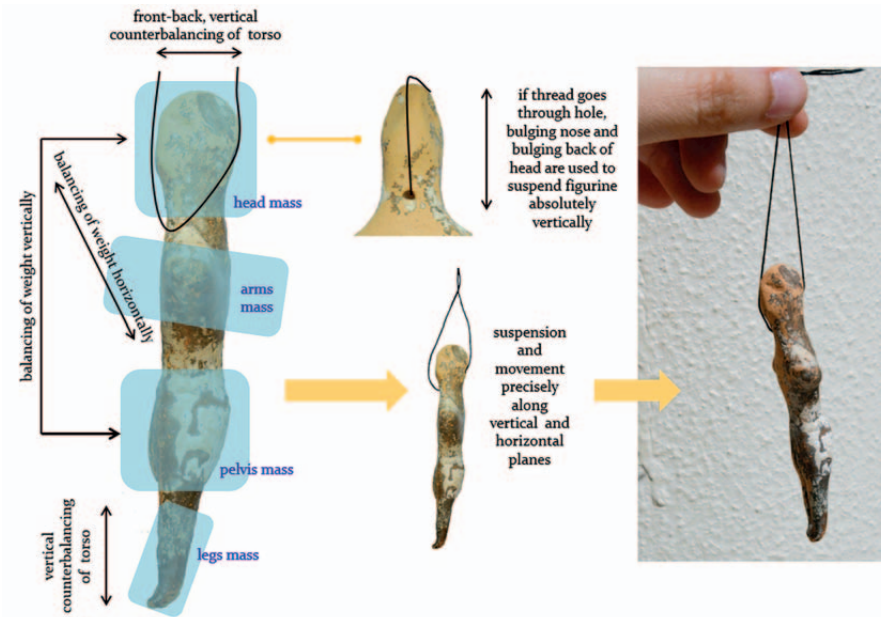
Fig. 4: Ergonomy of two Petras figurines (after Simandiraki-Grimshaw 2020 b, fig. 7; all photography, graphics and composition by and copyright of the author 2020; images reproduced with the kind permission of M. Tsipopoulou).

A careful consideration of the agency of artefactual bodies can also help us identify covert bodily communication potential which is usually overlooked in contemporary archaeological-museological contexts, especially in static museum displays and two-dimensional publications (resulting in what Thomas [2009, 8] calls the Western "disaggregation of the senses"). Because we as researchers and as museum visitors do not normally handle or experiment with original artefacts, our lack of engagement with their changeable somatic agency obscures significant portions of their communicative potential. In several cases, this agency is often a deliberate part of the remnants of a multisensory messaging mesh, which includes not only the extant artefactual bodies, but also the long-gone physical bodies which would have used them and for which the body of the researcher can be a proxy.

A group of recently discovered and published MM II figurines from the cemetery of Petras (Simandiraki-Grimshaw 2020 b) illustrates that, far from being static objects, their bodies were specifically designed for suspension and movement in complete balance (Fig. 4). Here, the shape of each figurine and its suspension hole were also communicative stimuli eliciting experimentation, which, in turn, led to an enhanced understanding of the agency and purpose of these figurines' bodies. Similarly, the EM II B 'Myrtos Goddess' anthropomorphic vessel elicits a specific way of being held, cradled and handled in order to be efficiently functional, as its ergonomy indicates (Fig. 5; Simandiraki-Grimshaw 2013, fig. 4, right). The author (2018 a, 2020 a) has also explored how the specific physical manipulation of artefacts, such as an epiphany ring (Simandiraki-Grimshaw 2020 a, fig. 13.6, *CMS* VI, no. 278), can create meaningful illusions, presumably activating particular messaging. In another recent example, Günkel-Maschek (2020)

Fig. 5: Ergonomic manipulation of the 'Myrtos Goddess' (after Simandiraki-Grimshaw 2013, fig. 4; photography by and copyright of the author 2013; image reproduction permission by the Antiquities Ephorate of Lasithi; artefact under the jurisdiction of the Antiquities Ephorate of Lasithi, copyright of the Hellenic Ministry of Culture and Sports (N. 3028/ 2002), Archaeological Resources Fund).

Fig. 6: Linear B tablet Kn Ap 639 as a palimpsest of overt and covert bodily communication; detail of AN1910.218 (image copyright Ashmolean Museum, University of Oxford; permission to reproduce this detail provided by the Ashmolean Museum, Oxford; image detail selection, graphics and composition by and copyright of the author 2022).

theorised how the physical human body would have interacted in a now lost messaging mesh, of which the Dancing Lady Fresco from Knossos would have been a part. In all these cases, the ergonomy of finds was deliberately designed to choreograph movements of artefactual and biological bodies – and we can explore this by recognising how they elicited specific manipulations and reactions by their users, including us.

A related aspect of bodily communication in preserved Minoan material is somatic action as instruction. Forms of this kind of communication vary, from gestures (as Hitchcock 1997 and Morris 2001 have explored) and processions, especially near life-size ones (which Hamilakis [2013, esp. 187–188] has discussed as sensorially performative) to depicted or even accidental handling of artefacts, which left extant remaining traces (*e.g.* Simandiraki-Grimshaw 2018b). But these were also forms of covert bodily instruction: "here is how we do it". The LM I Rhyton Bearer vignette from Knossos (Dimopoulou-Rethemiotaki 2005, 185), mentioned above, does not only overtly communicate messages regarding ritual, politics, culture, class, gender and wealth. This figure also serves as a covert embodied example of how to comport the body, how and where to process, how to carry a rhyton, how to wear a seal. Similarly, the manufacture of certain artefacts 'instructs' the user on appropriate handling gestures. Accidental fingerprints on an MM III clay disc from the palace of Galatas do not only communicate (to another potter, the user) a possible problem that the potter had while moving this disc, but can also be used as a (forever imprinted) instruction on how to handle the disc (Simandiraki-Grimshaw 2018b, fig. 3q–s).

These communicative phenomena regarding how to do or handle something or someone, whether facilitated through ergonomy and the item's agency or through visual or other instruction, can also potentially affect different physical motor skills, and, in fact, different areas of the human brain. As Miller et al. (2019, esp. fig. 4) have shown, there are different affordances on the brain regarding touch which involves *e.g.* a forearm or a tool (*cf.* Hamilakis 2013, 193, regarding "things as sensorial prosthetics"; see also Malafouris 2008; Fuchs and De Jaegher 2009, 472–473). What this means for us is that whenever we analyse the bodily communication of an actant (such as the potter), we ought to consider not only the conscious reactions which this might have elicited in the other actants of the messaging mesh, but also their physiological affordances.

Consequently, when trying to identify covert bodily communication, we may discern phenomena such as partible bodies, representation of bodily diversity and fragmentation in both artefactual and physical bodies, as well as similar remnants of violence across these bodies. We can

group these under the modes of heterogeneity and interchangeability (of limbs and bodies), as well as the meaningful and deliberate processes of dissolution of these bodies (*e.g.* through fragmentation). We also saw how covert bodily communication could and would have been effected through the ergonomic design of several artefacts (including design which assumes a physical actant to complete the scene), and ergonomy as instruction. I would argue that the common denominator of these phenomena is a *communicative choreography,* a strategy of ensuring that messages are trafficked by way of orchestrating physical and artefactual bodies to act and communicate in specific ways. Unwittingly, we too become parts of this strategy when we handle, correlate and interpret, as best we can, this messaging traffic.

Palimpsests of bodily communication

Having explored examples of overt and covert bodily communication, we can conclude this section with a brief discussion of how certain finds can be interpreted as corporeal *palimpsests.* A Linear B tablet from Knossos, Kn Ap 639 (Fig. 6, detail of lines .5 and .6; LiBER; Palaima 2011, 47, fig. 12.10; Melena 2019, 21) is such an example. At first glance, it is a typical tablet, a 'page' of clay shaped and initially partially dried. While still not completely dry (*cf.* Pape et al. 2014; Judson 2023; the author also conducted experimentation in 2011, hitherto unpublished), it was subsequently inscribed with lists of personnel associated with cloth production, before drying and being stored at the palace. It was eventually 'baked' in the LM III A2 (ca. 1375 BC) destruction of W. Magazine XV and excavated in 1901 (Evans 1900/1, 43). But the tablet, in addition to being an accounting instrument referring to artefacts and bodies beyond itself, also works on many levels as a means of bodily communication. Firstly, it was hand-made and then inscribed and even erased or corrected by hand in parts (*e.g.* line .13, Pape et al. 2014, 182), and so it bears several dry fingerprints of a biological body or bodies (which indicate to us and probably to the makers and users the state of dryness before inscription). The gap in line .6, for example, contains a clearly visible 'dry' fingerprint. Secondly, in line .5, there is reference to '*e-ra-ja*', a woman from '*e-ra*': this word communicates linguistically a *type* of actual situated physical body (there are also personal names elsewhere on the tablet). Thirdly, the word itself, as the rest of the tablet text, was inscribed by one, different, physical body, the scribe we have codified as no. 103 (who wrote at least 207 other documents), using a particular handwriting (see Firth and Melena 2016, 262–270, esp. 268; Melena 2019, 460–461). In addition, in this part of the tablet there is an ideogram, a token female body, *i.e.* an abstraction of a woman and not a depiction of an actual one, next to which is a numerical representation of seven real-life physical female bodies. Finally, the tablet was excavated by physical hands in the beginning of the 20th century CE and was preserved as important because, among other reasons, it communicated to a modern audience, even in its undeciphered form at the time, its list of bodies and performative inscribing (Evans 1900/1, 43; 1909, 48, fig. 25; 1935, 706–708; 1952, 2; see discussion in Palaima 2011, 46–47). It maintained, therefore, its communicative actant properties even in messaging meshworks completely different to its original one(s).

This is a *palimpsest* of bodies and bodily communication (in addition to being an actual epigraphic palimpsest), because a number of bodies were involved in its production and use through different communicative actions: the physical handling and inscribing of the tablet by at least one, if not more, bodies; the linguistic inscribing of a geographic type of body; the ideographic convention for gender and age; the numerical calculation of physical bodies; the enduring potential for visual, if not linguistic bodily communication. In addition, we also have our own cognitive understanding of the bodies on the tablet by referring to a 'third party' deciphering rubric, our 'bird's eye view' (*i.e.* corpus) knowledge of (the now deciphered) Linear B, acquired through cognitive and physical motor skills, which both the LM III A2 users, and to some extent we, had access to. Thus, in this case, we have overt bodily communication (text referring to people, depiction, fingerprints, handwriting), covert communication (cataloguing, administrative instruction), and implied motor skills of communication (visual recognition and cognitive de-

cipherment of Linear B, not to mention the oral linguistic skills of the scribe, to extrapolate the corporeal information to be recorded in the first place).

Discussion

In the previous sections, we examined how a synthesis of different epistemological categories of data can help us in identifying overt and covert types and strategies of bodily communication. Let us now turn to their trajectory over the course of the Cretan Bronze Age. Space does not allow for a longitudinal analysis here. It is nevertheless possible to draw some meaningful conclusions. There are marked changes towards the beginning of the Protopalatial period, another discernible shift at the beginning of the Neopalatial period, and a less obvious, but still perceptible differentiation at the beginning of the Postpalatial period.

More specifically, commingled osseous material comprises the overwhelming majority of (overt) bodily communication data during the Prepalatial period, with some figurines, anthropomorphic vessels, seal/sealing depictions and amulets making up the rest (the minority) of such evidence. Inevitably, the bodily communication means from this period (whether deliberate or due to archaeological contingency) are mostly biological and less so artefactual. In terms of communicative strategies, in this period we have what I class as heterogeneity, interchangeability and dissolution, when the diversity and fragmentation of bodies seem to proliferate. In other words, up until the beginning of the Protopalatial period, the types of overt bodily communication are fewer and more extensive in their body-related finds, with larger audiences – *e.g.* think of the potential congregations in cemeteries, tholos tombs and peak sanctuaries. In fact, we ought to consider that possibly the dominant corporeal communicative strategy in the Prepalatial and (to some extent) the Protopalatial periods is *transcorporeality* (Hamilakis 2018, 325–326, 328), *i.e.* a "corporeal fluidity" (Hamilakis 2018, 325) which enabled physical and artefactual bodies to become nodes in shifting networks (see also Relaki 2020).

In the Protopalatial period, while anthropomorphic vessels diminish in number, figurines nearly catch up with osseous material in popularity, as the osseous record also gradually transforms in frequency and 'quality' (different types of burial, perhaps gradually individualised; see nuanced discussion in Hamilakis 2018; *cf.* Tsipopoulou and Rupp 2019). We should also consider here the different contexts and audiences: broadly speaking, osseous material and figurines operated in different arenas (in this case cemeteries and peak sanctuaries respectively). This might indicate the development of different communicative techniques in different social interaction meshworks. In this period, other types of data also appear, such as limbs in Cretan Hieroglyphs, and there is an increased frequency of seal/sealing depictions of humans. Partibility and fragmentation continue more evidently in this period, now even more discernible archaeologically. Whereas *e.g.* the fragmentary nature of Prepalatial-Protopalatial group burials might have been taken for granted as a by-product of successive and intense taphonomic processes, the (often deliberate and intended) fragmentation and partibility of artefactual bodies is a more conspicuous reason to reconsider bodily dissolution more generally as a persistent practice, particularly evident until this period, then slowly diminishing.

It is a cliché but a necessity to correlate this 'emergence' of more corporeal communicative means and strategies with the emergence of the first palaces. This richness is, firstly, a symptom of the broadening of the manipulation of the human body as a more conspicuous and enduring communicative tool (more diversity in burying and manipulating the dead, more types of bodily representation, use of exotica and hybrids, ergonomic choreography). Secondly, this emergent diversification foreshadows an 'explosion' of both means and strategies in the Neopalatial and Final Palatial periods, which can only be explained as the result of social and perhaps political reconfigurations and antagonisms.

The picture for the Neopalatial and, to some extent, the Final Palatial periods, can be summarised as being corporeally 'messy': it is the 'busiest' of all periods in the variety of communicative means and strategies. In these periods, we have frescoes (lasting for a period shorter than

300 years) that are the most anthropocentric in the whole of the Minoan period (ca. 2000 years). There is a profound increase of sealings and seals with anthropomorphic scenes, also helped by new technologies, such as the creation of metal rings (*cf.* Simandiraki-Grimshaw 2020a). We also have cataloguing of humans, in Linear A first, then especially in Linear B. Osseous material, while proportionately extant in these periods, is now much more articulated and singled out than before, and undergoes a notable diminishment or even *lacunae* in the Neopalatial period. There is a bounty of communicative strategies in these periods, which include distinct gesturing, interaction group scenes, instruction, more evident ergonomic 'choreographies' etc.

But we are often archaeologically seduced by the 'thin description' (*cf.* Geertz 1973) of all this richness of corporeal communication technologies and tropes, a richness which masks the 'thick' description for what is actually being conveyed in the messaging traffic of the Neopalatial (especially) and Final Palatial periods. These periods actually see a significant drop in bodily plurality, and the various strategies of bodily communication can mostly be distilled as somatic choreography and regulation. In other words, we may have more individualised uses of the human body, for example distinct, standardised and integral people in representations, distinct burial kits of articulated bodies, specialised bodily communicators (scribes, seal engravers, fresco painters). But the actants who communicate the majority of this messaging traffic are no longer the diverse populations of the Pre- and Protopalatial periods (from shepherds to aristocrats), but the standardised few who represent a specific (and often palace-dominated or palace-emulated) competitive 'ecosystem'. As Panagiotopoulos reminds us (in his theorisation about visuality in Aegean prehistory more generally, 2012, 66), such modes of expression were class-dependent and numerically restricted in terms of their audiences. Perhaps the 'messiness', the diversity of means, towards the early Late Bronze Age was not only due to new technologies available, but also to the specialisation in bodily communication, in order to provide an 'edge' in social, political and economic competition for limited, antagonistic audiences. This hypothesis would also corroborate previous recognition of such competitive behaviour more generally and diachronically, such as that explored in Hamilakis' work (2002) on factional competition and Driessen's work (2017) on the role of potential 'houses'. Therefore, the proliferation of means and strategies of communicative traffic which we detect might actually reflect the possibility of developments in particular strata of Late Minoan societies.

Let us take the phenomenon of Linear B people records as an example, itself a palatial, time-limited construct. The administration reflected in Linear B further systematised the cataloguing of humans that had started with Linear A. It therefore streamlined notions of the human body as ontology and as tool, at the same time creating indexical, geographically situated representations of embodied labour. This Neopalatial-Final Palatial period shift is significant for us, if we contextualise it within the wider, especially economic and political, landscapes of Late Minoan Crete, where streamlining and standardisation were evident in other material culture, such as architecture, the tightly controlled redistributive economic production, and restrictive elite aesthetics. In other words, new and diverse ways of bodily communication reflected or might even have affected change in social stratification, through specific manipulation of the body in representational (frescoes, scripts, overt) or embodied ways (physical access and exclusion, designed and targeted ergonomy, covert).

By the Postpalatial period, there is disappearance (no anthropocentric frescoes), diminishment (osseous material) or reuse (seals) of several of the already encountered communicative means and strategies, but others emerge (or at least survive), such as larger, gesturing figures. With the dissolution of palatial control and the subordination of Crete to the Mycenaean sphere of influence, as long as that lasts until its own disarray by LM III C / LH III C, there is once more both diversity of messaging traffic and bodily plurality, as communities try to develop communication that is meaningful to them and not necessarily centrally regulated or dictated. Nevertheless, there is resurgence or reinvention of earlier tropes, *e.g.* in the case of the upraised hands gesture (Gaignerot-Driessen 2014).

Summary

In this paper, I explored ways of tracing and conceptualising bodily communication in Minoan Crete. I broadly categorised the data that we can 'mine', the communicative *means*. Similarly, I grouped technologies (like ergonomy), bodily phenomena (like partibility) and overarching actions (like cataloguing) into communicative *strategies*. I then explored their progression throughout the Cretan Bronze Age. This exploration highlighted the fact that in earlier Minoan periods, especially before and coinciding with the emergence of the First Palaces, one can discern more plurality, as well as transcorporeality, as a widespread *modus operandi* of the communicative bodies. It also highlighted a gradually substantial diminishment of body plurality, driven by a more restricted pool of actants and most evident during the Neopalatial period, despite an apparent increase in both communicative means and strategies. This shift was interpreted here as symptomatic of intense class-based competition. In my attempt to take a macroscopic view of bodily communication, therefore, I argued that such explorations can help us towards understanding, and even sometimes extrapolating, the actants, contexts, purposes and perhaps audiences of the original complex messaging meshworks. Consequently, I hope to have shown that this combined approach offers new insights into wider social, political, economic, aesthetic and other phenomena of Bronze Age Crete and contributes to archaeological method more generally.

Acknowledgements

References

Antczak, K. A., and M. C. Beaudry. 2019. "Assemblages of practice. A conceptual framework for exploring human–thing relations in archaeology." *Archaeological Dialogues* 26(2): 87–110.

Betancourt, Ph. P., C. Davaras, H. M. C. Dierckx, S. C. Ferrence, J. Hickman, P. Karkanas, P. J. P. McGeorge, J. D. Muhly, D. S. Reese, E. Stravopodi and L. Langford-Verstegen. 2008. "Excavations in the Hagios Charalambos Cave: a preliminary report." *Hesperia* 77(4): 539–605.

Blakolmer, F. 2010. "Small is beautiful. The significance of Aegean glyptic for the study of wall paintings, relief frescoes and minor relief arts." In *Die Bedeutung der minoischen und mykenischen Glyptik: VI. Internationales Siegel-Symposium aus Anlass des 50 jährigen Bestehens des CMS, Marburg, 9.–12. Oktober 2008,* edited by W. Müller, 91–108. *CMS Beiheft* 8, Mainz am Rhein: Verlag Philipp von Zabern.

Chapman, J. 2015. "Bits and pieces: fragmentation in Aegean Bronze Age context." In *Thravsma: contextualising the intentional destruction of objects in the Bronze Age Aegean and Cyprus,* edited by K. Harrell and J. Driessen, 25–47. Louvain-la-Neuve: Presses universitaires de Louvain.

Chapman, J., and B. Gaydarska. 2007. *Parts and wholes: fragmentation in prehistoric context.* Oxford: Oxbow Books.

Crevecoeur, I., and A. Schmitt. 2009. "4. Étude archéo-anthropologique de la nécropole (Zone 1)," In *Excavations at Sissi: preliminary report on the 2007–2008 campaigns,* Driessen, J., I. Schoep, F. Carpentier, I. Crevecoeur, M. Devolder, F. Gaignerot-Driessen, H. Fiasse, P. Hacıgüzeller, S. Jusseret, C. Langohr, Q. Letesson, and A. Schmitt, 57–94. *Aegis* 1, Louvain: Presses universitaires de Louvain.

Cucuzza, N. 2013. "Minoan nativity scenes? The Ayia Triada swing model and the three-dimensional representation of Minoan divine epiphany." *ASAtene* 91, N. S. 3.13: 175–207.

Dimopoulou-Rethemiotaki, N. 2005. *The Archaeological Museum of Herakleion.* Athens: EFG Eurobank Ergasias S. A. and John S. Latsis Public Benefit Foundation.

Dornan-Fish, J. 2012. "Motive matters: intentionality, embodiment, and the individual in archaeology." *Time and Mind* 5(3): 279–298.

Driessen, J. 2000. "A Late Minoan I B town shrine at Palaikastro." In MacGillivray et al. 2000, 87–96.

Driessen, J. 2017. "Understanding Minoan in-house relationships on Late Bronze Age Crete." In *Minoan architecture and urbanism: new perspectives on an ancient built environment,* edited by Q. Letesson and C. Knappett, 80–104. Oxford: Oxford University Press.

Evans, A. J. 1900/1. "The Palace of Knossos. Provisional report of the excavations for the year 1901." *BSA* 7: 1–120.

Evans, A. J. 1909. *Scripta Minoa: the written documents of Minoan Crete, with special reference to the archives of Knossos,* vol. I. Oxford: Clarendon Press.

Evans, A. 1928. *The Palace of Minos,* vol. III. London: Macmillan.

Evans, A. 1935. *The Palace of Minos,* vol. IV. London: Macmillan.

Evans, A. 1952. *Scripta Minoa: The written documents of Minoan Crete, with special reference to the archives of Knossos,* vol. II. Oxford: Clarendon Press.

Firth, R. J., and J. L. Melena. 2016. "Re-visiting the scribes of Knossos: the principal hands 101–123, 125–141." *Minos* 39: 249–318.

Fuchs, T., and H. De Jaegher. 2009. "Enactive intersubjectivity: participatory sense-making and mutual incorporation." *Phenom Cogn Sci* 8: 465–486.

Gaignerot-Driessen, F. 2014. "Goddesses refusing to appear? Reconsidering the Late Minoan III figures with upraised arms." *AJA* 118(3): 489–520.

Geertz, C. 1973. *The interpretation of cultures: selected essays. Alexander Street Anthropology.* New York: Basic Books.

Günkel-Maschek, U. 2020. "A lost ritual space in the palace at Knossos: re-contextualising the fresco of the 'Dancing Lady'." In *Current approaches and new perspectives in Aegean iconography,* edited by F. Blakolmer, 147–176. *Aegis* 18, Louvain-la-Neuve: Presses universitaires de Louvain.

Hallager, E. 1985. *The Master Impression: a clay sealing from the Greek-Swedish excavations at Kastelli, Khania. SIMA* 69. Göteborg: Paul Åströms Förlag.

Hamilakis, Y. 2002. "Too many chiefs? Factional competition in Neopalatial Crete." In *Monuments of Minos. Rethinking the Minoan palaces. Proceedings of the international workshop "Crete of the hundred Palaces?" held at the Université Catholique de Louvain, Louvain-la-Neuve, 14–15 December 2001,* edited by J. Driessen, I. Schoep, and R. Laffineur, 179–199. *Aegaeum* 23, Liège: Université de Liège.

Hamilakis, Y. 2013. *Archaeology and the senses: human experience, memory, and affect.* New York: Cambridge University Press.

Hamilakis, Y. 2018. "The 'emergence of the individual' revisited: memory and trans-corporeality in the mortuary landscapes of Bronze Age Crete." In *From the foundations to the legacy of Minoan archaeology: studies in honour of Professor Keith Branigan,* edited by M. Relaki and Y. Papadatos, 314–331. *Sheffield Studies in Aegean Archaeology* 12. Oxford and Philadelphia: Oxbow Books.

Hawes, H. B., B. E. Williams, R. B. Seager, and E. H. Hall. 2014. "Notes on Crania." In *Gournia, Vasiliki, and other prehistoric sites on the Isthmus of Hierapetra, Crete: excavations of the Wells-Houston-Cramp expeditions 1901, 1903, 1904.* 2nd ed. Philadelphia: INSTAP Academic Press.

Hitchcock, L. 1997. "Engendering domination: a structural and contextual analysis of Minoan Neopalatial bronze figurines." In *Invisible people and processes: writing gender and childhood into European archaeology,* edited by J. Moore and E. Scott, 113–130. London: Leicester University Press.

Hodder, I. 2012. *Entangled: an archaeology of the relationships between humans and things.* Malden, MA: Wiley-Blackwell.

Ingold, T. 2010a. "The textility of making." *Cambridge Journal of Economics* 34(1): 91–102.

Ingold, T. 2010b. *Bringing things to life: creative entanglements in a world of materials. Realities Working Papers* 15. ESRC National Centre for Research Methods, NCRM Working Paper Series 05/10.

Jones, B. 2007. "A reconsideration of the Kneeling Figure Fresco from Hagia Triada." In *Krinoi kai Limenes: studies in honor of Joseph and Maria Shaw,* edited by Ph. P. Betancourt, M. C. Nelson and H. Williams. *Prehistory Monographs* 22, 151–158. Philadelphia: INSTAP Academic Press.

Jones, C. 2014. *The smile revolution in eighteenth century Paris.* Oxford: OUP.

Judson, A. 2023. "The tablet-makers of Pylos: an experimental investigation into the production of Linear B tablets." *BSA* 118: 1–24.

Karnava, A. 2015. "In the Land of Lilliput: writing in the Bronze Age Aegean." *WorldArch* 47(1): 137–157.

Knapp, M. L., and J. A. Hall. 2010. *Nonverbal communication in human interaction.* 7th ed., Boston: Wadsworth, Cengage Learning.

La Rosa, V. 2010. "A new Early Minoan clay model from Phaistos." In *Cretan offerings: studies in honour of Peter Warren,* edited by O. H. Krzyszkowska, 189–194. *BSA Studies* 18. London: The British School at Athens.

Latimer, J. E., and M. Strathern. 2019. "A conversation with Marilyn Strathern about intimacy & entanglement." *The Sociological Review:* 481–496.

LiBER, lemma for Kn Ap 639, https://liber.cnr.it/tablet/view/2654.

MacGillivray, J. A., J. M. Driessen, and L. H. Sackett, eds. 2000. *The Palaikastro Kouros. A Minoan chryselephantine statuette and its Aegean Bronze Age context. BSA Studies* 6. London: The British School at Athens.

Malafouris, L. 2008. "Is it 'me' or is it 'mine'? The Mycenaean sword as a body-part." In *Past bodies: body-centered research in archaeology,* edited by D. Borić and J. Robb, 115–123. Oxford: Oxbow Books.

McGowan, E. R. 2006. "Experiencing and experimenting with embodied archaeology: re-embodying the sacred gestures of Neopalatial Minoan Crete." *Archaeological Review from Cambridge* 21(2): 32–57.

Melena, J. L. (in collaboration with R. J. Firth). 2019. *The Knossos Tablets.* 6th ed. Philadelphia: INSTAP Academic Press.

Miller, L. E., C. Fabio, V. Ravenda, S. Bahmad, E. Koun, R. Salemme, J. Luaute, N. Bolognini, V. Hayward, and A. Farne, 2019. "Somatosensory cortex efficiently processes touch located beyond the body." *Current Biology* 29 (24): 4276–4283.

Moak, M. 2000. "The Palaikastro Kouros." In MacGillivray et al. 2000, 65–83.

Morris, C. 2001. "The language of gesture in Minoan religion." In *Potnia. Deities and religion in the Aegean Bronze Age. Proceedings of the 8th International Aegean Conference, Göteborg, Göteborg University, 12–15 April 2000,* edited by R. Laffineur and R. Hägg, 245–251. *Aegaeum* 22. Liège: Université de Liège.

Morris, C. and L. Goodison, 2022. "In touch with the Minoans: gestural performance and experience in Bronze Age Crete." In *Tracing gestures: the art and archaeology of bodily communication,* edited by A. J. Maitland Gardner and C. Walsh, 13–30. UCL World Archaeology Series. London: Bloomsbury.

Morris, C., B. O'Neill and A. Peatfield 2019. "Thinking through our hands: making and understanding Minoan female anthropomorphic figurines from the peak sanctuary of Prinias, Crete." In *Experimental archaeology: making, understanding, story-telling. proceedings of a workshop in experimental archaeology: Irish Institute of Hellenic Studies at Athens with UCD Centre for Experimental Archaeology and Material Culture, Dublin, Athens 14th–15th October 2017,* edited by C. Souyoudzoglou-Haywood and A. O'Sullivan, 53–62. Oxford: Archaeopress Publishing Ltd.

Morris, C. and A. Peatfield. 2002. "Feeling through the body: gesture in Cretan Bronze Age religion." In *Thinking through the body. Archaeologies of corporeality,* edited by Y. Hamilakis, M. Pluciennik and S. Tarlow, 105–120. New York: Kluwer Academic and Plenum Publishers.

Morris, C. and A. Peatfield. 2004. "Experiencing ritual: shamanic elements in Minoan religion." In *Celebrations: selected papers and discussions from the Tenth Anniversary Symposon of the Norwegian Institute at Athens, 12–16 May 1999,* edited by M. Wedde, 35–59. *Papers from the Norwegian Institute at Athens* 6, Bergen: The Norwegian Institute at Athens.

Murphy, C. 2018. "Solid items made to break, or breakable items made to last? The case of Minoan peak sanctuary figurines." *Carnets De L'ACoSt* 17(17). https://journals.openedition.org/acost/1089.

Musgrave, J. 2000. "The anatomy of a Minoan masterpiece." In MacGillivray et al. 2000, 97–101.

Myres, J. L. 1902/3. "The sanctuary-site of Petsofà." *BSA* 9: 356–387.

Olivier, J.-P. and L. Godart, eds. 1996. *Corpus Hieroglyphicarum Inscriptionum Cretae (CHIC) (avec la collaboration de J.-C. Poursat), Étude Crétoises 31.* Paris: De Boccard.

Palaima, T. G. 2011. "Scribes, scribal hands and palaeography." In *A companion to Linear B: Mycenaean Greek texts and their world,* edited by Y. Duhoux and A. Morpurgo Davies, vol. 2, 33–136. Bibliothèque des Cahiers de l'Institut de Linguistique de Louvain 127, Leuven: Peeters.

Panagiotopoulos, D. 2012. "Aegean imagery and the syntax of viewing." In *Minoan realities: approaches to images, architecture, and society in the Aegean Bronze Age,* edited by D. Panagiotopoulos and U. Günkel-Maschek, 63–82. Louvain-la-Neuve: Presses universitaires de Louvain.

Pape, T., P. Halstead, J. Bennet and Y. Stangidis. 2014. "'For it is written': an experimental approach to the materiality and temporality of clay documents inscribed in Linear B." In *Αθύρματα: critical essays on the archaeology of the eastern Mediterranean in honour of E. Susan Sherratt,* edited by Y. Galanakis, T. Wilkinson and J. Bennet, 177–185. Oxford: Archaeopress.

Piccini, A. 2015. "'To see what's down there': embodiment, gestural archaeologies and materializing futures." *Paragraph (Modern Critical Theory Group)* 38(1): 55–68.

Rehak, P. 1995. "The use and destruction of Minoan stone bull's head rhyta." In *Politeia. Society and state in the Aegean Bronze Age. Proceedings of the 5th International Aegean Conference, University of Heidelberg, Archäologisches Institut, 10–13 April 1994,* edited by R. Laffineur and W.-D. Niemeier, vol. II, 435–460. *Aegaeum* 12. Université de Liège, Histoire de l'art et archéologie de la Grèce antique; University of Texas at Austin, Program in Aegean Scripts and Prehistory.

Relaki, M. 2020. "Ecologies of care: examining the practices of belonging in Bronze Age Crete." In *OIKOS. Archaeological approaches to House Societies in the Bronze Age Aegean,* edited by M. Relaki and Jan Driessen, 317–340. *Aegis* 19. Louvain-la-Neuve: Presses universitaires de Louvain.

Rethemiotakis, G. 2001. *Minoan clay figures and figurines from the Neopalatial to the Subminoan period. The Archaeological Society at Athens Library* 219. *Ancient Sites and Museums in Greece* 25. Athens: The Archaeological Society at Athens.

Rutkowski, B. 1991. *Petsofas. A Cretan peak sanctuary. Studies and Monographs in Mediterranean Archaeology and Civilization,* I. 1. Warsaw: Polish Academy of Sciences.

Sakellarakis, Y. and E. Sapouna-Sakellaraki. 1997. *Archanes. Minoan Crete in a new light,* vols. 1–2. Athens: Ammos Publications.

Simandiraki, A. 2008. "The Minoan body as a feast." In *DAIS. The Aegean feast. Proceedings of the 12th International Aegean Conference, University of Melbourne, Centre for Classics and Archaeology, Melbourne, Australia, 25–29 March 2008,* edited by L. Hitchcock, R. Laffineur and J. Crowley, 29–37, *Aegaeum* 29. Liège and Austin: Université de Liège, Histoire de l'art et archéologie de la Grèce antique and University of Texas at Austin, Program in Aegean Scripts and Prehistory.

Simandiraki-Grimshaw, A. 2010a. "Minoan animal-human hybridity." In *The Master of Animals in old world iconography,* edited by D. B. Counts and B. Arnold, 93–106. Budapest: Archaeolingua.

Simandiraki-Grimshaw, A. 2010b. "The human body in Minoan religious iconography." In *Cretan offerings: studies in honour of Peter Warren,* edited by O. H. Krzyszkowska, 321–329. *BSA Studies* 18. London: The British School at Athens.

Simandiraki-Grimshaw, A. 2010c. "Bodyscapes in Minoan Crete." Mycenaean Seminar 2009–2010. *BICS:* 126–127.

Simandiraki-Grimshaw, A. 2013. "Anthropomorphic vessels as re-imagined corporealities in Bronze Age Crete." *Creta Antica* 14: 17–68.

Simandiraki-Grimshaw, A. 2015. "The body brand and Minoan zonation." In *Minoan archaeology: perspectives for the 21st century,* edited by S. Cappel, U. Günkel-Maschek and D. Panagiotopoulos, 267–282. *Aegis* 8. Louvain-la-Neuve: Presses universitaires de Louvain.

Simandiraki-Grimshaw, A. 2017. "Figurines." In *Petras, Siteias I: Houses I.1 and I.2,* edited by M. Tsipopoulou, 163–173. Philadelphia: INSTAP Academic Press.

Simandiraki-Grimshaw, A. 2018a. "Illusion in Minoan religion." *Journal of Prehistoric Religion* 26: 35–46.

Simandiraki-Grimshaw, A. 2018b. "Fleeting fingers, silent pots? Examining human-vessel engagement in the Minoan palace of Galatas Pediados, Crete." In *Von Kreta nach Kuba: Gedenkschrift zu Ehren des Berliner Archäologen Veit Stürmer,* edited by K. Müller and B. Schiller, 247–262. Berlin: Logos Verlag.

Simandiraki-Grimshaw, A. 2020a. "The body and the ring: metal rings and social structures in the Late Bronze Age Aegean." In *OIKOS. Archaeological approaches to House Societies in the Bronze Age Aegean,* edited by M. Relaki and Jan Driessen, 201–224. *Aegis* 19. Louvain-la-Neuve: Presses universitaires de Louvain.

Simandiraki-Grimshaw, A. 2020b. "The Petras Male Figurine Group: a first presentation and assessment." In *Proceedings of the 4th Meeting for the Archaeological Work in Crete, Rethymno, Crete, 24–27 of November 2016,* edited by A. Tzigounaki, P. Karanastasi and C. Tsigonaki, 491–511. Hellenic Ministry of Culture and Sports, Rethymno Archaeological Ephorate, University of Crete.

Simandiraki-Grimshaw, A. and F. Stevens. 2013. "Destroying the Snake Goddess: a re-examination of figurine fragmentation at the Temple Repositories of the Palace of Knossos." In *Destruction. Archaeological, philological and historical perspectives, Louvain-la-Neuve, Belgium, 24–25–26 November 2011,* edited by J. Driessen, 153–170. Louvain-la-Neuve: Presses universitaires de Louvain.

Steinmann, B. F. 2014. "Making Knossos great again: changing strategies in Minoan elite representation before and after the destructions of the palaces (LM I/II)." In *Anodos: Studies of the Ancient World 14, Proceedings of the International Conference Ancient Communities and Their Elites from the Bronze Age to Late Antiquity (Central Europe – Mediterranean – Black Sea): Dedicated to the 25th anniversary of the re-established Trnava University in Trnava and the 20th anniversary of Department of Classical Archaeology, Trnava, 6th–8th October 2014,* Part II, 193–204.

Thomas, J. 2009. "On the ocularcentrism of archaeology." In *Archaeology and the politics of vision in a post-modern context,* edited by J. Thomas and V. Jorge, 1–12. Cambridge: Cambridge Scholar's Press.

Triantaphyllou, S. 2016. "Staging the manipulation of the dead in Pre- and Protopalatial Crete, Greece (3 rd–early 2 nd mill. BCE): from body wholes to fragmented body parts." *Journal of Archaeological Science, Reports* 10: 769–779.

Triantaphyllou, S. 2018. "Managing with death in Prepalatial Crete: the evidence of the human remains." In *From the foundations to the legacy of Minoan Archaeology: studies in honour of Professor Keith Branigan,* edited by M. Relaki and Y. Papadatos, 141–166. *Sheffield Studies in Aegean Archaeology* 12. Oxford and Philadelphia: Oxbow Books.

Triantaphyllou, S., S. Kiorpe and M. Tsipopoulou. 2017. "House Tomb 5: a preliminary analysis of the human skeletal remains." In *Petras, Siteia: The Pre- and Proto-palatial cemetery in context. Acts of a two-day conference held at the Danish Institute at Athens, 14–15 February 2015,* edited by M. Tsipopoulou, 291–299. Monographs of the Danish Institute at Athens 21, Aarhus: The Danish Institute at Athens and Aarhus University Press.

Triantaphyllou, S., S. Kiorpe and M. Tsipopoulou. 2019. "Manipulating bodies, constructing social memory: ways of negotiating, re-inventing and legitimizing the past at the Petras Cemetery, Siteia, Crete." In *Μνήμη / Mneme. Past and memory in the Aegean Bronze Age: proceedings of the 17th International Aegean Conference, University of Udine, Department of Humanities and Cultural Heritage, Ca' Foscari University of Venice, Department of Humanities, 17–21 April 2018,* edited by E. Borgna, I. Caloi, F. M. Carinci and R. Laffineur, 73–80. *Aegaeum* 43, Leuven and Liège: Peeters.

Tsangaraki, E. 2010. "Sealings with representations of human figures: a Neopalatial Repertoire and its significance in the administrative system." In *Die Bedeutung der minoischen und mykenischen Glyptik: VI. Internationales Siegel-Symposium aus Anlass des 50 jährigen Bestehens des CMS, Marburg, 9.–12. Oktober 2008,* edited by W. Müller. *CMS Beiheft* 8, 363–381. Mainz am Rhein: Verlag Philipp von Zabern.

Tsipopoulou, M., and D. Rupp. 2019. "The Pre- and Proto-palatial cemetery at Petras-Kephala: a persistent locale as an arena for competing cultural memories." In *Μνήμη / Mneme. Past and memory in the Aegean Bronze Age: proceedings of the 17th International Aegean Conference, University of Udine, Department of Humanities and Cultural Heritage, Ca' Foscari University of Venice, Department of Humanities, 17–21 April 2018,* edited by E. Borgna, I. Caloi, F. M. Carinci and R. Laffineur, 81–94. *Aegaeum* 43, Leuven and Liège: Peeters.

Vavouranakis, G., and C. Bourbou. 2015. "Breaking up the past: patterns of fragmentation in Early and Middle Bronze Age tholos tomb contexts in Crete." In *Thravsma: contextualising the intentional destruction of objects in the Bronze Age Aegean and Cyprus,* edited by K. Harrell and J. Driessen, 167–196. Louvain-la-Neuve: Presses universitaires de Louvain.

Warren, P. 1988. *Minoan religion as ritual action. SIMA-PB* 62. Gothenburg.

Wedde, M. 1999. "Talking hands: a study of Minoan and Mycenaean ritual gesture – some preliminary notes." In *Meletemata. Studies in Aegean Archaeology presented to Malcolm H. Wiener as he enters his 65th year,* edited by Ph. P. Betancourt, V. Karageorghis, R. Laffineur and W.-D. Niemeier, vol. III, 911–920. *Aegaeum* 20. Liège and Austin: Université de Liège, Histoire de l'art et archéologie de la Grèce antique; University of Texas at Austin, Programs in Aegean Scripts and Prehistory.

Younger, J. G. 2020. "Narrative in Aegean art: a methodology of identification and interpretation." In *Current approaches and new perspectives in Aegean iconography,* edited by F. Blakolmer, 71–86. *Aegis* 18, Louvain-la-Neuve: Presses universitaires de Louvain.

The Function of Minoan Cheironomy

Katerina Giannaki

Abstract   *The arms and hands are the main body parts in a non-verbal form of communication which follows a semiotic code of meaning in a specific context. Minoan hand gesture or 'cheironomy' is in line with this principle. Minoan cheironomy features a significant variety of schemata,* i.e. *distinct configurations of arms and hands, each one intended to convey specific meaning(s) in specific context(s). These schemata, either contextualised or depicted individually in a two- or three-dimensional representation, can be classified into two major categories, according to the outwards or inwards orientation, position and/or placement of arms, hands and palms: firstly, the open schemata with outwards configurations, which portray the figure in an extroverted, inter-connectedness/ communication state and, secondly, the closed ones with inwards configurations that render the figure in an introverted, self-connectedness state. The arms and hands may also function as conduits of energy. In the former case, the energy is transmitted to or received by the external agent and, in the latter, internally reserved or processed. A combination of both attitudes, displayed by the same figure, is also possible. Furthermore, the schemata may constitute different phases of the same cheironomy, or can be entirely independent and autonomous cheironomies in terms of schema and content, which can also be performed in a sequence. Specimens exemplifying such processes and states are discussed in thematic groups. Ultimately and irrespectively of the interpretation we may assign to each schema and its iconographical or archaeological context, this primary distinction is a common denominator for the function of Minoan cheironomy.*

Introductory Remarks

Minoan cheironomy constitutes a significant occurrence in the representation of two-dimensional and three-dimensional anthropomorphic figures of Minoan art. This study intends to discuss a main aspect of its function and certain of its basic underlying principles.[1] The term 'cheironomy' (= hand gesture) does not only refer to the gesture of the arms and hands. According to its Greek etymology (= νόμοι της χειρός), it also carries connotations of the social norms and customs governing the conduct of arms and hands, which may consciously convey symbolic meanings to the recipient or observer.[2]

The arms and hands are the most informative body parts in a non-verbal form of communication (Argyle 1988, 188) which follows a semiotic code of meaning in a specific context of occurrence within the structure of a distinct situation (Argyle 1988, 294–295; Feyereisen and de Lannoy 1991, 57–58, 111). The notion of gesture is traditionally linked with "conventional and voluntary expression" (Kendon 1981, 28). The usage and meaning of a gesture are also associated with the context of a society, creating thus cultural variations (Argyle 1988, 52–57, 191; Kendon 2004; Kita 2009 with reasons why cultural variations exist). In Argyle's words (1988, 191), gesture "is the non-verbal signal that is most affected by socialisation and by cultural history". Among the different systems of classification proposed and implemented in the relevant fields of research we can discern that of 'emblems', a term variously used to distinguish conscious and co-

---

1   This study utilises and expands on perceptions developed and presented in my Ph.D. dissertation, *"Cheironomy of the Female Figure in Minoan Art",* 2008.

2   I first employed 'cheironomy' in my Ph.D. diss. following Eleni Mantzourani, my associate supervisor's, kind suggestion on the basis of the term's connotations.

Fig. 1.1: Sealing, Palace at Knossos (CMS II 8, no. 256; courtesy of D. Panagiotopoulos, CMS Heidelberg). – Fig. 1.2: Figurine, Tylissos (after Dimopoulou-Rethemiotaki 2005, 106; Hellenic Ministry of Culture and Sports – Hellenic Organization of Cultural Resources Development [HOCRED], Heraklion Archaeological Museum; by permission). – Fig. 2.1: Figure, Kannia (after Rethemiotakis 1988, pl. 26:γ–δ, no. 140; by permission). – Fig. 2.2: Figure, Gazi (after Rethemiotakis 1988, pls. 42–43, no. 25; by permission). – Fig. 2.3: Figure, Gazi (after Rethemiotakis 1988, pl. 40, no. 24; by permission). – Fig. 2.4: Figure, Gournia (after Rethemiotakis 1988, pls. 30–31, no. 6; by permission). – Fig. 2.5: Figure, Gazi (after Rethemiotakis 1988, pls. 44–45, no. 26; by permission). – Fig. 2.6: Figure, Karphi (after Rethemiotakis 1988, pls. 48–49, no. 19; by permission). – Fig. 2.7: Figurine, Palace at Knossos (after Rethemiotakis 1988, fig. 28, no. 42; by permission). – Fig. 2.8: Three-sided prism, Heraklion (?) (CMS VI, no. 92a; by permission). – Fig. 2.9: Sealing, Agia Triada (CMS II 6, no. 3; by permission). – Fig. 3.1: Ring, Poros (after Dimopoulou and Rethemiotakis 2000, fig. 4c; by permission). – Fig. 3.2: Ring, Elateia (CMS V Suppl. 2, no. 106; by permission). – Fig. 3.3: Sealing, Agia Triada (CMS II 6, no. 6; by permission). – Fig. 3.4: Ring, Harbour Town of Knossos (?) (CMS VI, no. 280; by permission). – Fig. 3.5a: Ring, Isopata (CMS II 3, no. 51; by permission). – Fig. 3.5b: Ring, Isopata (after Dimopoulou-Rethemiotaki 2005, 126; Hellenic Ministry of Culture and Sports – Hellenic Organization of Cultural Resources Development [HOCRED], Heraklion Archaeological Museum; by permission). – Fig. 4.1: Sealing, Chania (CMS V Suppl. 1A, no. 177; by permission). – Fig. 4.2: Ring, Poros (after Rethemiotakis 2016–2017, fig. 2; by permission). – Fig. 4.3: Sealing, Knossos (CMS II 8, no. 268; by permission).

dified symbolic hand movements that are speech-autonomous, can be translated into words, and can be ethnicity- and culture-dependent (various aspects and applications of the term in Efron 1941; Argyle 1988, 52–57; Morris 2001, 247; Murphy 2018, 14–15).

Cheironomies in Minoan art are in line with the above principles. They are intentional emblematic/symbolic non-verbal signals or signs, which are well-orchestrated in order to convey specific encoded meanings in specific contexts, namely the iconographical or functional contexts in the framework of Minoan culture in general, and the culture of parts of Minoan society in particular (Wedde 1999, 912), that is of certain social groups behind their creation and implementation.

Schemata-related Observations and Methodology

Minoan cheironomy features a significant variety of schemata (term after Neumann 1965 and McNiven 1989), in other words specific configurations of arms and hands, each intended to convey specific meaning(s) in a given context. The classification of the schemata is based on the movement of the arm, forearm and hand, *i.e.* the kinesics of the upper limbs.

Time span

Certain schemata are more persistent, such as the long-lived one of one arm upraised towards the forehead with palm turned to and placed upon the forehead (Fig. 1.1: sealing from the Palace at Knossos, possibly executed by the male figure in the scene; Fig. 1.2: distinctly performed by the male figurine from Tylissos; see Verlinden 1984, pl. 11, no. 26; Sapouna-Sakellarakis 1995, pl. 7, no. 101). The sideways and frontally upraised arms schemata also cover a long time span (Figs. 2.1–2.9). Others are more limited in duration, such as the Neopalatial LM I schema of one arm bent with hand near or touching the same shoulder (central female figure in Fig. 5.2; see Sakellarakis and Sapouna-Sakellaraki 1997, 654–660, fig. 722). There are also schemata with unique specimens, as the one of the clay female figurine from Myrsine (dated to LM II or early LM III A by Rethemiotakis 1998, 64; 2001, fig. 74), exhibiting arms bent and upraised with joined palms at chest level, a gesture reminiscent of prayer.

Significance of each arm in a cheironomy

In certain schemata the movement of both arms is executed in a symmetrical manner, so both arms may have equal bearing, such as the above-noted sideways and frontally upraised arms cheironomy (Figs. 2.1–2.6, 2.8–2.9). In a number of non-symmetrical schemata we can discern one arm and hand executing the main movement and the other arm and hand performing a complementary, of equal bearing or secondary significance movement that can take different forms in certain cheironomies, thus creating variations and, in certain cases, sequences of the same cheironomy as will be argued below in selected themes. The criterion for this distinction emerges from the comparative examination of the material, especially where we have a sufficient number of three- and/or two-dimensional specimens. The latter type of specimens provide the utmost important iconographical context of the cheironomy. A complementary, yet of equal bearing, arms/hands schema in a cheironomy will be discussed further down in the gestural combination of one hand on chest or heart with the other upraised towards another agent (performed by female figures in Figs. 3.1–3.2, 4.3); both hand configurations convey significant meanings and have appeared autonomously in two-dimensional iconography. A cheironomy which appears to have one arm/hand bearing the main message is the previously mentioned cheironomy of one arm upraised towards the forehead with palm turned to and placed upon the forehead (Fig. 1.2), with the other arm exhibiting various schemata of secondary significance, also pertaining to possible sequences of arm movements: the outstretched or slightly bent arm can be extended along the body (common for bronze male and female figurines, Fig. 1.2) or can be bent and placed near or upon the body in various positions, as exemplified by glyptic examples.[3] In this connection it

---

3 *Cf.* a seal of unknown origin: *CMS* VI, no. 286; the Makrygialos seal: *CMS* V Suppl. 1A, no. 55; the seal in a

ought to be mentioned that Céline Murphy has discussed the significance of what she has termed as 'Arm B' and has considered it to be 'the gesture's classificatory feature'. In her examination of the 'Fist on Chest' gesture, she has argued that this arm helps define the 'attitude' of the gesticulating figure during communication and that "Arm B sets the scene while Arm A represents the action" (Murphy 2018, esp. 9–10, 14).

Extroversion, inter-connectedness vs introversion, self-connectedness and the energy management factor

In each schema the orientation, direction, and level or placement of the palm or palms is the most crucial factor. The whole bodily comportment and stance are also significant. The figures are open and extroverted through cheironomy, as well as unreserved body posture: they open outwards and may also target an external agent ('target' and 'targeting' after Wedde 1999, 912). On the other hand, the figures are closed when they are self-contained, internalised/introverted through cheironomy and reserved body posture. It is worth noting that the clenched fist, a characteristic feature of mainly male figures that adds to the intensity and introversion while also bearing gender-specific connotations, is also important to take into account. However, in a considerable number of specimens, particularly the glyptic ones, we are not in a position to ascertain the attitude of the palms, as these are either unstructured or not manifesting their orientation.

Therefore, these cheironomy schemata, either contextualised along with other agents or depicted individually in a two- or three-dimensional representation respectively, can be classified into two major categories, according to the outwards or inwards orientation, position and/or placement of arms, hands and palms: the open and closed ones (a distinction also considered by Peatfield and Morris 2012, 239–242). The open ones with outwards configurations portray the figure in a state of *extroversion* and *inter-connectedness, i.e.* in a process of connecting, communicating and/or interacting with another entity, be it a living and animate or inanimate agent (which may also be in the course of becoming animate; with respect to Minoan animism, see Day 2012; Tully, Crooks, and Hitchcock 2016; Tully 2016, 2018, 2021; and Herva 2006 for the 'ecological perspective'). The closed schemata with inwards configurations render the figure in a state of *introversion* and *self-connectedness* (a term that I introduce and employ here to juxtapose it with and contrast it to the term 'inter-connectedness'), *i.e.* in a non-communicative state which can be one of internalising and/or connecting inwardly with the body and self. Furthermore, there can be a combination of both attitudes exhibited by the same figure with related results.

Regarding the cheironomies that exhibit introversion and self-connectedness, there are schemata in which both palms and/or arms or one palm and/or arm are upon specific parts of the body, near or in front of specific parts of the body: positioning sideways towards the head (Figs. 2.4, 2.7), before or upon the head and forehead (one hand on forehead: Fig. 1.2 and possibly in Fig. 1.1), mouth and/or nose, neck, upon the opposite shoulder, near or on the same shoulder for female figures (Fig. 5.2), chest for the male and female figures (one hand on chest in Figs. 3.1–3.3, 4.1, 4.3, 5.3–5.4, 6.5; both arms sideways on chest in Figs. 3.1–3.2), specifically breasts for the female figures (we may also have placements above, around and below the breasts); pulling the V-shaped bodice opening (the 'revelation of breast' act according to Platon 2014, 71–77); placement upon possibly heart (Figs. 3.1–3.3, 4.1, 4.3, 6.5), stomach or abdomen, and with both hands on or near the hips (Fig. 4.2) or waist. The practice seems to be associated with the significance these body parts had for the Minoans or the significance several of these have universally on the basis of human physiology and functions – and I am noting this without undermining Minoan cultural distinctiveness.

---

private collection: *CMS* V Suppl. 1A, no. 75 – in the drawing the hand is placed on the forehead but the palm appears to be turned outwards; the Sacred Mansion gold ring from Poros: Rethemiotakis and Dimopoulou 2003, col. pl. I, pls. 1–4, fig. 1, which also appears to belong to this cheironomy schema.
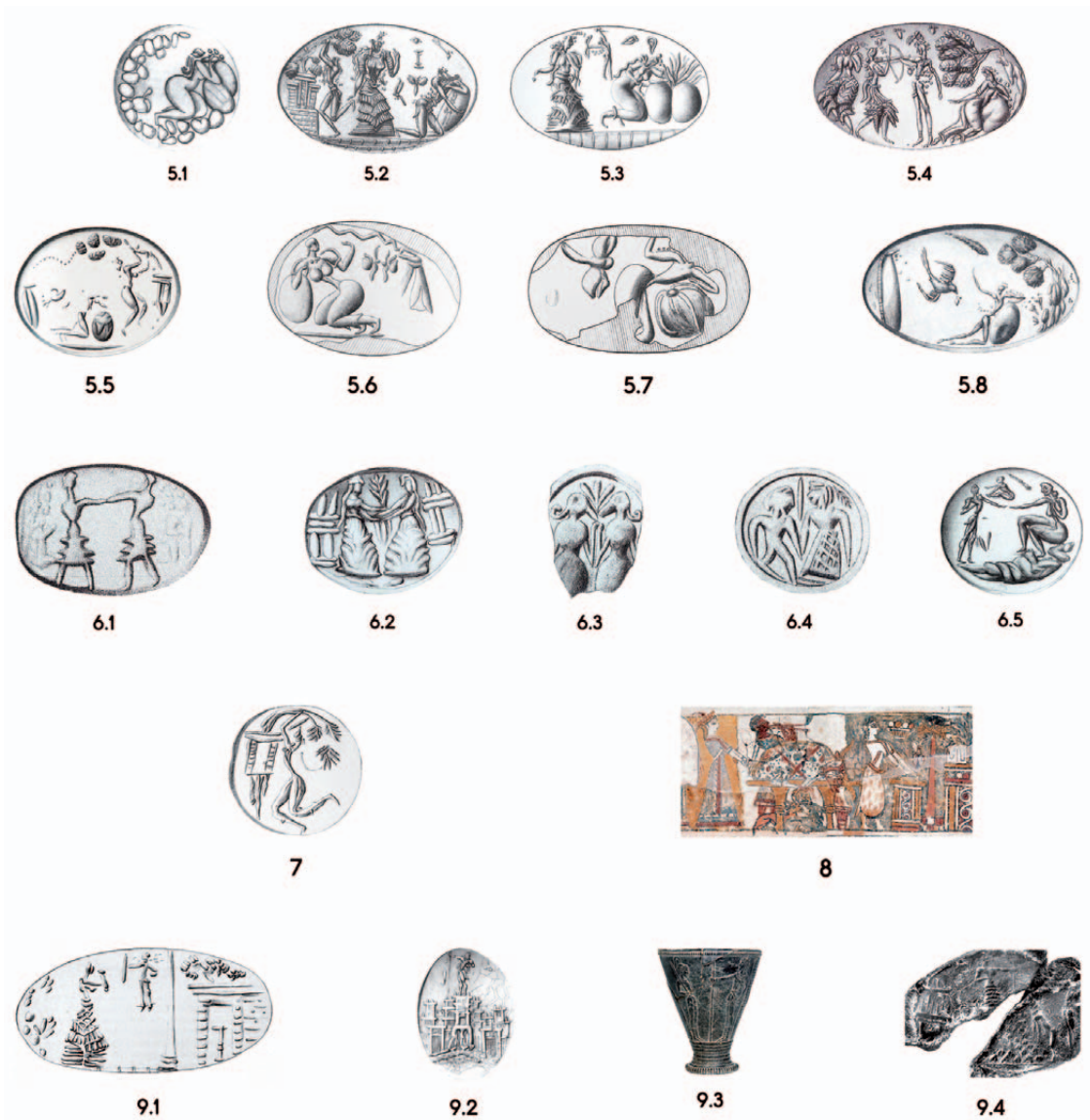
Fig. 5.1: Seal, Knossos (after Warren 1990, fig. 14; by permission). – Fig. 5.2: Ring, Archanes (after Marinatos 2010, fig. 7.6a; by permission of N. Marinatos and CMS Heidelberg). – Fig. 5.3: Ring, uncertain provenance (CMS VI, no. 278; by permission). – Fig. 5.4: Ring, unknown provenance (CMS XI, no. 29; by permission). – Fig. 5.5: Ring, Kalyvia (CMS II 3, no. 114; by permission). – Fig. 5.6: Sealing, Agia Triada (CMS II 6, no. 4; by permission). – Fig. 5.7: Sealing, Zakros (CMS II 7, no. 6; by permission). – Fig. 5.8: Ring, Sellopoulo (after Marinatos 2010, fig. 7.9b; by permission of N. Marinatos and CMS Heidelberg). – Fig. 6.1: Ring, Isopata (CMS II 3, no. 56; by permission). – Fig. 6.2: Sealing, Chania (CMS V Suppl. 1A, no. 178; by permission). – Fig. 6.3: Sealing, Phaistos (CMS II 5, no. 323; by permission). – Fig. 6.4: Sealing, Phaistos (CMS II 5, no. 324; by permission). – Fig. 6.5: Seal, unknown provenance (CMS X, no. 261; by permission). – Fig. 7: Seal, unknown provenance (CMS XII, no. 264; by permission). – Fig. 8: Sarcophagus, Agia Triada, side B, detail (after Dimopoulou-Rethemiotaki 2005, 180–181; Hellenic Ministry of Culture and Sports – Hellenic Organization of Cultural Resources Development [HOCRED], Heraklion Archaeological Museum, by permission). – Fig. 9.1: Ring, Knossos(?) (CMS VI, no. 281; by permission). – Fig. 9.2: Sealing, Chania (CMS V Suppl. 1A, no. 142; by permission). – Fig. 9.3: The Chieftain Cup, Agia Triada (after Dimopoulou-Rethemiotaki 2005, 154; Hellenic Ministry of Culture and Sports – Hellenic Organization of Cultural Resources Development [HOCRED], Heraklion Archaeological Museum, by permission). – Fig. 9.4: Sealings, Palace at Knossos (CMS II 8, no. 256; courtesy of the CMS Heidelberg).

In addition, there is a second level of approach. This paper proposes a working hypothesis which employs the concept of an *energy management factor* that may have contributed to the function of Minoan cheironomy in acts and contexts where certain effects were meant to be produced, such as ones that have been traditionally perceived as 'gaining access to a sacred entity or deity', 'healing', 'protection', 'blessing', 'prosperity', 'procreation', 'regeneration', and so forth. The purpose of this paper is not to examine the specific nature of these effects but, in tandem with the extroversion/inter-connectedness and introversion/self-connectedness aspect of the cheironomy, to also take into consideration the alternative point of view that hands can function as *conduits of energy.*

Energy can be defined as "the capacity to produce an effect" (McCraty et al. [1998] 2018, 1). "Technically energy is a scalar quantity associated with the state (or condition) of one or more objects" (Walker et al. 2014, 149). As a general rule, energy cannot be perceived and observed directly but can only be experienced or induced, and is a force that has an effect on physical entities (Liu 2018, 30, 32). A property of our universe is that "energy can be transformed from one type to another and transferred from one object to another" (Walker et al. 2014, 149). The concept of energy transfer does not mean that "anything material flows into and out of the object … it is like the electronic transfer of money between two accounts" (Walker et al. 2014, 151). Furthermore, energy obeys the law of conservation, meaning that its total amount is always the same but can change form and transfer externally from and internally within a system (Walker et al. 2014, 149, 195–197).

The belief in energy transfer and exchange through the hands is a universal one. As a healing practice, it is employed in the Eastern and Western Medicine systems, now often called by the generic term 'Energy Medicine'; according to these systems, however, healing does not only occur by hands (McCraty et al. [1998] 2018, 1). It is described in sacred texts of Judaism and Christianity, namely the Hebrew Bible and Greek Old Testament, the New Testament and Acts – mainly in conferring a blessing, wisdom or authority (for instance, *Deuteronomy* 34:9, *Numbers* 29:15–23 and *Acts* 6:6, 8:14–19), and in healing by Jesus (for instance, *Luke* 5:12–13 and *Mark* 8:22–26) and the apostles (*Mark* 16:14–18). Moreover, the rod, a symbol of power for the Israelites and thought to be charged with divine energy, is used in conjunction with an appropriate gesture (particularly the one of stretching out of one arm) by Moses and Aaron in order for them to perform miracles (in *Exodus,* for instance by Moses, 10:12–13, 14:16–27, 17:8–13, and by Aaron 7:19–20).

Significant scientific research has been conducted in this area, as the tools of scientific observation have been growing more sophisticated especially in recent years. Scientific methods have been proposed to verify the existence of a bodily energy system and the energy of particular organs, as well as the flow of energy inside and outside the body, by means of modern scientific technology and modern science theory, methods and applications (see the proposal by Liu 2018). Experiments have verified, measured and generated the parameters of the electromagnetic energy, which is produced by the heart, and its transmission and exchange between individuals when they touch, hold hands or are in proximity (see the research by McCraty et al. [1998] 2018). It has been demonstrated that the human hand is a natural and powerless infrared (IR) light source emitting infrared radiation, a form of electromagnetic radiation, sufficient to power various devices, and that each finger can serve as an independent light source; it has also been proposed that the data derived from the various gestures composed of different fingers be implemented in the field of sign languages (see the research and proposal by An et al. 2021). Moreover, research has expanded to encompass other kinds of living organisms, such as trees and plants, attempting to convert their energy into electricity (see Meder et al. 2018).

Thus energy can be handled and transmitted to or received by an external agent or source, or it can be inwardly reserved, focused on and/or processed, and can also be associated with specific parts and organs of the body. The arms and palms can function as conduits of energy.

Cheironomy Schemata in a Meaningful Sequence

In this part a selection of possible sequences that seem to take place in order to produce specific effects will be considered. Naturally, sequences are difficult or often impossible to identify due to the fragmentary nature of the extant material and the lack of written sources. In addition, critical is the selection of a particular most meaningful moment in the execution of a cheironomy; as a result, a preferred schema is generated, it becomes conventionalised and established in the repertoire of two- and three-dimensional art (see also Morris 2001, 247). Nevertheless, we may be able to discern a number of sequences and distinguish between two types of sequences. The first type appears to involve the sequence of schemata within what seems to be the same cheironomy framework and the second type incorporates the sequence of different cheironomies within the same subject/framework of action represented in two-dimensional iconography.

Sequence of schemata within what seems to be the same cheironomy framework

In the former type we can observe that, as cheironomies are frozen in time, what may be depicted for a number of schemata are not different cheironomies but different phases of the same cheironomy in symmetrical and non-symmetrical attitudes. From the list of possible cases, we can more safely distinguish the following group. The aid of the three-dimensional material is significant here because it exhibits the schemata explicitly.

In the sideways or frontally upraised arms configurations, a standard attitude appears to be symmetrical and has both palms turned in the same direction. Concerning the Postpalatial clay figures (those of the so-called Goddess with Upraised Arms) and clay and metal figurines, in the sideways schema (*i.e.* arms upraised from the side), both palms are turned either towards the viewer, as attested by figures from Kannia, and Gazi sanctuaries (Figs. 2.1–2.2),[4] or turned three-quarters to the viewer, as attested by a figure from Gazi sanctuary (Fig. 2.3) and two identical figures from Karphi sanctuary,[5] or turned towards the head, as attested by a figure from Gournia sanctuary (Fig. 2.4) and a figure from Kavousi sanctuary.[6] In the frontally upraised arms schema, palms are turned towards each other, as attested by figures from Gazi (Fig. 2.5) and Karphi (Fig. 2.6) sanctuaries – the latter displays hands slightly bent downwards with forearms converging.[7] However, in the sideways upraised arms cheironomy, we also have one palm turned outwards to the viewer while the other palm is turned to the head, as attested by the clay figurine from the Shrine of the Double Axes (Fig. 2.7), a bronze figurine probably from Eileithyia Cave at Tsoutsouros, and a lead figurine from the Little Palace at Knossos which apparently exhibits the same schema.[8]

These different configurations may signify sequences of outstanding attitudes (from the viewpoint of meaning, as discussed above) performed and depicted as series of ritual acts to cre-

---

[4] Fig. 2.1: Kannia: Rethemiotakis 1998, no. 140, pl. 26: γ–δ (the author dated it to early LM III B: 1988, 70–72 and 2001, 19, 22); for a second figure from Kannia see Rethemiotakis 1998, no. 142, pl. 27 (towards early LM III B: 1998, 70–72 and 2001, 19, 22); Alexiou (1958, 198) dated the Kannia figures to LM III B; Fig. 2.2: Gazi: Rethemiotakis 1998, no. 25, pls. 42–43 (towards early LM III C: 1998, 81); for a second figure from Gazi see Rethemiotakis 1998, no. 23, pls. 37–39 (early LM III C: 1998, 81).

[5] Fig. 2.3: Gazi: Rethemiotakis 1998, no. 24, pls. 40–41 (early LM III C: 1998, 81); Karphi: Rethemiotakis 1998, no. 18, pls. 59–63 (the author dated the figures to the Subminoan period, 1998, 87; 2001, 45, 48).

[6] Fig. 2.4: Gournia: Rethemiotakis 1998, no. 6, pls.

30–31 (LM III B: 1998, 73; 2001, 25); Kavousi, Vronda: Gesell 2004, fig. 7.2 (shrine in LM III C settlement: 136).

[7] Fig. 2.5: Gazi: Rethemiotakis 1998, no. 26, pls. 44–45 (early LM III C: 1988, 81); Karphi: Rethemiotakis 1998, no. 17, pls. 52–53 (mid LM III C: 1998, 84); for a second figure from Karphi see Rethemiotakis 1998, no. 20, pls. 50–51 (towards mid LM III C: 1998, 84); Fig. 2.6: Karphi: Rethemiotakis 1998, no. 19, pls. 48–49 (towards mid LM III C: 1998, 84).

[8] Fig. 2.7: Shrine of the Double Axes: Rethemiotakis 1998, no. 42, fig. 28 (LM III A2: 1998, 67–68); Tsoutsouros: Verlinden 1984, no. 183, pl. 75 (end of the Postpalatial period); Little Palace: Verlinden 1984, no. 184, pl. 75 (end of the Postpalatial period) and Gesell 1985, 49 (LM III B).

ate specific results in terms of the extroversion and inter-connectedness and/or introversion and self-connectedness as well as the energy management processes and states. In the non-symmetrical configurations both arms are significant in conveying the meaning of the cheironomy, but it is not feasible to ascertain whether one of the arms bears a more important message.

Firstly, we might have a sequence from/to the symmetrical or non-symmetrical attitude of palms. Secondly, we may be dealing with a sequence denoted by the different orientation of the palms. Thirdly, a sequence from a sideways to a frontal raising of arms may be intended. Moreover, certain configurations represented by the above specimens may not comprise of different and autonomous cheironomies, but represent different phases of the same cheironomy. It is worth noting that the cult environment of Gazi, starting from early LM III C, produced different hand schemata for both the sideways upraised arms (with outwards and three-quarters direction of palms) and frontally upraised arms schemata (with palms facing each other); this observation reinforces further the argument.

With regard to communication, we can note that the figures are represented in an open and inter-connected state with both palms facing the spectator, a closed and self-connected state with an external agent with the inwards positioning of both palms, and in both states with the outwards orientation of one palm and the inwards orientation of the other palm. The figures may also exhibit energy connection and manipulation: by focusing and/or processing energy internally (Fig. 2.4), between their hands (Figs. 2.5–2.6), or by directing it to the viewer (Figs. 2.1–2.2), or by both acts (Fig. 2.7; Fig. 2.3 with palms turned three-quarters to the viewer may exhibit an intermediate stage in energy conduct and communication) implemented in a concurrent or sequential manner. Fingers pointing upwards possibly signify communication, as well as energy connection, with the heavenly realm. In the Postpalatial period the creators of the images may have chosen to demonstrate these notions more explicitly in art. The figure from the Shrine of the Double Axes (Fig. 2.7) could be representative of the beginnings of such a tradition.

Moreover, in glyptic the frontally upraised arms cheironomy has yielded much earlier specimens with palms facing outwards thus being in an extroverted state (Fig. 2.8; three-sided prism from Heraklion (?), dated to MM II by Pini, *CMS* VI, no. 51), or turned towards the face thus being in an introverted state of being (Fig. 2.9; sealing from Agia Triada, dated to LM I B by Tsangaraki 2005–2006, 332; in my view, based on their formation, the palms appear to be turned towards the female figure's face, and this may be further supported by her downwards-inclined head). These particular examples do not exhibit the same hand configurations as the figures and figurines; nonetheless they function on the same principle. The energy appears to be flowing inwards-outwards and/or the reverse in the first specimen and outwards-inwards and/or the reverse in the second specimen. In the latter, the Agia Triada scene, if the opposite act and gesture have already taken place, *i.e.* the female figure has already connected through her palms with the agent in a process of exchanging or receiving energy from it, another phase in a sequence of acts and relevant gestures may be represented, that of directing the energy to herself by turning her palms towards her face. The figure stands before a construction of significance (a columnar shrine according to Tully's classification system, 2018, 76–79), decorated with a garland pointing to a special ritual or cult occasion, and surmounted by oblong objects. These shapes are considered sacred and interpreted as 'Kulthörner' possibly (*CMS* II 6, nos. 3, 10), 'horns of consecration' (Tsangaraki 2005–2006, 332), or stalactites in the role of non-anthropomorphic cult objects.[9] Therefore, what is depicted here seems to be a kind of sacred interaction and energy connection between the agents in the scene: the anthropomorphic figure and the sacred structure and/or specifically the ambiguous but sacred objects – as the figure has her hands at their level and in close proximity to them.

---

[9] Marinatos and Hägg 1983, 185; it is noteworthy that in recent years Marinatos has redefined the sacred horns to be the representation of the cosmic sacred mountain, 2010, 103–113.

Different cheironomies within the same framework of action or situation

In the other type of meaningful sequences the figures are apparently executing an autonomous cheironomy and then another within the same framework of action or 'situation' (after Kyriakidis 2018). There are three typical examples for this type: the cheironomies of the so-called epiphanic figures, female and male, descending or floating; the ones of seated female figures; the ones of the female and male figures in the act of leaning on an object, commonly identified as a stone. The two-dimensional material is significant in this type of sequences.

Epiphany has been thoroughly researched (see selectively the studies by Hägg 1986, Marinatos 2004, and Tully 2016). It is widely accepted that figures appear to be descending from the sky or hovering at a higher level than the other agents in the scene. In the first group of images, *i.e.* the Sacred Conversation gold ring from Poros (Fig. 3.1; Dimopoulou and Rethemiotakis 2000, figs. 3–4, 6–8; Rethemiotakis 2016–2017, fig. 8), the Ivory Pyxis from Mochlos (Soles 2016, 249–252, pls. LXXXI–LXXXII), and the gold ring from Elateia (Fig. 3.2; the specimen is seemingly either Minoan or of strong Minoan influence), we can observe that, before these descending or floating figures make contact with the earthly plane and its agents, they tend to have both their arms bent, hands held close to their body and sideways at chest level. A figure in this conduct seems self-contained, introverted/self-connected and non-communicative at this stage. In the second group of images, *i.e.* the sealing from Agia Triada (Fig. 3.3), the 'Amnisos' gold ring (Fig. 3.4) and the gold ring from Isopata (Fig. 3.5 a–b), the airborne figure is shown in a communicative, an extroverted/inter-connected and/or interactive state and process by its stance, which has one arm extended or stretched forwards. In such specimens we can further discern that these figures target another agent or other agents in the scene through this extended or outstretched arm. In light of these observations, these two groups appear to display a sequence of two different cheironomies which represent two different states. In addition, by targeting another agent, the figures may transmit energy to, or receive energy from, or exchange energy with it. Ute Günkel-Maschek (2020, fig. 1) has recently expanded on Wolf-Dietrich Niemeier's perception of the so-called Dancing Lady Fresco as being a hovering figure. If the Lady is indeed depicted in such a state, then her outstretched arm seems to be indicative of her extroversion and possibly interaction in the specific framework of being which, unfortunately, is not preserved.

Similarly, seated female figures appear self-contained, introverted/self-connected when they do not make contact with another agent through closed cheironomies. In the first group, the sealing from Chania (Fig. 4.1) and the Divine Couple gold ring from Poros (Fig. 4.2: Rethemiotakis 2016–2017, figs. 1–7), the female figures are in a closed stance: in the Chania scene the figure places one hand upon the chest or heart while having the other hand extended downwards and close to her body; in the Divine Couple scene the figure performs a symmetrical gestural schema with both arms bent and hands placed, seemingly, on top of her thighs. In the second group, the sealing from Knossos (Fig. 4.3) and the previously mentioned Sacred Conversation ring (Fig. 3.1), female figures do make contact by extending one arm towards another agent in the scene while keeping the other arm bent and placed on the chest or heart. It is important to note that in the Sacred Conversation case the female figure's hand appears intentionally aligned with the male figure's outstretched arm. Moreover, the female figures in the second group are depicted in a state of both introversion/self-connectedness and extroversion/inter-connectedness denoted by their closed and open cheironomies, which seem to be complementary and of equal bearing (as discussed in the 'Schemata-related observations and methodology' section). Consequently, when the figures are introverted/self-connected, the energy may be reserved or manipulated inwardly by them and/or focused on the specific part of the body (particularly where the hand is placed upon the chest or heart). When the figures are in both introverted and extroverted states, the energy may be both processed inwardly and extended to the agent through the appropriate hand gestures executed in a simultaneous or successive manner.

In the act of leaning on and hugging the stone, the so-called baetyl (see, selectively on the object and the ritual: Warren 1990; Kyriakidis 2000–2001; Marinatos 2004; 2010, 86–102,

210 n. 5, 211 n. 15; Morris 2004, 37, 40; Herva 2006, 588–589, 591–593; Goodison 2009; Younger 2009; Day 2012, 13–15; Crooks 2013; Tully 2016, 23, 25–29; Crooks, Tully, and Hitchcock 2016; Kyriakidis 2018; Kekes 2021, 858–879), we can distinguish two groups. In the first group, the kneeling figure has their arm(s) and hand(s) upon the object and more or less literally embraces it (Fig. 5.1: seal from Knossos; Warren 1990, 198, 200, figs. 12–14, where the figure also has their hand on the head; Fig. 5.2: the aforementioned gold ring from Archanes; Fig. 5.3: gold ring of uncertain provenance). In the second group the figure extends or outstretches one arm towards another entity, be it anthropomorphic, insect or other, which is intentionally positioned by the artist close to them (Fig. 5.4: gold ring of unknown provenance; Fig. 5.5: gold ring from Kalyvia, with at least one arm extended forwards in the direction of another female figure; Fig. 5.6: sealing from Agia Triada; Fig. 5.7: sealing from Zakros; Fig. 5.8: gold ring from Sellopoulo, Popham 1974, 217 [J 8], 219, fig. 14D, pl. 37a–c). In this group certain figures (with preserved heads) even turn their face away from the stone towards the entity they connect with (Figs. 5.4, 5.6, 5.8). The order (that is, which one comes first and which follows) is debatable, but there seems to be a very credible sequence of two different cheironomies in the same situation and framework of actions. The kneeling figures appear to be in two states regarding their communication and energy conduct: in the first group in an introverted/self-connected state yet at the same time extroverted/inter-connected, interactive and intimate with the object through having their hand(s) upon it, and in the second group, while maintaining the first state, they are also in a communicative and probably an interactive state with other entities in the same context. The object itself may be animate or inanimate (and could become animate at a certain stage during the ritual).

Selected Meaningful Specimens in Specific Extroversion/Inter-connectedness Situations

In this section I will present further two-dimensional examples for the extroversion/inter-connectedness and related energy conduct perspectives that epitomise my thesis.

In glyptic representations we encounter a close and/or intimate connection between an anthropomorphic figure and another anthropomorphic figure or another type of agent. In the first situation figures of the same or opposite gender attain this state by touching hands, as illustrated in the following specimens: gold ring from Isopata (Fig. 6.1); sealing from Chania (Fig. 6.2) – besides touching hands, Tully (2018, 217) also considers the possibility that both figures hold the central tree depicted behind them; two sealings from Phaistos (Figs. 6.3–6.4); seal of unknown provenance (Fig. 6.5). In the second situation, as in the scenes of Figs. 5.2 and 5.7, the figures exoterically and intensely grasp, shake and/or pull a tree (for discussions on the specific ritual act, see selectively: Marinatos 1990, 84, 91; 2004; 2010, 91–92; Morris 2004, 37; Younger 2009; Herva 2006, 591–592; Day 2012, 13–15; Tully 2018, 14–15) and/or esoterically and intensely hug the baetylic object we discussed above (Marinatos [1990, 87; 2004, 27, 32, 36] spoke of antithetical passive and active moods, especially when they are combined in the same scene). It is also possible that these figures are shown in a process of becoming one with the agent. On the Agia Triada Sarcophagus, Side B (Fig. 8: Long 1974; Immerwahr 1990, A. T. no. 2, 180–181; Kontorli-Papadopoulou 1996, Agia Triada no. 36, 50), two female figures are stretching their arms and also appear to be laying their hands upon a sacrificed animal and a ritual small conical cup placed on an altar respectively or they are about to do so (regarding the gestures see Long 1974, 67; Marinatos 1986, 25; 2010, 41; Kekes 2016, 8–13; 2021, 798–806; see Mantzourani 1995, no. 11, 127, concerning the vessel and the altar, and 140–141 on the ceremonial use of vessels during religious occasions and on their depiction in Aegean murals). The meaning of each of these acts has been variously interpreted but the common principle is that all these figures seem to be in a special communion and potentially in a process of energy transmission (or reception and/or exchange) through their hands, with the agents they are connected with (see McCraty et al. [1998] 2018) regarding the energy exchange between people touching hands,

and Meder et al. 2018 concerning the fact that trees possess energy, both referred to in the 'Schemata-related observations and methodology' section).

In pictorial representations male and female figures are holding and displaying a staff (rod) or sceptre in their outstretched arm (Fig. 9.1: the Epiphany Ring; Fig. 9.2: the Master Impression sealing; Fig. 9.3: the Chieftain Cup, *cf.* Marinatos 1993, 134–135, 217–218, figs. 100, 224; Fig. 9.4: the Mountain Mother sealing;[10] the same gesture is performed by a female figure on one of the gold rings from the Griffin Warrior tomb in Pylos that follows a similar Minoan iconographic formula, see Davis and Stocker 2016, 643–645, 647, fig. 11, Ring 3 (a–e); it is also depicted on a seal from a Mycenaean grave in Naxos, *CMS* V2, no. 608, where the object held by a male figure is a spear). The gesture is performed in an imposing and dynamic manner. In this case, first and foremost, the object itself displays insignia and asserts the status and authority of the figure (see thorough analysis in Kekes 2018, 161–169; 2021, 665–680). There have also been arguments in favour of transmission of power and authority through the transference of this object to the human sphere and elite individuals (see discussions in Palaima 1995, 135–136; Krattenmaker 1995, 57; Tully 2018, 70–72). Therefore, the object may be charged with its own energy, proclaimed, asserted, emanated (possibly also bestowed in certain cases), through the appropriate cheironomy, to the recipient agent in the scenes and, when the power-figure is solitary, to its context or cosmos and to the beholder of the image.

A specimen that best exemplifies the use of gestures in the act of inter-connection between agents and potential energy manipulation in a framework of action is the Isopata gold ring (Figs. 3.5 a–b), which is also presented above in the epiphanic scenes. Four female figures execute a combination of cheironomies. The female figures, through the open attitude of body and arms, are shown to be communicating and/or interacting. It ought to be stressed that obviously a variety of cheironomies were required to artistically express the parameters of the specific ritual and the kind of inter-connectedness and energy conduct depicted in this scene. Intriguingly, two of the figures perform an identical frontally upraised arms cheironomy; it is possible that either two figures executing the same cheironomy are required to fulfill the specifications of the particular act, or each figure has a different role to enact through this gesture. Moreover, there are 'floating' items which are significant in terms of symbolism and position in space (see the treatments of the 'floating' objects in iconography by Kyriakidis 2005 and Crowley 2016). In this context, the orientation of arms and hands is crucial. However, we can only speculate but cannot safely discern exactly which of the other agent(s) (figures or floating items) the individual figures target and connect with. In addition, we are unable to determine the sequence of cheironomies and actions, *i.e.* whether they all happen concurrently or in phases (*cf.* Cain 2001, 45–46).

Conclusions

In conclusion, a lens through which we can look at and perceive the function of Minoan cheironomy emerges. On the one hand, Minoans employed cheironomies to represent the human body in different states and/or processes: a. closed, self-contained, introverted/self-connected and non-communicative, b. open, unreserved, extroverted/inter-connected and communicative, c. a combination of both. This is the first approach.

According to the second approach, the energy management factor, it has been argued that arms and hands may have been seen by Minoans as conduits of energy, internally and/or externally. Minoans appear to have perceived their own body as a receiver and transmitter of energy to be handled to serve their needs. Consequently, they seem to have integrated and performed cheironomies to manipulate energy in various ways in their acts and rituals, in order to ulti-

---

10 Poole (2020, 14, 80) has recently raised serious concerns over the accuracy of the reconstructed drawing presented in *CMS* II 8, no. 256. *CMS,* with the aid of modern technology, will hopefully resolve this issue in the near future and provide us with much-needed data. I am grateful to Diamantis Panagiotopoulos for the information on and assistance with this matter.

mately attain a variety of spiritual and material objectives. As regards energy per se, however, there is an open question about how Minoans experienced it to be, what form(s) and name(s) they gave it, or whether they associated it with deities, numina, spirits or other divine and supernatural forces.

In either case, Minoans had to demonstrate the 'dromena' and convey them effectively, so they devised a legible system of visual artistic conventions, by laying emphasis on hands as well as posture. Consequently, in alignment with their convictions and rituals, Minoans depicted cheironomies in an elaborate manner in their art.

In closing, the twofold model put forward and outlined may be considered as a common denominator for the function of Minoan cheironomy. This model can be implemented irrespective of the interpretations we assign to cheironomies and to their iconographical and functional/archaeological context.

References

An, S., W. Shang, M. Jiang, and T. Deng. 2021. "Human hand as a powerless and multiplexed infrared light source for information decryption and complex signal generation." *Proceedings of the National Academy of Sciences USA.* https://doi.org/10.1073/pnas.2021077118.

Argyle, M. 1988. *Bodily communication.* 2nd ed. New York: Methuen & Co.

Cain, C. D. 2001. "Dancing in the dark: deconstructing a narrative of epiphany on the Isopata ring." *AJA* 105: 27–49.

Crooks, S. 2013. *What are these queer stones? Baetyls: epistemology of a Minoan fetish. BAR IS* 2511. Oxford: BAR Publishing.

Crooks, S., C. J. Tully, and L. A. Hitchcock. 2016. "Numinous tree and stone: re-animating the Minoan sacred landscape." In *Metaphysis. Ritual, myth, and symbolism in the Aegean Bronze Age. Proceedings of the 15th International Aegean Conference, Vienna, Institute for Oriental and European Archaeology, Aegean and Anatolia Department, Austrian Academy of Sciences and Institute of Classical Archaeology, University of Vienna, 22–25 April 2014,* edited by E. Alram-Stern, F. Blakolmer, S. Deger-Jalkotzy, R. Laffineur, and J. Weilhartner, 157–164. *Aegaeum* 39. Leuven and Liège: Peeters.

Crowley, J. L. 2016. "In the air here or from the world beyond? Enigmatic symbols of the Late Bronze Age Aegean." In *Metaphysis. Ritual, myth, and symbolism in the Aegean Bronze Age. Proceedings of the 15th International Aegean Conference, Vienna, Institute for Oriental and European Archaeology, Aegean and Anatolia Department, Austrian Academy of Sciences and Institute of Classical Archaeology, University of Vienna, 22–25 April 2014,* edited by E. Alram-Stern, F. Blakolmer, S. Deger-Jalkotzy, R. Laffineur, and J. Weilhartner, 89–96. *Aegaeum* 39. Leuven and Liège: Peeters.

Davis, J. L., and S. R. Stocker. 2016. "The lord of the gold rings: the Griffin Warrior of Pylos." *Hesperia* 85: 627–655.

Day, J. 2012. "Caught in a web of a living world. Tree-human interaction in Minoan Crete." *PAN: Philosophy, Activism, Nature* 9: 11–21.

Dimopoulou, N., and G. Rethemiotakis. 2000. "The 'Sacred Conversation' Ring from Poros." In *Minoisch-mykenische Glyptik: Stil, Ikonographie, Funktion. V. Internationales Siegelsymposium, Marburg, 23.–25. September 1999,* edited by I. Pini, 39–56. *CMS* Beiheft 6. Berlin: Gebrüder Mann Verlag.

Dimopoulou-Rethemiotaki, N. 2005. *Το Αρχαιολογικό Μουσείο Ηρακλείου.* Athens: ΟΛΚΟΣ. https://www.latsis-founda tion.org/content/elib/book_12/heraklion_gr.pdf.

Efron, D. 1941. *Gesture and environment. A tentative study of the spatio-temporal and 'linguistic' aspects of the gestural behavior of eastern Jews and southern Italians in New York City, living under similar as well as different environmental conditions.* New York: King's Crown Press.

Feyereisen, P., and J.-D. de Lannoy. 1991. *Gestures and speech. Psychological investigations. Studies in Emotion and Social Interaction.* New York: Cambridge University Press.

Gesell, G. C. 1985. *Town, palace and house cult in Minoan Crete. SIMA* LXVII. Göteborg: Paul Astroms Förlag.

Gesell, G. 2004. "From Knossos to Kavousi: the popularizing of the Minoan palace goddess." In *ΧΑΡΙΣ: Essays in honor of Sara A. Immerwahr,* edited by A. P. Chapin, 131–150. *Hesperia* Suppl. 33. Princeton: American School of Classical Studies at Athens.

Giannaki, K. 2008. "Cheironomy of the female figure in Minoan art." Ph.D. diss., The University of Sydney.

Goodison, L. 2009. "'Why all this about oak and stone?': Trees and boulders in Minoan religion." In *Archaeologies of cult: essays on ritual and cult in Crete in honor of Geraldine C. Gesell,* edited by A. L. D'Agata, and A. van de Moortel, 51–57. *Hesperia* Suppl. 42. Princeton: The American School of Classical Studies at Athens.

Günkel-Maschek, U. 2020. "A lost ritual space in the palace at Knossos: re-contextualising the fresco of the 'Dancing Lady'." In *Current approaches and new perspectives in Aegean iconography,* edited by F. Blakolmer, 147–176. Louvain-la-Neuve: Presses Universitaires de Louvain.

Hägg, R. 1986. "Die göttliche Epiphanie im minoischen Ritual." *AM* 101: 41–62.

Herva, V.-P. 2006. "Flower lovers, after all? Rethinking religion and human-environment relations in Minoan Crete." *WorldArch* 38(4): 586–598.

Immerwahr, S. A. 1990. *Aegean painting in the Bronze Age.* University Park: The Pennsylvania State University Press.

Kekes, Ch. 2016. "Αιγαιακές χειρονομίες (συν)ομιλίας και δέησης: αιγυπτιακές επιρροές και διαχρονικότητα." In *Πεπραγμένα του ΙΒ′ Διεθνούς Κρητολογικού Συνεδρίου, Ηράκλειο 21–25.9.2016,* 1–15. https://12iccs.proceedings.gr/ el/proceedings/category/38/32/263.

Kekes, Ch. 2018. "Deities or mortals?" Reassessing the Aegean 'outstretched arm holding staff' gesture." *CretAnt* 19: 155–172.

Kekes, Ch. 2021. *Ομιλούντα σώματα: μια προσέγγιση των αιγυπτιακών και των αιγαιακών τελετουργικών χειρονομιών της Εποχής του Χαλκού.* Ph.D. diss., University of the Aegean.

Kendon, A. 1981. "Introduction: current issues in the study of 'nonverbal communication'." In *Nonverbal communication, interaction, and gesture: selections from Semiotica,* edited by A. Kendon et al., 1–54. *Approaches to Semiotics* 41. The Hague: Mouton Publishers.

Kendon, A. 2004. *Gesture: visible action as utterance.* Cambridge: Cambridge University Press.

Kita, S. 2009. "Cross-cultural variation of speech-accompanying gesture: a review." *Language and Cognitive Processes* 24 (2): 145–167. http://wrap.warwick.ac.uk/66214/2/WRAP_Kita_culture_and_gestue_LCP_v13-distr%20%281%29. pdf.

Kontorli-Papadopoulou, L. 1996. *Aegean frescoes of religious character. SIMA* 117. Göteborg: Paul Ästroms Förlag.

Krattenmaker, K. 1995. "Palace, peak and scepter: the iconography of legitimacy." In *The role of the ruler in the prehistoric Aegean. Proceedings of a panel discussion presented at the Annual Meeting of the Archaeological Institute of America New Orleans Louisiana 28 December 1992,* edited by P. Rehak, 49–59. *Aegaeum* 11. Liège: Université de Liège.

Kyriakidis, E. 2000–2001. "Pithos or baetyl? On the interpretation of a group of Minoan rings." *OpAth* 25–26: 117–118.

Kyriakidis, E. 2005. "Unidentified floating objects on Minoan seals." *AJA* 109: 137–154.

Kyriakidis, E. 2018. "Situations in the study of Minoan iconography: the situation of the baetyls." In *Χρωστήρες / Paintbrushes. Wall-painting and vase-painting of the second millennium BC in dialogue. Proceedings of the international conference held at Akrotiri, Thera, 24–26 May 2013,* edited by A. Vlachopoulos, 243–249. Athens: University of Ioannina and Hellenic Ministry of Culture and Sports – Archaeological Receipts Fund.

Liu, T. 2018. "The scientific hypothesis of an 'energy system' in the human body." *Journal of Traditional Chinese Medicine Sciences* 5: 29–34. https://www.sciencedirect.com/science/article/pii/S2095754818300358.

Long, C. L. 1974. *The Ayia Triadha sarcophagus: a study of Late Minoan and Mycenaean funerary practices and beliefs. SIMA* XLI. Göteborg: Paul Astroms Förlag.

Mantzourani, E. 1995. "Notes on the depiction of various types of vases and vessels in Aegean wall-painting." In *Klados: Essays in honour of J. N. Coldstream,* edited by Ch. Morris, 123–141. *BICS* Suppl. 63. London: University of London, Institute of Classical Studies.

Marinatos, N. 1986. *Minoan sacrificial ritual: cult practice and symbolism.* SkrAth 8, IX. Stockholm: Paul Aströms Förlag.

Marinatos, N. 1990. "The tree, the stone and the pithos: glimpses into a Minoan ritual." *Aegaeum* 6: 79–92.

Marinatos, N. 1993. *Minoan religion: ritual, image and symbol.* Columbia: University of South Carolina Press.

Marinatos, N. 2004. "The character of Minoan epiphanies." In *Divine epiphanies in the Ancient World,* edited by D. Shanzer and N. Marinatos, 25–42. Illinois Classical Studies 29. Urbana: University of Illinois.

Marinatos, N. 2010. *Minoan kingship and the solar goddess. A Near Eastern koine.* Urbana: University of Illinois Press.

Marinatos, N., and R. Hägg. 1983. "Anthropomorphic cult images in Minoan Crete?" In *Minoan society. Proceedings of the Cambridge Colloquium 1981,* edited by O. Krzyszkowska and L. Nixon, 185–201. Bristol: Bristol Classical Press.

McCraty, R., M. Atkinson, D. Tomasino, and W. A. Tiller. 1998. "The electricity of touch: detection and measurement of cardiac energy exchange between people." In *Brain and values: is a biological science of values possible?* edited by Karl H. Pribram, 359–379. Mahwah, NJ: Lawrence Erlbaum Associates. https://www.heartmath.org/assets/uploads/2015/01/electricity-of-touch.pdf.

McNiven, T. J. 1989. *Gestures in Attic vase painting: use and meaning, 550–450 BC.* Ph.D. diss, University of Michigan, 1982. Ann Arbor: University Microfilms International.

Meder, F., I. Must, A. Sadeghi, A. Mondini, C. Filippeschi, L. Beccai, V. Mattoli, P. Pingue, and B. Mazzolai. 2018. "Energy conversion at the cuticle of living plants." *Advanced Functional Materials* 28. https://doi.org/10.1002/adfm.201806689.

Morris, Ch. 2001. "The language of gesture in Minoan religion". In *Potnia. Deities and religion in the Aegean Bronze Age. Proceedings of the 8th International Aegean Conference Göteborg. Göteborg University, 12–15 April 2000,* edited by R. Laffineur and R. Hägg, 245–250. Aegaeum 22. Liège: Université de Liège.

Morris, Ch. 2004. "'Art makes visible': an archaeology of the senses in Minoan elite art." In *Material engagements: studies in honour of Colin Renfrew,* edited by N. Brodie and C. Hills, 31–43. Cambridge: McDonald Institute for Archaeological Research.

Morris, Ch., and A. Peatfield. 2002. "Feeling through the body: gesture in Cretan Bronze Age religion." In *Thinking through the body: archaeologies of corporeality,* edited by Y. Hamilakis, M. Pluciennik, and S. Tarlow, 105–120. New York: Kluwer Academic/Plenum Publishers.

Murphy, C. 2018. "No mouths, just hands: a review of the Minoan fist on chest gestures." In *Πεπραγμένα ΙΑ΄ Διεθνούς Κρητολογικού Συνεδρίου, Ρέθυμνο, 21–27 Οκτωβρίου 2011,* A1.3, 9–23. Rethymno: Ιστορική και Λαογραφική Εταιρεία Ρεθύμνης.

Neumann, G. 1965. *Gesten und Gebärden in der griechischen Kunst.* Berlin: Walter de Gruyter.

Palaima, T. G. 1995. "The nature of the Mycenaean wanax." In *The role of the ruler in the prehistoric Aegean. Proceedings of a panel discussion presented at the Annual Meeting of the Archaeological Institute of America New Orleans Louisiana 29 December 1992,* edited by P. Rehak, 119–138. Aegaeum 11. Liège: Université de Liège.

Peatfield, A. A. D., and Ch. Morris. 2012. "Dynamic spirituality on Minoan peak sanctuaries." In *Archaeology of spiritualities,* edited by K. Rountree, Ch. Morris, and A. A. D. Peatfield, 227–245. New York: Springer.

Platon, E. 2014. "Η «χειρονομία της αποκάλυψης»: ένα άγνωστο μέχρι σήμερα στιγμιότυπο των μινωικών τελετουργιών ενηλικίωσης." *CretChron* 34: 65–81.

Poole, S. E. 2020. *A consideration of gender roles and relations in the Aegean Bronze Age interpreted from gestures and proxemics in art.* BAR IS 2980. Oxford: BAR Publishing.

Popham, M. R., E. A. Catling, and H. W. Catling. 1974. "Sellopoulo tombs 3 and 4. Two Late Minoan graves near Knossos." *BSA* 69: 195–275.

Rethemiotakis, G. 1998. *Ανθρωπομορφική πηλοπλαστική στην Κρήτη: από τη Νεοανακτορική έως την Υπομινωϊκή περίοδο.* Athens: Η εν Αθήναις Αρχαιολογική Εταιρεία 174.

Rethemiotakis, G. 2001. *Μινωικά πήλινα ειδώλια.* Athens: Η εν Αθήναις Αρχαιολογική Εταιρεία 218.

Rethemiotakis, G. 2016–2017. "The 'Divine Couple' ring from Poros and the origins of Minoan calendar." *AM* 131–132: 1–29.

Rethemiotakis, G., and N. Dimopoulou. 2003. "The 'Sacred Mansion' ring from Poros, Herakleion." *AM* 118, 1–22.

Sakellarakis, G., and E. Sapouna-Sakellaraki. 1997. *Αρχάνες: Μια νέα ματιά στη Μινωική Κρήτη.* Athens: Άμμος.

Sapouna-Sakellarakis, E. 1995. *Die bronzenen Menschenfiguren auf Kreta und in der Ägäis. Prähistorische Bronzefunde* I, 5. Stuttgart: Franz Steiner Verlag.

Soles, J. S. 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 15th International Aegean Conference, Vienna, Institute for Oriental and European Archaeology, Aegean and Anatolia Department, Austrian Academy of Sciences and Institute of Classical Archaeology, University of Vienna, 22–25 April 2014,* edited by E. Alram-Stern, F. Blakolmer, S. Deger-Jalkotzy, R. Laffineur, and J. Weilhartner, 247–253. *Aegaeum* 39. Leuven and Liège: Peeters.

Tsangaraki, E. 2005–2006. *Σφραγίσματα με παραστάσεις ανθρωπίνων μορφών: συμβολή στη μελέτη τον διοικητικού συστήματος της Νεοανακτορικής Κρήτης. Κρητική Εστία, Περίοδος Δ΄,* 11. Chania: Κρητική Εστία.

Tully, C. 2016. "Virtual reality: tree-cult and epiphanic ritual in Aegean glyptic iconography." *JPR* 25: 19–30.

Tully, C. J. 2018. *The cultic life of trees in the prehistoric Aegean, Levant, Egypt and Cyprus. Aegaeum* 42. Leuven and Liège: Peeters.

Tully, C. J. 2021. "Traces of places: sacred sites on miniature gold rings." In *Sacred sites and sacred stories: transmission of oral tradition, myth and religiosity,* edited by D. Kim, 11–40. London: Palgrave Macmillan.

Verlinden, C. 1984. *Les statuettes anthropomorphes crétoises en bronze et en plomb, du IIIe millénaire au VIIe siècle av. J.-C. Archaeologia Transatlantica* IV. Rhode Island: Brown University Center for Old World Archaeology and Art.

Walker, J., D. Halliday, and R. Resnick. 2014. *Fundamentals of physics.* 10 th ed. New York: Wiley & Sons. https://elearn.daffodilvarsity.edu.bd/pluginfile.php/1057506/mod_label/intro/fundamentals-of-physics-textbook.pdf.

Warren, P. 1990. "Of baetyls." *OpAth* 18: 193–206.

Wedde, M. 1999. "Talking hands: a study of Minoan and Mycenaean ritual gesture – some preliminary notes." In *Meletemata. Studies in Aegean Archaeology presented to Malcolm H. Wiener as he enters his 65th year,* edited by P. P Betancourt, V. Karageorghis, R. Laffineur, and W.-D. Niemeier, 911–920. *Aegaeum* 2. Liège: Université de Liège.

Younger, J. 2009. "Tree hugging and omphalos hugging on Minoan gold rings." In *Archaeologies of cult: essays on ritual and cult in Crete in honor of Geraldine C. Gesell,* edited by A. L. D'Agata and A. van de Moortel, 43–49. *Hesperia* Suppl. 42. Princeton: The American School of Classical Studies at Athens.

II. Communication Through Expression and Movement

Beyond the Body: Facial Expression, Human Interaction and Narrativity in Aegean Iconography

Fritz Blakolmer

Abstract   *Although, in the iconography of the Aegean Bronze Age, the depiction of facial expression can be observed only sporadically, it occurs in manifold forms and contexts. Especially in images from Neopalatial Crete we observe mimic expressions, such as different versions of open mouth and closed eyes, of individual human figures. Based on the iconographic contexts of examples such as the Harvester Vase from Agia Triada, a series of seal-stones and signet-rings and examples of Mycenaean painted pottery, this contribution aims at analysing their meaning as well as the question of a possible interrelation between several of these images. Aegean examples of facial expression constitute the exception to the rule, a stereotypical, multivalent depiction of the human face that can be defined as 'the Clint Eastwood syndrome'. However, all the more challenging is the question of how and why facial expressions were attributed to selected figures. How were verbal expressions such as addressing speech and conversation, shouting, singing, and saying a prayer defined by iconographic means? What were the alternatives to mimic expression in Aegean iconography for depicting psychological insight into the character and feeling of a figure in distinct situations such as physical effort, aggression, pain, mourning and other kinds of emotional expression?*

Introduction

In the iconography of the Aegean Bronze Age examples of non-verbal messages expressed by the human face occur very seldom but can be found throughout all regions and periods. From Middle Minoan seal images and figurines preceding those of the Neopalatial period we learn that, in Minoan Crete, gesture is a much more widespread and elementary phenomenon than the differentiation of the human face. The depiction of action and interaction first appears on seal impressions from the MM II B Archivio di Cretule at Phaistos (Pini 2011, 416; Blakolmer 2020, 48). As a consequence, 'talking hands' were the rule whereas 'talking mouths' always constituted the exception to the rule. We also have to bear in mind that the codified artistic depiction of an equally codified human behaviour is not devoid of artistic individuality, misinterpretation, and further imponderables. Nonetheless, the depiction of mimic expression presupposes the existence of certain artistic standards that point to the definition and differentiation of such pictorial contexts (see in general Kenner 1960; Evans 1969; Borrmann 1994; Krierer 1995).

This contribution focuses on depictions of the human face that contrast the norm, meaning alterations in mimic features such as an open mouth, closed eyes, and other non-canonical physiognomic expressions. What was their significance in depictions of communicative processes or when they appear on isolated figures? Do they permit us to define the iconological content, emotions, or any other messages? In short, what was the norm of depicting mouth, eyes and face, and what were the meanings of the deviation from this norm, *i.e.* the specific transcending of the unspecific?

The Iconographic Norm: 'the Clint Eastwood Syndrome'

When we study high-quality images such as the wounded and suffering seated woman in the Xeste 3 murals (Doumas 1985, 30; 1992, 142–143, figs. 105–106) and figures such as the ivory figurine of a bull-leaper from Knossos (Evans 1930, 431–433, figs. 297a–b; Hood 1971, 106, 227, pls. 82–83; 1978, 119, fig. 106), we wonder why the facial expression of figures in these dramatic activities remains so constantly static and inexpressive. Throughout the entire Aegean Bronze Age, in small-scale images as well as those of less naturalistic style, the human face in profile was depicted in a bipartite manner: in MM II vase painting the most protruding elements, nose and chin, were highlighted whereas in the late Mycenaean period similar facial features may indicate the mouth. In none of these cases bird-heads with a beak were depicted;[1] instead, in the pictorial art of the Aegean, occasionally, the human mouth was the less meaningful element of human faces. In more elaborate images the Aegean norm constitutes open eyes and a closed (or slightly open) mouth. In faces given in profile or in frontal view a slight smile may result from the accentuated nasolabial groove (*sulcus nasolabialis*) and occasionally prominent cheek bones; this, however, does not seem to bear any specific meaning, since its occurrence is unrelated to any situation or context of the figures.[2]

One could name this standardised depiction of a stereotypical human face 'the Clint Eastwood syndrome'. When Clint Eastwood was advised by a film director to make stronger use of his facial expressions, he answered that he has only two facial expressions in his repertory: that with a cigarillo in his mouth (Fig. 1) and another one without the cigarillo (Eliot 2010). Although, in our cases, we are not confronted with an expression of coolness and superiority, this example reflects an artistic phenomenon widespread in the Ancient Near East and predominant also in the Aegean Bronze Age as well as in later periods of Greece: immobile and indistinct facial features of equally indistinct figures and the concentration or even limitation to the use of prop-like elements for defining the character of a figure and its pictorial context, such as a distinct hair-style and beard, a special dress and head-gear, weapons, a staff, or other items. In contrast, mimic expression enables a considerably more distinct definition of a figure and his/her situation in an image. An additional difference is that facial expression can change suddenly, according to an altered situation, which is not the case with dress and other insignia, at least not to the same extent.

In a similar fashion as Clint Eastwood and other modern heroes in their movies, in the Aegean 'language of images', Minoans and Mycenaeans did not have a lot to say to each other, at least, as far as can be judged by the play of their facial features. Instead, similar to movie heroes, they let their fists and arms do the talking. It goes without saying that Aegean artists, unlike the actor Clint Eastwood, did *not* intend to represent static, immobile and identical figures, which becomes clear from the varying ornamented dress in polychrome painting, even when figures in a regular procession were depicted. Thus, variety mattered but, obviously, not the variety of human faces.

We should not necessarily interpret the depiction of static, almost expressionless faces as an absence of meaning. Despite its immobility, the modelled landscape of the human face can be perceived as a sign of stability and cosmic order, as might have been the case in Egyptian art (Schäfer 1963, 36–74; Davis 1989; Assmann 1999, esp. 26–31). Although the pictorial formula of the 'Archaic smile' in ancient Greek art could simply be a normative artistic stereotype, perhaps for 'vitalizing' a statue, without any specific meaning, it was also interpreted as an expression of 'charis' of the aristocratic Athenians (Hughes Fowler 1983; Martini 1990, 83–85; Stieber 2004, 49–55). In a manner similar to Clint Eastwood in many of his movies, when

---

1 An exception are seal motifs of the 'bird-woman': Pini 2010, 329–332, figs 5–8; Zouzoula 2018; Dubcová 2020.

2 See especially the figures in the mural paintings from Xeste 3 in Akrotiri: Doumas 1992, 126–171, pls. 100–134.
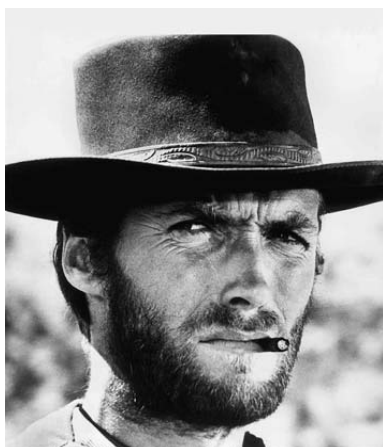
Fig. 1: Clint Eastwood (https://www. kaufmann.dk/the-journal/mennesker/ clint-eastwood).

Fig. 2: Head of the Discobolus Lancelotti, plaster copy; original in the Museo delle Terme, Rome (Cast collection of the Institute of Classical Archaeology, University of Vienna).

looking in the face of the Discobolus of Myron (Fig. 2), we cannot recognize that this statue is an athlete in vivid motion. Thus, stability, uniformity and continuity of a canonical artistic form, *i.e.* the continuous reference to iconographic concepts of the past, may have signified an expression of political and social stability, an attempt to highlight an eternal order guaranteed by deities and rulers (Ehrenberg 1998; Roaf 2000; Panagiotopoulos 2017, 82–84; Blakolmer 2019, 429–433). In the depiction of the human body in the Aegean, this artistic conservatism is also exemplified by the traditional 'wasp waist', the elongated legs and other modes of depicting male and female figures lasting from the early Neopalatial period of Crete until the end of the Mycenaean palatial era.

The So-called 'Portrait Gems'

The open mouth of a figure mainly implies an acoustic component, signifying a dialogic semantic expression towards another being, or the expression of an emotional, inner condition of an isolated figure. While, for gestures in imagery, the most characteristic moment of a motion sequence of the human body was selected, in the case of the depiction of an open mouth it can be suspected that artists selected the maximum open mouth in order to differentiate between talking, singing and shouting.

In the iconographic repertoire of the Aegean, a mimic expression either belongs to a cluster of images of the same narrative theme or it constitutes an individual creation in a specific contextual situation that is presented in different clusters (*cf.* Wedde 1999, 913; Blakolmer 2007, 222–227). The heads depicted on so-called 'portrait gems' appear isolated, without context or any unmistakable indication of a situation or a target (see Biesantz 1958; Pini 1999; Younger 1995, 165–168, pls. LVII–LIX; Foster 1997; Karetsou 2005). They possess some similarities to figurines of bronze and terracotta but lack any gesture. However, interestingly enough, only a few of these male heads appear insignificant, whereas many of them are defined by an open mouth, a raised position of the head, a distinct hair style, or a special head-gear (Figs. 3–4). Thus, instead of reflecting individual portraits, they imply a distinct situation and a more specific meaning that may indicate a distinct social position and/or a specific role in a broader iconographic context. For example, the so-called 'portrait gem' from Shaft Grave Gamma of Grave Circle B at Mycenae (Fig. 3; *CMS* I, no. 5), without any doubt of Minoan origin, not only presents the open mouth in U-shape but even shows the upper row of teeth, permitting us to interpret the figure as talking or shouting.

Fig. 3: 'Portrait gems' from Shaft Grave Gamma at Mycenae (CMS I, no. 5; courtesy of the CMS Heidelberg).

Fig. 4: 'De Jong gem', Oxford (CMS VI, no. 293; courtesy of the CMS Heidelberg).
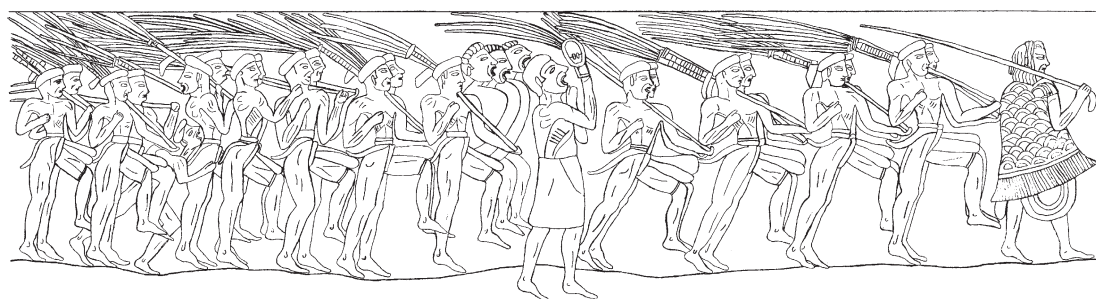
Fig. 5: Reconstruction of the frieze of the Harvester Vase from Agia Triada (after Blakolmer 2008. pl. LV 12).

There is no reason why an isolated figure should be depicted with an open mouth, unless he or she is intended to be communicating with another figure or an invisible deity and the like. Alternatively, in the case of an isolated head on a Minoan seal, one could also argue that the open mouth was depicted because this figure is unable to gesture. If so, the open mouth substitutes a gesture, while gestures in art express and substitute meaning. In any case, the specificity of the open mouth makes it very probable that these heads are excerpts taken from and referring to a specific situation in a larger scene (*cf.* Blakolmer 2010, 103–107, fig. 8). Amongst the so-called 'portrait gems', it is likely that none of them presents any individual portrait, but they seem to allude to types of figures depicted in a distinct state or situation and taken from extensive, large-scale, narrative friezes.

Mimics on the Harvester Vase from Agia Triada and Their Parallels

This leads us to the so-called Harvester Vase from Agia Triada (Figs. 5–7; Savignoni 1903; Kaiser 1976, 24–25, 149–155; van Effenterre 1999; Blakolmer 2007, 201–242; 2008, 265–266; Halstead and Isaakidou 2021). Irrespective of the interpretation of this frieze, characterised by Robert Laffineur (2012, 4–5) as "an extraordinary premonition of the Seven Dwarfs coming back from work at the mine", we will focus on the faces of several figures depicted in this lively male procession. Although the frieze of this stone relief vessel is unique in its large number of mimic expressions, most of them possess parallels in other artistic media, mainly in seal images. Thus, among the seven figures exhibiting mimic facial expressions, based on present knowledge, hardly any of them is unique in Aegean iconography (Blakolmer 2007, 222–227).

Curiously enough, the singing sistrum-player with his wide-open mouth (Fig. 6) may form an exception to this: in the case of other depictions of musicians in Aegean iconography, such as the (equally singing?) lyre-players in mural paintings from Agia Triada and Pylos (Younger 1998,

9–28, pls. 10–14), no open mouth is indicated. As the sistrum-player on the Harvester Vase shows, in the case of an open mouth, the nasolabial groove is defined more expressively than usual. In three-dimensional art, such as in the terracotta figures from Agia Irini on Kea (Caskey 1986) and on stone relief vessels, the nasolabial groove is indicated often, but without showing any relation to an open or a closed mouth.

Fig. 6: Harvester Vase from Agia Triada, detail (after Marinatos and Hirmer 1973, pl. 104 bottom).

Additionally, one of the participants of the procession on the Harvester Vase, namely the figure walking immediately in front of the sistrum-player (Fig. 6) possesses a feature that is so far unique. His slightly open mouth is represented in V-form and can hardly be interpreted other than as a soft singing along. This suggests an individual narrative feature, an iconographic gimmick, probably signifying an emotional reaction to the musician in his immediate vicinity (Charbonneaux 1929, 23; Kaiser 1976, 150). As will be shown below, this is not the only example of figures with open mouth amongst the participants of procession in Aegean iconography.

The three figures with their open mouths and deeply carved nasolabial grooves in the background behind the sistrum-player on the Harvester Vase (Fig. 6) are traditionally interpreted as representing coordinated singing but, perhaps, can be better understood as spectators positioned beside the procession file and shouting or calling out to the participants (Blakolmer 2007, 210). Their mouths, given in variable U-form, possess good parallels in several 'portrait gems' shown above (Figs. 3–4; *cf.* also *CMS* VI, no. 293; IX, no. 6D b).

Open Mouth and Hand-to-Mouth Gesture as Indications of Conversation

A special case is the scene of two figures in the rear part of the procession on the Harvester Vase consisting of a figure at a lower position, perhaps bent over, and raising his right hand, and the man walking in front of him and turning his head (Fig. 7). Both have an open mouth and are communicating with each other, although without any dialogic direct eye contact. The sequence of this event is clear: first the action of 'falling', then the reaction of the walking man turning his head. Different meanings have been proposed for this scene, for example, that of touching the genitals of the man in front as a salty joke by Kurt Müller[3] or as a grotesque disruptive dancer by John Forsdyke (1954, 2, 7). Most recently, Vangelis Kyriakidis (2013, 160) suggested that the figure bent over "probably lost his pace and fell down distracting the man in front who turns to look what happened". However, none of these interpretations appears convincing. Irrespective of the exact meaning of this scene, here we discern action and reaction as well as communication and probably even emotion (Blakolmer 2007, 211).

As Christos Kekes demonstrated, in Egyptian iconography, the gesture of raising the inner side of the right hand to the mouth was used when a figure was defined as talking, singing, giving advice or in magical activities. Thus, it forms a gesture of addressing somebody else and meaning 'I speak' (Kekes 2017, 2–7; see also Shaw 1996, 178). For Minoan iconography, a similar meaning of this gesture is supported by a series of examples, such as several seated women in the miniature frescoes from Knossos (Evans 1932, 49–62, figs. 29–35, pl. XVII) and the women looking out of the window on a fresco fragment from Mycenae (Shaw 1996, 172, fig. 5; pp. 176–178, pl. A9). An additional argument that points to this interpretation is the gesture of invocation ('αποσκοπείν') by raising one hand to the head, as is attested in several Minoan

---

3 Müller 2015, 255 ("recht derber Scherz"). For earlier interpretations as captured warrior or as dancer, see ibid. 256 with n. 1.

Fig. 7: Harvester Vase from Agia Triada, detail (after a plaster copy in the Cast collection of the Institute of Classical Archaeology, University of Vienna).

Fig. 8: Minoan bronze figurine from the Diktaean cave (?) (after Vasilakis 2005, fig. on p. 123).

bronze figurines.[4] If the open mouth of an isolated figure means speaking, the speech is addressed to a non-present target subject. For example, the Minoan bronze figurine of a man with raised right hand said to come from the Diktaean cave at Psychro (Fig. 8) clearly presents an open mouth (Verlinden 1964, no. 106, pl. 48; Sapouna-Sakellarakis 1995, 27–28, no. 33, pl. 22; Vasilakis 2005, fig. on p. 123). If this figurine is authentically Minoan, it delivers clear evidence of speaking, singing, or saying a prayer in a sacral context. Thus, the open mouth may support the meaning expressed by the hand-to-mouth gesture. A bronze figurine from an LM I context at Gournia equally shows a slightly open mouth and a similar gesture (Sapouna-Sakellarakis 1995, 14–15, no. 10, pl. 22). Nonetheless, it is difficult to decide whether this gesture in association with an open mouth, which is the exception to the rule, signifies that all figurines making this gesture have to be understood as talking or praying.

Thus, this interpretation of the Minoan hand-to-mouth gesture would reinforce the mimic expression of the open mouth in the scene on the Harvester Vase (Fig. 7). However, given the scarceness of facial expression and the frequency of this gesture in Aegean iconography, one should rather define it the other way around: the mimic expression supports the gesture of speaking. This is remarkable in that it suggests that in Minoan iconography mimic expression was a supplementary artistic means, which was only sporadically used to reinforce gestures, some of which were inspired by Egyptian imagery (see also Marinatos in this volume).

An important issue in deciphering gestures and other physical expressions is repetition. This artistic mode of indicating conversation finds good parallels in other Minoan and Mycenaean images, although only in a few examples is an open mouth indicated. On a signet-ring held in Berlin (Figs. 9a–b; CMS XI, no. 30), the mouth of the female votary in front of a seated goddess seems to be slightly open, probably as a sign of speaking, which is supported by her raised hand, whereas the mouth of the goddess is not indicated at all. On the large signet-ring from the tomb of the Griffin Warrior at Pylos (Figs. 10a–b; Davis and Stocker 2016, 640–643, fig. 10), the front figure of the two women with peaked hats approaching the central tree-shrine is the only figure with a naturalistic face and open mouth; this could be interpreted in connection with her hand-to-mouth gesture as a sign of addressing speech – in this context presumably saying a ritual prayer or the like. In the light of this gold ring, the unusually large open mouth of the seated figure with raised hands in front of a tree-shrine on the signet-ring from Mylopotamos (Fig. 11) points to the same interpretation (Papadopoulou 2011), irrespective of the question whether the figure is a votary or a goddess.

---

4 Sapouna-Sakellarakis 1995, 110–111. See also the male votary on the seal image of the 'Mother of the mountain' from Knossos: CMS II 8, no. 256.

Fig. 9a–b: Signet-ring, Berlin (CMS XI, no. 30; courtesy of the CMS Heidelberg).

Fig. 10a–b: Signet-ring from the tomb of the Griffin Warrior, Pylos (after Davis and Stocker 2016, 641, figs. 10a [drawing T. Ross], 10b [photo J. Vanderpool]; courtesy of The Department of Classics, University of Cincinnati).

While the drawing of a seal-stone in the Giamalakis Collection in *CMS* III (Fig. 12a) is slightly inaccurate (*CMS* III, no. 351; see also Krzyszkowska 2020, 259–260, fig. 2a), the detail photograph of the head clearly shows that the female figure with her hand-to-head gesture has a wide-open mouth in a U-form (Fig. 12b). If the gesture of this figure is identical to that of the central female in ritual scenes with tree-shrine and baetyl – one hand to the mouth, the other arm lowered and the hand bent outwards – such as on the signet-rings from Archanes and Isopata (Sakellarakis and Sapouna-Sakellaraki 1997, I, 654–660, fig. 722; Rehak 2000; Cain 2001), this type of figure can be understood as speaking, shouting, crying or the like. A hitherto unique case is shown on a lentoid seal-stone inserted in a gold ring from Aidonia: a divine female figure with hand-to-mouth gesture, wearing a flounced skirt and an unusual head-dress (?) and flanked by two dolphins (Figs. 13a–b; *CMS* V Suppl. 1B, no. 116). Not only is her mouth open but also the nasolabial groove was engraved. We remain ignorant about the reason for the depiction of her open mouth; as an indication of authority and strength this would be unique.
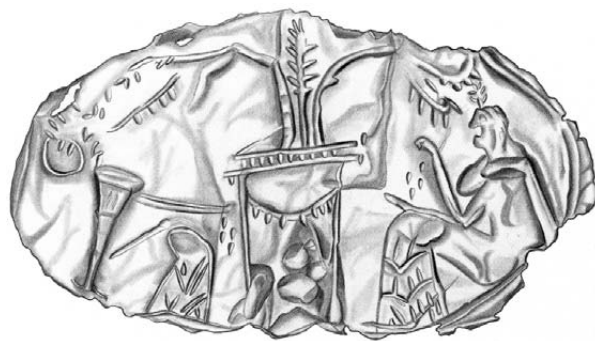

Fig. 11: Signet-ring from Mylopotamos (after Papadopoulou 2011, 6, fig. 5b).
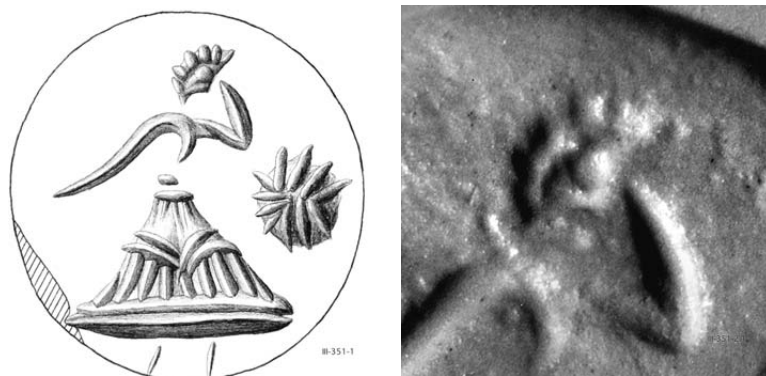
Fig. 12 a–b: Seal-stone in the Giamalakis Collection (CMS III, no. 351; courtesy of the CMS Heidelberg).
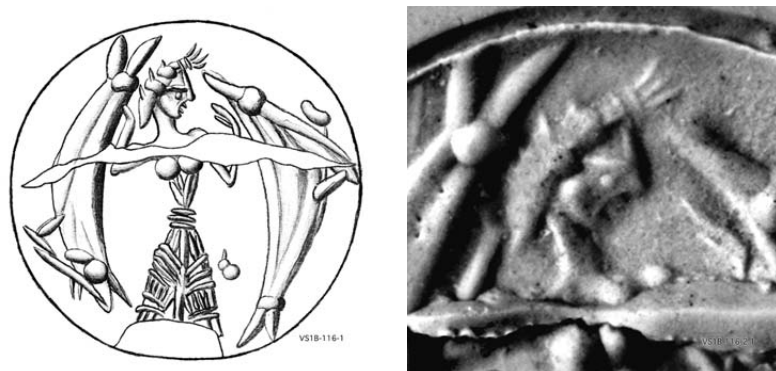
Fig. 13 a–b: Seal-stone from Aidonia (CMS V Suppl. 1B, no. 116; courtesy of the CMS Heidelberg).

Communication of a Figure Turning its Head

Let us return once again to the scene with the two interacting figures on the Harvester Vase (Fig. 7). With regard to the motif of the head turned backward, Christos Boulotis, in his thorough study of this iconographic motif, pointed to its multivalent character by summing up that "its use was never void of significance and meaning," but it "never became a standardized figurative formula" (Boulotis 2011, 283). Nonetheless, in many examples of this recurring pictorial motif the figure is depicted with an open mouth and thus addresses his voice to the figure behind, just as in the related scene on the Harvester Vase. Although, in the mural painting programme from Xeste 3 in Akrotiri, the mouths of several figures are slightly open and the motif of the head turned backward occurs several times, the meaning of a markedly open, speaking mouth can be attributed only to the naked young man in the male procession carrying a textile and turning his head back to the small boy walking behind him and holding a bowl in his hands (Fig. 14; Doumas 1992, 146–149, figs. 109, 112–113).

The pictorial motif of the figure turning its head backwards often occurs in examples of what can be named the 'special procession' (Blakolmer 2016; 2018; Blakolmer and Hein 2018). For example, seal impressions from Agia Triada (Figs. 15 a–b; *CMS* II 6, no. 9) show three figures taken from a comprehensive procession frieze, amongst them the middle female figure with raised head and possibly with an open mouth, while the man walking in front of her turns his head back to her. Another seal impression from Agia Triada presents a similar scene of double-axe bearers, unfortunately with badly preserved heads (*CMS* II 6, no. 10). On two signet-rings with female processions from Aidonia, the middle figure turns her head and raises one or two hands to address the figure behind, although their mouths remain closed (*CMS* V Suppl. IB, nos. 114–115). The same motif is depicted on a seal-stone from Modi that shows two women in the great outdoors (*CMS* V Suppl. 3, no. 80). In contrast, in the procession scene on a gold ring

Fig. 14: Mural painting from Xeste 3 in Akrotiri, Thera (after Doumas 1992, 146, fig. 109).
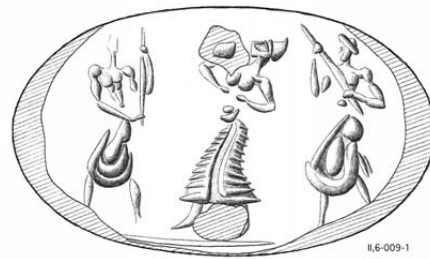
Fig. 15 a–b: Seal impressions from Agia Triada (CMS II 6, no. 9; courtesy of the CMS Heidelberg).

from Midea (Figs. 16 a–b; *CMS* I, no. 191), Ingo Pini interpreted the rearmost of the two female figures, with a raised head and wide-open mouth, as singing (Pini 2008, 251 with n. 26). Yet, it could well be that the large distance between nose and chin indicates that *both* figures have an open mouth. Examples such as these remind us of the scene of the two interacting figures in the procession frieze of the Harvester Vase from Agia Triada (Fig. 7). Although the examples vary in many aspects, the narrative element of a pair of figures communicating with each other occurs in several other procession images.

What conclusions can be drawn from this analysis for our understanding of the frieze of the Harvester Vase and its parallels? These observations not only point to the existence of a common prototype of lively procession friezes, structurally similar to that of the Har-

Fig. 16 a–b: Signet-ring from Midea (CMS I, no. 191; courtesy of the CMS Heidelberg).

vester Vase, with identical narrative elements and scenes; furthermore, they also demonstrate that a common repertoire of mimic expressions for describing figures in specific situations by specific pictorial formulae was developed in Neopalatial Crete.

The Open Mouth in Warrior Scenes

In Aegean warrior scenes, we can neither observe any triumphal expression in the face of the winner nor any clear indication of suffering and pain by mimic elements of the defeated who, occasionally, has turned his head *en face* to the viewer (Morgan 1995). Nonetheless, a considerable number of warriors in action were depicted with an open mouth. On the prominent signet-ring with battle scene from Shaft Grave IV at Mycenae (Figs. 17a–b; *CMS* I, no. 16; Stürmer 1982) the un-helmeted opponent warrior has his mouth opened in V-form and thus contrasts the 'mouth-less' victor. Could this imply the pejorative meaning of an open mouth, as a sign of infer-

Fig. 17a–b: Signet-ring from Shaft Grave IV, Mycenae (CMS I, no. 16; courtesy of the CMS Heidelberg).

Fig. 18 a–c: 'Warrior agate seal' from the tomb of the Griffin Warrior, Pylos (after Stocker and Davis 2017, 590, fig. 10 [drawing T. Ross], p. 591, fig. 11; p. 593, fig. 13 [photo J. Vanderpool]; courtesy of The Department of Classics, University of Cincinnati).
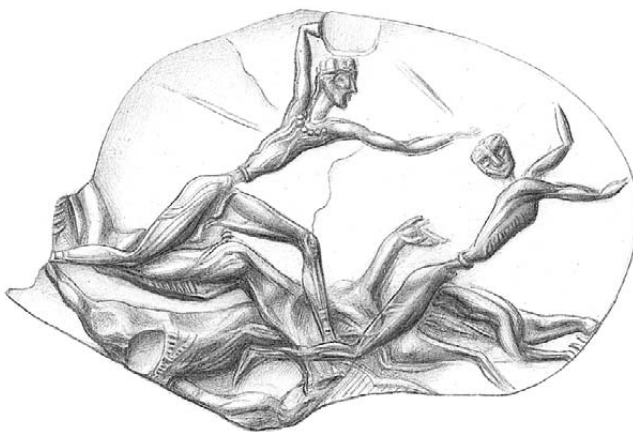
Fig. 19: Seal impressions from Knossos and Agia Triada (CMS II 6, no. 15 = CMS II 8, no. 279; courtesy of the CMS Heidelberg).

iority, *i.e.* a less canonical face as underlining the inferior position in combat? Likewise, on the Combat Agate seal from the tomb of the Griffin Warrior at Pylos (Figs. 18 a–c), the opponent warrior with his mouth opened in V-form stands in contrast to the victor with his closed mouth (Stocker and Davis 2017). However, in the fighting scene on seal impressions from Knossos and Agia Triada (Figs. 19a–b) the mouth of the rushing attacker is open, whereas the fleeing opponent has turned his face to the viewer.[5] The archer on the fragment of an LM I stone relief vessel from Knossos has his mouth opened in V-form (Evans 1932, 100, 106, fig. 59; Müller 1915, 262–263, fig. 10; Kai-

---

5 *CMS* II 6, no. 15 = *CMS* II 8, no. 279. For an alternative interpretation as a hunting scene by R. Koehl, see Montecchi 2019, 2, n. 1.
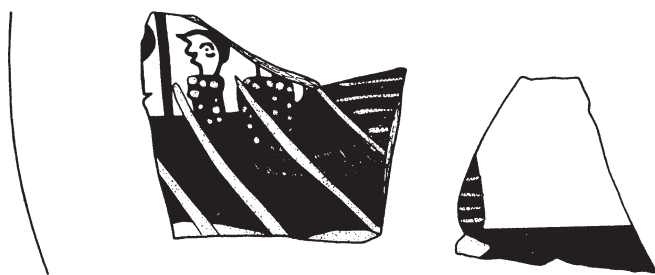
Fig. 20: Fragment of a pictorial krater, Tiryns (after Güntner 2000, pl. 12, 6; courtesy of Joseph Maran).
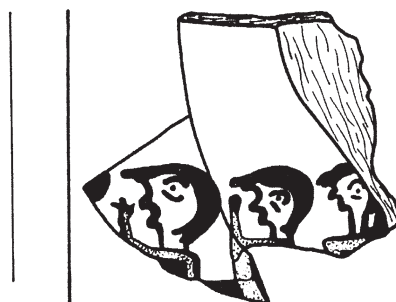
Fig. 21: Fragment of a pictorial krater, Tiryns (after Güntner 2000, pl. 12, 7; courtesy of Joseph Maran).
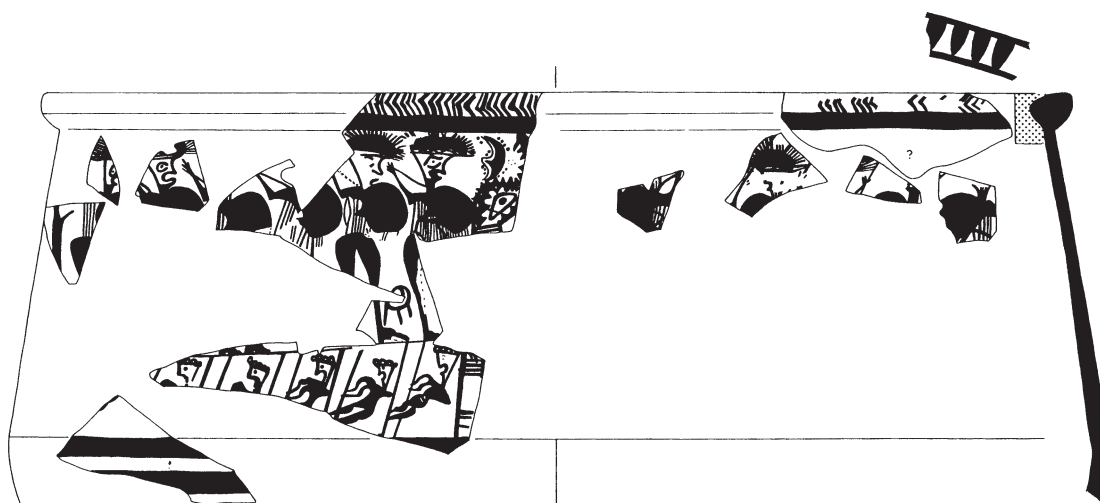
Fig. 22: LH III C krater from Bademgediği (after Mountjoy 2005, pl. XCVI).

ser 1976, 12–13 [Knossos 3], 158, 181, 409 with n. 539, fig. 3); either this has to be understood as an arbitrary depiction of the mouth or it should be seen as an expression of the vivid motion of the warrior. An open mouth in a warlike context, perhaps, also can be recognised on one of the stone relief vessel fragments from Epidavros: on the fragment with the boat, the foremost figure with a weapon in his outstretched hand shows an open mouth, unless this results from the awkward depiction of the head (Sakellariou 1971; 1981, 532–534, pl. 180; Morgan 1988, 151–154, pls. 193–194; Dickers 1990, 187–188, pls. 10, 4a–b.A).

In late Mycenaean pictorial pottery, the depiction of the mouth of the figures is mostly understood as insignificant. However, we find a series of exceptions. An interesting case is presented on two fragments of LH III B2 pictorial

Fig. 23: Pictorial krater from Tiryns, detail (after Güntner 2000, pl. 4; courtesy of Joseph Maran).

kraters from Tiryns each showing a row of seated rowers with open mouths. The fragment of the first krater (Fig. 20) shows a series of rowers with oars in a boat; the only preserved head behind the mast is depicted with an open mouth (Güntner 2000, 33 [Mensch 17], pl. 12, 6; 2006, 179,

Fig. 24: Golden mask from Shaft Grave IV at Myce-
nae (after Karo 1930, pl. XLVII).

Fig. 25: Late Mycenaean head rhyton, Boston (after
Vermeule 1991, fig. on p. 99).

fig. 5). The fragment of another krater from Tiryns (Fig. 21) presents a series of at least four fig-
ures, possibly rowers in a ship, with open mouths and one raised hand (Güntner 2000, 33–34
[Mensch 18], pl. 12, 7; 2006, 179–180, fig. 6). An LH III C sherd from Lefkandi presents a
good parallel to that (Deger-Jalkotzy and Lemos 2006, cover ill.; Lemos 2008, fig. on p. 181).
On the fragments of an LH III C Middle krater from Bademgediği (Fig. 22), all preserved war-
riors in both hostile ships, facing each other, are depicted with open mouths (Mountjoy 2005;
2006, 110–112 [no. 4], fig. 3). Additionally, several of the rowers in the lower part of the ship
on the left side equally were shown with an open mouth. In all these cases, the open mouth prob-
ably indicates the aggressive, warrior-like character of the figures as well as the physical effort of
rowing, and thus underlines the dramatic pictorial theme of the naval battle.

The interpretation of the open mouth as expressing a warlike context is perhaps supported
by another LH III B2 krater from Tiryns depicting a series of sphinxes on one side and a chariot
scene on the other side with two figures behind the chariot (Fig. 23; Güntner 2000, 20–21 [Wa-
gen 15], pl. 4). The figures face each other and probably constitute a hostile confrontation of a
sphinx and a man, both with open mouths. Although this could be a specificity of this individual
painter, the open mouth could well indicate a warlike interaction between an attacking warrior
and the sphinx defending the chariot.

Mimic Expression in Sepulchral Contexts

Let us move on to facial expressions in sepulchral contexts, where we find a series of examples of
closed eyes. They mostly occur on gold masks from the Shaft Graves at Mycenae and therefore
define them as depicting the dead, instead of reflecting the face of the living (Kopcke 1976; Gra-
ziadio and Pezzi 2006; Hristova 2012). On the electrum mask from Shaft Grave Gamma (Mylo-
nas 1972–1973, 76 (Γ-362), pls. 60 a, XII; Kopcke 1976, 4–6, pl. 1.1) the closed eyes are
indicated by both rows of eyelashes, as is also the case on two masks from Shaft Grave IV (Fig.
24; Karo 1930–1933, 75, nos. 253, 254, pls. XLVII–XLVIII; Kopcke 1976; Dickinson 2005),
whereas on the so-called 'Mask of Agamemnon' the closed eyes are only defined by the line separ-
ating the closed eyelids (Karo 1930–1933, 121, no. 624, pl. LII; Kopcke 1976, 6–9; Dickinson
2005).

Likewise, an LH III rhyton in the form of a human head in Boston (Fig. 25) shows a
bearded man with closed eyes, similar to the considerably earlier metal masks from Mycenae (Ver-
meule 1988; 1991, 110–112, figs. 23–27; Blakolmer 2004–2005, 60–61, fig. 10). The head is

portrayed as turned upwards and the three painted strokes on each cheek perhaps have to be seen in a sepulchral context. Without any doubt, the closed eyes of this head-rhyton indicate a dead man. A somewhat comparable face with closed eyes and clearly defined nasolabial groove can be seen in the head of a terracotta figure from Vrokastro dated to the Geometric period (Schiering 1964, 13, figs. 15a–b; pp. 15–16; Vermeule 1991, 114–115, fig. 36; Rethemiotakis 1998, 21, no. 11, pl. 75c–d; 2001, 49–50, 52, fig. 52).

Fig. 26: Terracotta larnax from Tanagra (after Aravantinos 2010, fig. on p 114 top).

Perhaps, closed eyes are also indicated in the face of the deceased figure on a larnax from Tanagra (Fig. 26; see esp. Dakouri-Hild 2021, 18–19). In this context it is worth noting that the presumably dead male figure carried by a Minoan 'genius' on his shoulders on a seal-stone from Voudeni exhibits an unspecific face with open eyes (*CMS* V Suppl. IB, no. 153). Since, in Aegean art, the pupil is indicated almost exclusively in the eyes of large-scale heads in mural paintings and occasionally in ivories, we do not know whether the eyes of the singing musician on the Harvester Vase (Fig. 6) are open or closed.

Although in the sepulchral iconography of late Mycenaean Greece, mourning was mostly expressed by gesture (Vermeule 1965, 142–144; Iakovidis 1966; Cavanagh and Mee 1995, 46–50; Hiller 2006, 184–185; Burke 2008; Kramer-Hajos 2015; Vlachou 2018; Dakouri-Hild 2021, 13–17), in a few cases grief, pain, and lamentation were additionally indicated by facial expressions such as an open mouth and possibly also tears, irrespective of the question whether this reflects crying, shouting, or ritual lament of a female (and also male?) mourner.[6] On the Tanagra larnakes of her Group 3, Margaretha Kramer-Hajos defines several figures as "open[ing] their mouths in a wide gash, uttering, it seems, a 'cry of angry grief'", in quoting Emily Vermeule (1965, 132; Kramer-Hajos 2015, 643, 645, fig. 10). In a prothesis scene on larnax 23 from Tanagra, already mentioned above (Fig. 26), at least two of the mourning figures beside the bier with the corpse are depicted with an open mouth (Kramer-Hajos 2015, 645 [larnax 23], fig. 9). A larnax from Tanagra Tomb 16 shows two pairs of mourning figures approaching each other (Aravantinos et al. 2018, 430, 436, fig. 5b); the two opposing figures in the centre have their mouths open. A remarkable figure with a two-handed mourning gesture on the narrow side of another larnax from Tanagra perhaps has its mouth wide open to the temples[7] – apparently a strong physiognomic expression of emotion that led Emily Vermeule to the often-quoted characterisation: "The most charming figure of any larnax […] He is the most discouraged Mycenaean to last beyond the Bronze Age" (Vermeule 1965, 132; Huber 2001, 53). In any case, sepulchral images of Mycenaean Greece were a prominent subject that offered the opportunity to use facial features for describing the special situation and behaviour of distinct figures.

Conclusions

We have to confess that, in Minoan and Mycenaean arts, facial expression did not constitute an elementary and often used iconographic tool. The scarceness of mimic expressions in Aegean iconography is best demonstrated by the fact that, since the discovery of the Harvester Vase at Agia Triada in 1902, no other example has come to light that exceeds the number of seven fig-

---

6 Although the majority of mourning figures is female, a few exceptions seem to be male. For this discussion, see Burke 2008, 75; Vlachou 2018, 269; Dakouri-Hild 2021, 16–17.

7 Vermeule 1965, 132, no. 8, fig. 3b; Panagiotopoulos 2007, 207, fig. 4; Kramer-Hajos 2015, 643 (larnax 24), 645, fig. 10. The female sex was attributed to this figure by Dakouri-Hild 2021, 17.
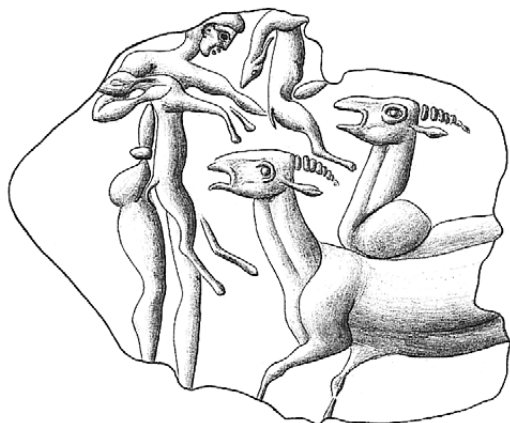
*Fig. 27: Seal impressions from Kato Zakros (*CMS *II 7, no. 30; courtesy of the* CMS *Heidelberg).*

ures with an open mouth in an Aegean image. Nonetheless, the examples of physiognomic expression clearly surpass the character of merely individual cases. Additionally, facial differentiation occurs at all artistic levels and extends from 'high art' through to schematic drawings. We also have to bear in mind that, in Egypt, expressions similar to those on the Harvester Vase can be observed not earlier than during the time of the artistic 'expressionism' of the Amarna period (*cf.* Hornung 1995, 51–53). This makes mimic expressions in iconography a remarkable artistic phenomenon.

With regard to the question of a standardised codification of mimic expressions in Aegean iconography, the relatively low number of examples and the high morphological diversity of the open mouth allow us to assume that individual examples, such as in Late Mycenaean pictorial vase painting and in the somewhat local images of the Tanagra larnakes, were taken from human behaviour, whereas in the more standardised arts of Neopalatial Crete they rather constituted clear-cut artistic formulae. In any case, the development of facial expression seems to correlate with the depiction of nature as well as the behaviour of animals in Neopalatial Crete: the acoustic and atmospheric component in the depiction of the open mouth of animals is expressed in an impressive way on sealings from Kato Zakros (Fig. 27): here two goats are depicted with their mouths open in a highly naturalistic and meaningful manner as protesting against the removal of two bucklings by a man (*CMS* II 7, no. 30).

Mimic expressions were part of the pictorial vocabulary of the Aegean and defined figures in a variety of contexts and situations: different varieties of the open mouth as an indication of verbal communication form by far the majority – speaking, shouting, calling out, wailing and, only sporadically, singing. In a series of examples, the open mouth supports the hand-to-mouth gesture in order to indicate addressing speech or conversation. In the case of isolated figurines, the open mouth of votaries may indicate their addressing the divine, perhaps by saying a prayer. Another pictorial formula for communication was the open mouth of a figure turning its head to another figure in a procession; it could well be that this signifies an uncoordinated shouting. The open mouth may also have constituted a supplementary expression of physical effort of fighting warriors (victors as well as vanquished) and sailors. Closed eyes as an indication of dead men occur in a few special cases of mask-like heads, whereas the open mouth was depicted in a series of late Mycenaean mourning figures. Especially in this last case, emotional attitudes and psychological insight into the character and feeling of a figure became apparent.

With regard to gender, we observe the same facial stereotypes for male and female figures in contexts such as processions and mourning scenes. The common principle in Aegean iconography that women occur approximately as often as men applies also to the occurrence of facial expressions. However, similar to other aspects, male figures with a distinct physiognomy cover a broad range of activities, whereas women with open mouths are confined to ritual and religious subjects (*cf.* Weingarten 2005, 356). In the case of bronze figurines, as far as I can see, only males seem to have an open mouth.

In none of these contexts was the depiction of an open mouth obligatory for the artists in clarifying the context and the situation of a figure. In contrast to that, closed eyes may have formed the primary indicator of a mask-like dead man. Categories such as a positive and a negative mimic expression appear to have been irrelevant: no figure is laughing, or shouting with joy, but several are mourning, probably even moved to tears. In any case, Aegean imagery by no

means presents a speechless and silent realm, although we hardly can reconstruct the words these figures are speaking, shouting, or praying.

Acknowledgments

References

Aravantinos, V. 2010. *The Archaeological Museum of Thebes.* Athens: John S. Latsis Public Benefit Foundation.

Aravantinos, V., I. Fappas, P. Angelidis, M. Louka, and N. Sepetzoglou. 2018. "The female figure in the pictorial tradition of Mycenaean Boeotia: Critical overview and technical observations." In *Χρωστήρες / Paintbrushes. Wall-painting and Vase-painting of the Second Millennium BC in Dialogue, Proceedings of the International Conference on Aegean Iconography held at Akrotiri, Thera, 24–26 May 2013,* edited by A. G. Vlachopoulos, 427–449. Athens: University of Ioannina and Hellenic Ministry of Culture and Sports – Archaeological Receipts Fund.

Assmann, J. 1999. *Ägypten. Eine Sinngeschichte.* Frankfurt: Fischer Taschenbuch-Verlag.

Biesantz, H. 1958. "Die minoischen Bildnisgemmen." *MarbWPr* 1958: 9–25.

Blakolmer, F. 2004–2005. "Körperzeichen in der ägäischen Frühzeit: Ästhetik, Stigma und Ritual." In: Körperschmuck. *MAGW* 134–135: 55–71.

Blakolmer, F. 2007. "Die „Schnittervase" von Agia Triada. Zu Narrativität, Mimik und Prototypen in der minoischen Bildkunst." *CretAnt* 8: 201–242.

Blakolmer, F. 2008. "Processions in Aegean iconography II: Who are the participants?" In *DAIS. The Aegean Feast. Proceedings of the 12th International Aegean Conference, University of Melbourne, Centre for Classics and Archaeology, 25–29 March 2008,* edited by L. A. Hitchcock, R. Laffineur, and J. Crowley, 257–268. *Aegaeum* 29. Liège and Austin: Université de Liège and University of Texas.

Blakolmer, F. 2010. "Small is beautiful. The significance of Aegean glyptic for the study of wall paintings, relief frescoes and minor relief arts" In *Die Bedeutung der minoischen und mykenischen Glyptik. VI. Internationales Siegel-Symposium aus Anlass des 50-jährigen Bestehens des CMS, Marburg, 9.–12. Oktober 2008,* edited by W. Müller, 91–108. *CMS Beiheft* 8. Mainz: Verlag Philipp von Zabern.

Blakolmer, F. 2016. "Eine ›spezielle Prozession‹ in minoischen Siegelbildern: Evidenz für ein Herrschaftsritual im neopalatialen Kreta?" In *Akten des 15. Österreichischen Archäologentages in Innsbruck, 27. Februar–1. März 2014,* edited by G. Grabherr and B. Kainrath, 33–39. *Ikarus* 9. Innsbruck: Innsbruck University Press.

Blakolmer, F. 2018. "A 'special procession' in Minoan seal images: observations on ritual dress in Minoan Crete." In *EUDAIMON. Studies in Honour of Prof. Jan Bouzek, Conference, Prague, 19–23 of May 2015,* edited by P. Pavúk, V. Klontza-Jaklová, and A. Harding, 29–50. Prague and Brno: Filozofická fakulta UK v Praze.

Blakolmer, F. 2019. "The glory that was Knossos! Heirlooms, reception and the significance of development in the arts of the Aegean Late Bronze Age." In *Μνήμη / Mneme. Past and Memory in the Aegean Bronze Age, Proceedings of the 17th International Aegean Conference, University of Udine, Department of Humanities and Cultural Heritage, Ca' Foscari University of Venice, Department of Humanities, 17–21 April 2018,* edited by E. Borgna, I. Caloi, F. M. Carinci, and R. Laffineur, 425–434. *Aegaeum* 43. Leuven and Liège: Peeters.

Blakolmer, F. 2020. "At the dawn of Minoan iconography: the 'Archivio di cretule' at MM II B Phaistos." In *Current Approaches and New Perspectives in Aegean Iconography,* edited by F. Blakolmer, 47–70. *Aegis* 18. Louvain-la-Neuve: Presses universitaires de Louvain.

Blakolmer, F., and I. Hein. 2018. "A 'special procession' in Minoan Crete as a ritual of rulership? A view from Egypt." In *Proceedings of the 10th International Congress on the Archaeology of the Ancient Near East, 25–29 April 2016, Vienna,* I, edited by V. Müller, 195–208. Wiesbaden: Otto Harrassowitz Verlag.

Borrmann, N. 1994. *Kunst und Physiognomik. Menschendeutung und Menschendarstellung im Abendland.* Cologne: DuMont.

Boulotis, Ch. 2011. "'Στρέφοντας πίσω το κεφάλι'. Το ταξίδι ενός αφηγηματικού μοτίβου, από το 'αγγείο των θεριστών' μέχρι μία σαρκόφαγο από την Τανάγρα." In *Κρήτης Μινωίδος. Tradizione e identità minoica tra produzione artigianale, pratiche cerimoniali e memoria del passato. Studi offerti a Vincenzo La Rosa per il Suo 70° compleanno,* edited by F. Carinci, N. Cucuzza, P. Militello, and O. Palio, 259–284. *Studi Cretese* 10. Padova: Bottega d'Erasmo.

Burke, B. 2008. "Mycenaean memory and Bronze Age lament." In *Lament. Studies in the Ancient Mediterranean and Beyond,* edited by A. Suter, 70–92. Oxford: Oxford University Press.

Cain, C. D. 2001. "Dancing in the dark: deconstructing a narrative of epiphany on the Isopata ring." *AJA* 105: 27–49.

Caskey, M. E. 1986. *Keos II. The temple at Ayia Irini I. The statues.* Mainz: Verlag Philipp von Zabern.

Cavanagh, W., and Ch. Mee. 1995. "Mourning before and after the Dark Ages." In *Klados. Essays in honour of J. N. Coldstream,* edited by Ch. Morris, 45–61. *BICS Suppl.* 63. London: University of London.

Charbonneaux, J. 1929. *L'art égéen.* Paris and Brussels: G. van Oest.

Dakouri-Hild, A. 2021. "The most discouraged Mycenaeans: performing emotions and death in Late Bronze Age Tanagra, Greece." *JFA* 46: 1–33.

Davis, W. 1989. *The Canonical Tradition in Ancient Egyptian Art.* Cambridge: Cambridge University Press.

Davis, J. L., and Sh.R. Stocker. 2016. "The Lord of the gold rings. The Griffin Warrior of Pylos." *Hesperia* 85: 627–655.

Deger-Jalkotzy, S., and I. S. Lemos, eds. 2006. *Ancient Greece: from the Mycenaean palaces to the age of Homer. Edinburgh Leventis Studies* 3. Edinburgh: Edinburgh University Press.

Dickers, A. 1990. "Spätbronzezeitliche Steingefäße des griechischen Festlandes." *SMEA* 28: 125–225.

Dickinson, O. 2005. "The 'face of Agamemnon'." *Hesperia* 74: 299–308.

Doumas, Ch.G. 1985. "Conventions artistiques à Théra et dans la Méditerranée orientale à l'époque préhistorique." In *L'iconographie minoenne. Actes de la table ronde d'Athènes (21–22 avril 1983),* edited by P. Darcque and J.-C. Poursat, 29–34. *BCH Suppl.* 11. Athens: De Boccard.

Doumas, Ch. 1992. *The wall-paintings of Thera.* Athens: The Thera Foundation.

Dubcová, V. 2020. "Bird-demons in the Aegean Bronze Age: their nature and relationship to Egypt and the Near East." In *Current approaches and new perspectives in Aegean iconography,* edited by F. Blakolmer, 205–222. *Aegis* 18. Louvain-la-Neuve: Presses universitaires de Louvain.

Ehrenberg, E. 1998. "Archaism and individualism in the late Babylonian period." In *Intellectual life of the ancient Near East. Papers presented at the 43rd Rencontre Assyriologique Internationale, Prague, July 1–5, 1996,* edited by J. Prosecky, 125–140, Prague: Academy of Science of the Czech Republic.

Eliot, M. 2010. *American rebel: the life of Clint Eastwood.* New York: Crown.

Evans, A. 1930. *The Palace of Minos at Knossos,* II. London: Macmillan.

Evans, A. 1932. *The Palace of Minos at Knossos,* III. London: Macmillan.

Evans, E. C. 1969. *Physiognomics in the Ancient World, TransactAmPhilosSoc* 59. Philadelphia: The American Philosophical Society.

Forsdyke, J. 1954. "The 'Harvester' Vase of Hagia Triada." *JWarb* 17: 1–9.

Foster, K. P. 1997. "Visage and likeness in Minoan art." In *TEXNH. Craftsmen, Craftswomen, and Craftmanship in the Aegean Bronze Age, Proceedings of the 6th International Aegean Conference, Philadelphia, Temple Univ., 18–21 April 1996,* edited by Ph.P. Betancourt and R. Laffineur, 127–139. *Aegaeum* 16. Liège and Austin: Université de Liège and University of Texas.

Graziadio, G., and E. Pezzi. 2006. "Schliemann and the so-called 'Agamemnon mask'." *SMEA* 48: 113–131.

Güntner, W. 2000. *Figürlich bemalte mykenische Keramik aus Tiryns, Tiryns* XII. Mainz: Verlag Philipp von Zabern.

Güntner, W. 2006. "Same motif, another context." In *Pictorial pursuits. Pictorial painting on Mycenaean and Geometric pottery. Papers from two seminars at the Swedish Institute at Athens in 1999 and 2001,* edited by E. Rystedt and B. Wells, 177–182. Stockholm: Svenska Institutet i Athen.

Halstead, P. and V. Isaakidou. 2021. "Representations of palatial staple finance in the Late Bronze Age southern Aegean: The 'Harvester Vase' from Agia Triadha and the gold sheet with relief procession from Peristeria." In *Representations. Material and immaterial modes of communication in the Aegean Bronze Age,* edited by J. Bennet, 31–51. *Sheffield Studies in Aegean Archaeology* 13. Oxford and Philadelphia: Oxbow.

Hiller, S. 2006. "The prothesis scene. Bronze Age – Dark Age relations." In *Pictorial pursuits. Pictorial painting on Mycenaean and Geometric pottery. Papers from two seminars at the Swedish Institute at Athens in 1999 and 2001,* edited by E. Rystedt and B. Wells, 183–190. Stockholm: Svenska Institutet i Athen.

Hood, S. 1971. *The Minoans. Crete in the Bronze Age.* London: Thames and Hudson.

Hood, S. 1978. *The arts in prehistoric Greece.* Harmondsworth: Penguin.

Hornung, E. 1995. *Echnaton. Die Religion des Lichts.* Düsseldorf and Zürich: Artemis.

Hristova, P. 2012. "Overlaying Mycenae's masks in funerary and living contexts of symbolic action: jewellery for body adornment, portraits, or else?" In *Kosmos. Jewellery, adornment and textiles in the Aegean Bronze Age. Proceedings of the 13th International Aegean Conference, University of Copenhagen, Danish National Research Foundation's Centre for Textile Research, 21–26 April 2010,* M.-L. Nosch and R. Laffineur, 417–423. *Aegaeum* 33. Leuven and Liège: Peeters.

Huber, I. 2001. *Die Ikonographie der Trauer in der Griechischen Kunst.* Mannheim and Möhnesee: Bibliopolis.

Hughes Fowler, B. 1983. "The Centaur's smile: Pindar and the Archaic aesthetic." In *Ancient Greek art and iconography,* edited by W. G. Moon, 159–170. Madison and London: University of Wisconsin Press.

Iakovidis, S. E. 1966. "A Mycenaean mourning custom." *AJA* 70: 43–50.

Kaiser, B. 1976. *Untersuchungen zum minoischen Relief.* Bonn: Habelt.

Karetsou, A. 2005. "Early sealing evidence and a new "Minoan Male Portrait" sealstone from the Juktas peak sanctuary." In *Studi in onore di Enrica Fiandra. Contributi di archeologia egea e vicinorientale,* edited by M. Perna, 113–131. Paris: De Boccard.

Karo, G. 1930–1933. *Die Schachtgräber von Mykenai.* Munich: Bruckmann.

Kekes, Ch. 2017. "Αιγαιακές χειρονομίες (συν)ομιλίες και δέησης: αιγυπτιακές επιρροές και διαχρονικότητα." In *Πεπραγμένα του ΙΒ´ Διεθνούς Κρητολογικού Συνεδρίου, Heraklion, 21.–25. 9. 2016, 1–13.* Irakleio: Εταιρία Κρητικών Ιστορικών Μελετών. https://12iccs.proceedings.gr/el/proceedings/category/38/32/263.

Kenner, H. 1960. *Weinen und Lachen in der griechischen Kunst.* Vienna: R. M. Rohrer.

Kopcke, G. 1976. "Zum Stil der Schachtgräbermasken." *AM* 91: 1–13.

Kramer-Hajos, M. 2015. "Mourning on the larnakes at Tanagra. Gender and agency in Late Bronze Age Greece." *Hesperia* 84: 627–667.

Krierer, K. R. 1995. *Sieg und Niederlage. Untersuchungen physischer und mimischer Phänomene in Kampfdarstellungen der römischen Plastik.* Vienna: Phoibos Verlag.

Krzyszkowska, O. 2020. "Changing views of style and iconography in Aegean glyptic: a case study from the Cabinet des Médailles in Paris." In *Current approaches and new perspectives in Aegean iconography,* edited by F. Blakolmer, 253–271. *Aegis* 18. Louvain-la-Neuve: Presses universitaires de Louvain.

Kyriakidis, E. 2013. "The dead acrobat. Managing risk and Minoan iconography." In *Ritual failure. Archaeological perspectives,* edited by V. Koutrafouri and J. Sanders, 155–163. Leiden: Sidestone Press.

Laffineur, R. 2012. "For a *kosmology* of the Aegean Bronze Age." In *Kosmos. Jewellery, adornment and textiles in the Aegean Bronze Age. Proceedings of the 13th International Aegean Conference, University of Copenhagen, Danish National Research Foundation's Centre for Textile Research, 21–26 April 2010,* edited by M.-L. Nosch and R. Laffineur, 3–20. *Aegaeum* 33. Leuven and Liège: Peeters.

Lemos, I. S. 2008. "Lefkandi auf Euböa." in: *Zeit der Helden. Die „dunklen Jahrhunderte" Griechenlands 1200–700 v.Chr.,* Catalogue of Exhibition, edited by Badisches Landesmuseum Karlsruhe, 180–184. Karlsruhe and Darmstadt: Primus Verlag Gmbh.

Marinatos, S., and M. Hirmer. 1973. *Kreta, Thera und das mykenische Hellas,* 2nd ed., Munich: Hirmer.

Martini, W. 1990. *Die archaische Plastik der Griechen.* Darmstadt: Wbg Darmstadt.

Montecchi, B. 2019. "Mobility to, from and within Neopalatial Crete: the evidence from the sealings." In *Πεπραγμένα του ΙΒ'Διεθνούς Κρητολογικού Συνεδρίου, Heraklion, 21.–25. 9. 2016,* 1–12. Irakleio: Εταιρία Κρητικών Ιστορικών Μελετών.

Morgan, L. 1988. *The miniature wall paintings of Thera. A study in Aegean culture and iconography.* Cambridge: Cambridge University Press.

Morgan, L. 1995. "Frontal face and the symbolism of death in Aegean glyptic." In *Sceaux minoens et mycéniens. IVe symposium international, 10–12 septembre 1992, Clermont-Ferrand,* edited by I. Pini and J.-C. Poursat, *CMS Beiheft* 5, 135–149. Berlin: Gebr. Mann Verlag.

Mountjoy, P. A. 2005. "Mycenaean connections with the Near East in LH III C: ships and sea peoples." In *EMPORIA. Aegeans in the central and eastern Mediterranean. 10th International Aegean Conference, Italian School of Archaeology in Athens, 14–17 April 2004,* edited by R. Laffineur and E. Greco, 423–426. *Aegaeum* 25, I. Liège and Austin: Université de Liège and University of Texas.

Mountjoy, P. A. 2006. "Mycenaean pictorial pottery from Anatolia in the transitional LH III B2–LH III C Early and the LH III C phases." In *Pictorial Pursuits. Pictorial Painting on Mycenaean and Geometric Pottery. Papers from Two Seminars at the Swedish Institute at Athens in 1999 and 2001,* edited by E. Rystedt and B. Wells, 107–121. Stockholm: Svenska Institutet i Athen.

Müller, K. 1915. "Frühmykenische Reliefs aus Kreta und vom griechischen Festland." *JdI* 30: 242–336.

Mylonas, G. E. 1972–1973. *Ο ταφικός κύκλος Β΄ των Μυκηνών.* Athens: Αρχαιολογική Εταιρεία.

Panagiotopoulos, D. 2007. "Mykenische Trauerbilder. Zu den Anfängen der griechischen funerären Ikonographie." In *ΣΤΕΦΑΝΟΣ ΑΡΙΣΤΕΙΟΣ. Archäologische Forschungen zwischen Nil und Istros. Festschrift für Stefan Hiller zum 65. Geburtstag,* edited by C. Reinholdt, F. Lang, and J. Weilhartner, 205–213. Vienna: Phoibos.

Panagiotopoulos, D. 2017. "In the grip of their past? Tracing Mycenaean *memoria.*" In *Archaeology and Homeric Epic,* edited by S. Sherratt and J. Bennet, 74–100. *Sheffield Studies in Aegean Archaeology* 11. Oxford and Philadelphia: Oxbow.

Papadopoulou, E. 2011. "Gifts to the goddess. A gold ring from Mylopotamos, Rethymnon." *AM* 126: 1–27.

Pini, I. 1999. "Minoische 'Porträts'?" In *Meletemata. Studies in Aegean Archaeology Presented to Malcolm H. Wiener as he enters his 65th Year,* edited by Ph. P. Betancourt, V. Karageorghis, R. Laffineur, and W.-D. Niemeier, 661–670. *Aegaeum* 20, III. Liège and Austin: Université de Liège and University of Texas.

Pini, I. 2008. "Are there any representations of feasting in the Aegean Bronze Age?" In *DAIS. The Aegean Feast. Proceedings of the 12th International Aegean Conference, University of Melbourne, Centre for Classics and Archaeology, 25–29 March 2008,* edited by L. A. Hitchcock, R. Laffineur, and J. Crowley, 249–254. *Aegaeum* 29. Liège and Austin: Université de Liège and University of Texas.

Pini, I. 2010. "Soft stone versus hard stone seals in Aegean glyptic: Some observations on style and iconography." In *Die Bedeutung der minoischen und mykenischen Glyptik. VI. Internationales Siegel-Symposium aus Anlass des 50-jährigen Bestehens des CMS, Marburg, 9.–12. Oktober 2008,* edited by W. Müller, 325–339. *CMS Beiheft* 8. Mainz: Verlag Philipp von Zabern.

Pini, I. 2011. "Innovation in MM II soft stone glyptic art." In *Πεπραγμένα του Ι' Διεθνούς Κρητολογικού Συνεδρίου (Χανιά, 1–8 Οκτοβρίου 2006),* I, 3, 409–420. Chania: Φιλολογικός Σύλλογος «Ο Χρυσόστομος».

Rehak, P. 2000. "The Isopata ring and the question of narrative in Neopalatial glyptic." In *Minoisch-mykenische Glyptik. Stil, Ikonographie, Funktion. V. Internationales Siegel-Symposium, Marburg, 23.–25. September 1999,* edited by I. Pini, 269–276. *CMS Beiheft* 6. Berlin: Gebr. Mann Verlag.

Rethemiotakis, G. 1998. Ανθρωπομορφική πηλοπλαστική στην Κρήτη. Athens: The Archaeological Society at Athens.

Rethemiotakis, G. 2001. *Μινωικά πήλινα ειδώλια.* Athens: The Archaeological Society at Athens.

Roaf, M. 2000. "Survivals and revivals in the art of Ancient Mesopotamia." In *Proceedings of the First International Congress of the Archaeology of the Ancient Near East,* edited by P. Matthiae, 1447–1462. Rome: Università degli studi di Roma "La Sapienza".

Sakellarakis, Y., and E. Sapouna-Sakellaraki. 1997. *Archanes. Minoan Crete in a New Light,* I–II. Athens: Ammos Publications.

Sakellariou, A. 1971. "Scène de bataille sur un vase mycénien en pierre?" *RA* 1971: 3–14.

Sakellariou, A. 1981. Η Κρητική καταγωγή ενός Μυκηναϊκού εικονογραφικού κύκλου, In *Πεπραγμένα του Δ' Κρητολογικού Συνεδρίου,* I, 2, 532–538. Athens: Panepistimion Kritis.

Sapouna-Sakellarakis, E. 1995. *Die bronzenen Menschenfiguren auf Kreta und in der Ägäis, Prähistorische Bronzefunde* I: 5. Stuttgart: F. Steiner.

Savignoni, L. 1903. "Il vaso di Haghia Triada." *MonAnt* 13: 77–131.

Schäfer, H. 1963. *Von ägyptischer Kunst. Eine Grundlage.* Wiesbaden: Harrassowitz.

Schiering, W. 1964. "Masken am Hals kretisch-mykenischer und frühgriechischer Tongefäße." *JdI* 79: 1–16.

Shaw, M. C. 1996. "The bull-leaping fresco from below the Ramp House at Mycenae: a study in iconography and artistic transmission." *BSA* 91: 167–190.

Stieber, M. 2004. *The Poetics of Appearance in the Attic Korai.* Austin: University of Texas Press.

Stocker, Sh.R., and J. L. Davis. 2017. "The Combat Agate from the grave of the Griffin Warrior at Pylos." *Hesperia* 86: 583–605.

Stürmer, V. 1982. "Zur Ikonographie des Kampfes auf dem Siegelring CMS I, Nr. 16." *OpAth* 14: 111–118.

van Effenterre, H. and M. 1999. "À propos du 'Vase des Moissonneurs'." In *Meletemata. Studies in Aegean Archaeology presented to Malcolm H. Wiener as he enters his 65th Year,* III, edited by Ph. P. Betancourt, V. Karageorghis, R. Laffineur, and W.-D. Niemeier, 883–885. *Aegaeum* 20. Liège and Austin: Université de Liège and University of Texas.

Vasilakis, A. 2005. *Das Archäologische Museum Iraklion. Führer durch die Sammlungen.* Athens: Adam Editions.

Verlinden, C. 1964. *Les statuettes anthropomorphes Crétoises en bronze et en plomb, du IIIe millénaire au VIIe siècle av. J.-C., Archaeologia Transatlantica* IV. Louvain-la-Neuve: Tony Hackens.

Vermeule, E. T. 1965. "Painted Mycenaean larnakes." *JHS* 85: 123–148.

Vermeule, E. 1988. "A Mycenaean dead head?" *Report of the Department of Antiquities, Cyprus* 1988, I: 299–300.

Vermeule, E. 1991. "Myth and tradition from Mycenae to Homer." In *New perspectives in early Greek art,* edited by D. Buitron-Oliver, 98–121. *Studies in the History of Art* 32, *Center for Advanced Study in the Visual Arts, Symposium Papers* XVI. Hanover and London: Yale University Press.

Vlachou, V. 2018. "New images, old practices? An imagery of funerary rituals and cult in the Aegean and the eastern Mediterranean." In *Change, continuity, and connectivity. North-eastern Mediterranean at the Turn of the Bronze Age and in the Early Iron Age,* edited by L. Niesiolowski-Spanò and M. Wecowski, 258–293. Wiesbaden: Otto Harrassowitz.

Wedde, M. 1999. "Talking hands: a study of Minoan and Mycenaean ritual gestures – some preliminary notes." In *Meletemata. Studies in Aegean Archaeology presented to Malcolm H. Wiener as he enters his 65th Year,* III, edited by Ph. P. Betancourt, V. Karageorghis, R. Laffineur, and W.-D. Niemeier, 911–919. *Aegaeum* 20. Liège and Austin: Université de Liège and University of Texas.

Weingarten, J. 2005. "Review of O. Krzyszkowska, Aegean seals. An introduction, London 2005." *SMEA* 47: 353–359.

Younger, J. 1995. "The iconography of rulership: a conspectus." In *The role of the ruler in the prehistoric Aegean. Proceedings of a panel discussion presented at the Annual Meeting of the Archaeological Institute of America, New Orleans, Louisiana, 28 December 1992,* edited by P. Rehak, *Aegaeum* 11, 151–211. Liège and Austin: Université de Liège and University of Texas.

Younger, J. G. 1998. *Music in the Aegean Bronze Age, SIMA Pb* 144. Jonsered: Paul Åströms Förlag.

Zouzoula, E. 2018. "The bird-ladies of Minoan iconography: artistic fancy or religious icons?" In *Πεπραγμένα ΙΑ′ Διεθνούς Κρητολογικού Συνεδρίου (Ρέθυμνο, 21–27 Οκτωβρίου 2011),* 1, 3, edited by E. Gavrilaki, 189–200. Rethymno: Ιστορική και Λαογραφική Εταιρεία Ρεθύμνης.

Gesture and Movement in Wall Paintings as Directives of Viewing[*]

Lyvia Morgan

Abstract   *This essay examines the relationship between human figures in wall paintings within their architectural context and potential viewer reception. Large scale figures are inextricably bound to their spatial positions in communicating meaning, and it is the relationship between these and the bodily action of the viewer as they move through space that elicits response. Small scale figures lead the viewer's eyes between passages of meaning. In both, communication between painted figures within the image and between the image and the viewer is orchestrated through gesture, stance and movement. The essay explores directionality and positions on walls in relation to stasis and movement, on the premise that communicative action is the key to viewer response to painted figures within architectural space.*

Introduction

The power of figurative art to elicit response in the viewer is founded on gesture and movement. Expression is conveyed through positions of hands, inclinations of head, directions of gaze, movements of body, feet and (in some artistic traditions though by no means all) facial muscles. Above all, it is the relationships of figures to one another within the spatial configuration of the image that communicates meaning. These are the tools of the artist in turning form into meaning. So much is true of all media, whether the hard surfaces of stone, metal or ceramic, or the flat yielding surfaces of papyrus, parchment, paper or canvas. The surfaces of walls, however, are fundamentally different in one, crucially important way – they are created within an architectural space that structurally guides the viewer. In temples, chapels, palaces and houses responses are predicated on movements of participants through space and the varying emphasis of their gaze.

In this essay, I discuss some principles of spatial organization of figurative mural art in relation to architectural space and human action, first broadly, then specifically in relation to the Cyclades and Crete. The aim is to consider how gesture, movement, and spatial organization of images connect with and influence the experience of the spectator – how, in other words, mural images elicit response.

Modes of Viewing

Mural art is *experienced,* rather than simply seen. Murals have an environment, the images relating not only to the walls on which they are painted, but to the circulatory patterns of their surrounds (Palyvou 1987). Architectural schemes stimulate bodily movement and direct the gaze to places where only the eyes can reach (Bloomer and Moore 1977). Response is both spatial and temporal, dependent equally on the placement of images and the movements and focus of the participant. Experience is cumulative, as the viewer progresses through space, but also simultaneous, as the eye sees relationships between zones of imagery on each wall. Scale, both of painting and of painted space, affects viewing, as does where the images are situated in relation to entrances and exits, windows and seating arrangements, encouraging movement, visibility and stasis.

Experiencing mural images in their spatial contexts is *interactive.* The body is literally encompassed *within* the images. All the senses are involved. Ancient temples are now devoid of

---

[*]   The word 'directives' is used here in a positive sense, as in directionality.

their colours and emphatically lack the sounds, smells, and ritual actions of the past, but would have been experienced within a cornucopia of sensory experience (witness Hindu temples and Orthodox Christian churches today). Where paintings survive on their (or reconstructed) walls, we see them today by electric lights installed for maximum visibility, but in their original contexts ancient and medieval paintings would have been glimpsed by sunlight controlled by the placement of windows and dependent on time of day or by oil lamps carried or positioned to highlight specific images glinting in the gloom, radically affecting response, especially to depictions of human figures. Placement of figures within a programme of images involves juxtapositions with and references to figures on surrounding walls or adjacent rooms or even, in multi-storeyed buildings such as Xeste 3, to those above or below. As such, memory comes into play as the participant moves through the painted spaces (Morgan 2019, 372).

Architectural space has thresholds, boundaries and zones of increasing privacy or sanctity. Images in entrances and thresholds leading from exterior to interior alert the visiting participant of the rationale for these spatial and spiritual demarcations. External walls, door jambs, entrance passages or vestibules may announce those who enter the building (Procession Frescoes at Knossos and Pylos), honour the occupant of a tomb (Mereruka at Saqqara), or propagandize the deeds of the king at his mortuary temple (Medinet Habu, Thebes). Donorship is also deemed worthy of display near the entrance. In Byzantine churches the donor may be shown presenting a model of the church to Christ in a conspicuous position above the doorway leading into the naos (Chora, Istanbul), while Silk Road merchant-donors are represented processing along the lower walls leading into Buddhist cave temples (Dunhuang, China).

Mural art presupposes sequence. Whether or not it has a narrative, this sequence has direction through which attention is focused. Corridors guide the participant from one zone to another; thresholds act as liminal zones of transition; small enclosures define limited access; large halls encourage circulation or congregation. Horizontal zoning encourages movement of the body, while vertical zoning entails shifting the gaze upwards. Mural sequences take many configurations, according to both story and potential use of space, designed with the movements and viewing positions of participants in mind (Morgan in preparation).

Spatial sequence, gesture and movement are all directives of viewing. Bodily movements comprise gesturing in the widest sense (Mauss 1935/2005). In art, it is arrested movement that communicates (Morgan 2000, 926, 932–933; 2020, 50–53; Morris 2001, 247; Poole 2020; all with further references). Gestures encode meaning through stop-motion positions, communicating intention through recognizable gestural expression. Within each scene, figures can 'speak' to one another and to the viewer with their hands despite having closed mouths (*cf.* Barasch 1990, 15–39 on Giotto). Occasionally in Aegean art, a slightly open mouth communicates active speech (as in the youthful figures in Xeste 3; *cf.* Blakolmer, this volume) but, in most cases, it is the movements of the bodies and the gestures of the hands that speak. Repeating a gesture across figures – hands offering, arms raised, head turned or looking down – visually and conceptually links scenes, directing the eye of the viewer from one part of the story to another.

Some images include the viewer in the painted action through the disposition of figures. In the miniature Grandstand Fresco from Knossos the focus is not the unseen action watched but those who are watching (Marinatos 1989, 39; Adams 2013, 8–10). Looking at the painting, we the viewers become the performance. Frontal face images, such as those of Byzantine icons, directly engage with the eye contact of the viewer in their role as intermediaries. Back-views of figures in the forefront of a pictorial plane include the spectator into the scene of those observing the action beyond (Giotto, *The Apparition of St Francis at the Chapter Meeting in Arles,* Assisi). In each case, the viewer is invited to become a part of the pictorial message through the postures of the painted figures.

Structuring space

Most of the world's sacred buildings have a defined trajectory through zones of variable access from public to private, leading to the innermost area and revelation of the divine image, spatial design expressing notions of the cosmos (Wightman 2007, 932–952). In some cases (as in Egyptian temples) access to the public was limited to outer courts, interior action being the prerogative of priests. In others (as in Christian churches), direction for worshippers is linear from exterior to interior to a certain point, beyond which only priests access the inner ritual zone. In others (as in Buddhist and Hindu temples) circumambulation routes direct devotees in a circular motion. Structuring of space in this way is designed to be transformational and it is above all figurative images that define the experience for the participant.

In Egyptian tomb chapels, space is ritually zoned from the outside court to the mediating zone of the Transverse Hall to the Inner Passage of transformation and rebirth. The images are orchestrated with this ritual zoning and would have synchronized with movements of participants in the funerary cult. Large scale figures of the tomb owner oversee the action in the registers of small-scale scenes. The 'ka'-servants (priests) attending to the deceased's daily needs and family members visiting on feast days would face the receiving figures of the tomb owner, echoing the movements of offering bearers in the registers. In the same way, the 'ka' statue, depicted actively walking as though the spirit were emerging through the wall from the tomb below, faced towards the living bearers of food offerings or their eternal substitutes in the form of images on the walls.

In the tomb chapel of Rekhmire (Davies 1944), images, texts and space work in unison, with progression inwards and upwards towards the divine realm, painted figures leading the viewer's eyes (Fig. 1; Morgan, in press a; in preparation). On the right end wall of the Transverse Hall, a "spirit-door" to the beyond (Davis 1944, 14), Rekhmire faces outwards while his relatives face towards him, as though entering the chapel from the outside world or from the world of ancestors beyond. Deep in the inner passage on the right wall, opposite the funerary procession, are scenes of rites over the statue, in which the statues all face outwards and most of the officiants face inwards, echoing the movements of priests. Everything leads to the end wall, with its false door through which the 'ka' spirit could pass. High up, inside a niche was the 'ka' statue, animated through the rites of the Opening of the Mouth shown on the preceding wall. Directional postures of the painted figures lead towards the focal point of ritual transformation.

Coordination of ritual actions with the placement of images within architectural space is nowhere more evident than in Byzantine churches (Ousterhourt 1998; Patricios 2014). Space is hierarchic, progressing in sanctity from west to east and low to high. To experience the mosaics and paintings, the participant must walk through the ritual space, looking up and across, through doorways and arches, beneath vaults and domes, enveloped in the three-dimensionality of the iconographic programme. Each spatial zone has a range of
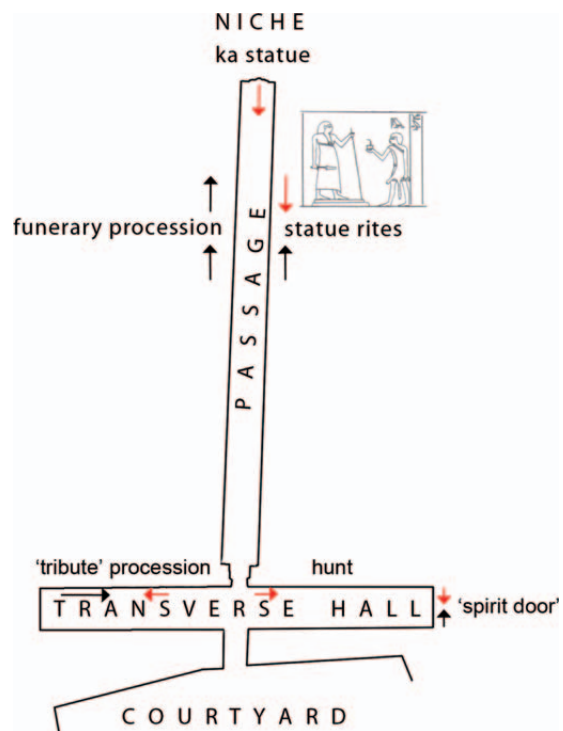

Fig. 1: The Tomb Chapel of Rekhmire showing some of the directional movements of figures. Red: Rekhmire or his statue; black: others (adapted from Morgan 2016, pl. LXIIb; insert: Davies 1944, pl. CVI, detail).

images relevant to the action of participants. In the liminal zone of the narthex, saints, apostles and patriarchs line the lower parts of the walls, their frontal faces greeting the worshipper's gaze as they enter the church. On the walls and vaults of narthex and naos are narrative sequences relating to the Orthodox festivals (Patricios 2014, 256, 403). The New Testament cycle of birth, death, and resurrection echoes the seasons and is reflected in the liturgies and sermons of the church year (Maguire 1998, 129). A screen, the iconostasis, separated the naos from the bema at the eastern end, limiting visibility of the sacred mysteries of the Eucharist from the congregation while providing a surface on which to place icons as intermediaries. The frontal faces of the icons, alive with the flickering light of candles, met the gaze of worshippers, who would kiss the image in response. In the apse behind the altar is the image of Christ offering consecrated bread and wine to his disciples, mirroring the real-life ritual of the Eucharist that takes place at the Holy Table below (Patricios 2014, 257).

The painted figures lead the eye, descending the walls in order of hierarchy: celestial realms, biblical narratives, saints and ecclesiastics. Sunlight, symbolizing the source of spiritual illumination, harmonises with the images. On the ceiling, figures relate to the position of the spectator, facing west at the eastern end and east at the western end, while on the domed vaults representing the heavens, the figures lead the eye in a circular motion. The church, as a microcosm of the universe, connects the divine with the world of worshippers through the spatial organization and postures of its painted figures. This intricate plan works only through the active viewing and movements of the participants.

Wall Paintings in the Cyclades and Crete

In Aegean buildings, the loss of contextualization makes it difficult to identify spatial functions (Palyvou 2005, 107–109) or ritual movements, but the ground-breaking work of Clairy Palyvou (1987, 2000, 2005, 2012, 2018) has demonstrated how, here too, architectural design accommodates and influences patterns of human interaction. In recent years, relationships between architecture and wall paintings have been fruitfully explored in terms of visibility and viewing situations at Akrotiri (Palyvou 2000, 2012; Paliou 2008, 2011; Paliou et al. 2011; Günkel-Maschek 2011) and in Neopalatial Crete (Letesson 2012; Panagiotopoulos 2012; Günkel-Maschek 2020).

Processions and the offering gesture: Knossos and Thera

Wall paintings link space with human action. Dark corridors, such as those of the Procession Fresco at Knossos (Boulotis 1987; Günkel-Maschek 2020, 153–275 with earlier references) or the Corridor of the Mature Ladies in Xeste 3 at Akrotiri (Vlachopoulos 2008, figs. 41.33–36; Vlachopoulos and Zorzos 2014, pls. LXI–LXIV), lead inwards (Figs. 2, 6). In both cases, the large-scale figures on the corridor walls surrounded the participant as they made their way inwards, the apparent movement of the figures guiding the participant along the way like "sign-posts" (Cameron 1970, 165) while perpetuating ritual action through imagery (Hägg 1985, 210–211). Corridors led to light and controlled visibility of further images, concealing and revealing through pier-and-door partitions. At Knossos, from the open, symbolic space of the Central Court (Panagiotopoulos 2006), the sun pierces through the doors of the Throne Room at specific times of day and season (Goodison 2001, 81–87; 2004; Soar 2018). In Xeste 3, the corridor procession bends round to be framed by multiple doors controlling visibility of the images within. In Xeste 4, male figures were painted as though ascending the staircase (Doumas 1992, pls. 138–141; Rehak 1996, fig. 10; Boulotis 2005, 30–31, fig. 8; Marinatos 2020, fig. 1), as was proposed by Mark Cameron for the East Staircase at Knossos (Cameron 1978, 587, pl. 4). Like Mycenaean processional figures (Peterson 1981; Hägg 2001; Blakolmer 2007, 2008), these corridor and staircase figures acted as directional guides for those with privileged access. One can imagine actual persons walking alongside the painted figures, greeted at the end of their trajectory by persons who (with the notable exception of the Goddess in Xeste 3) are not themselves represented.
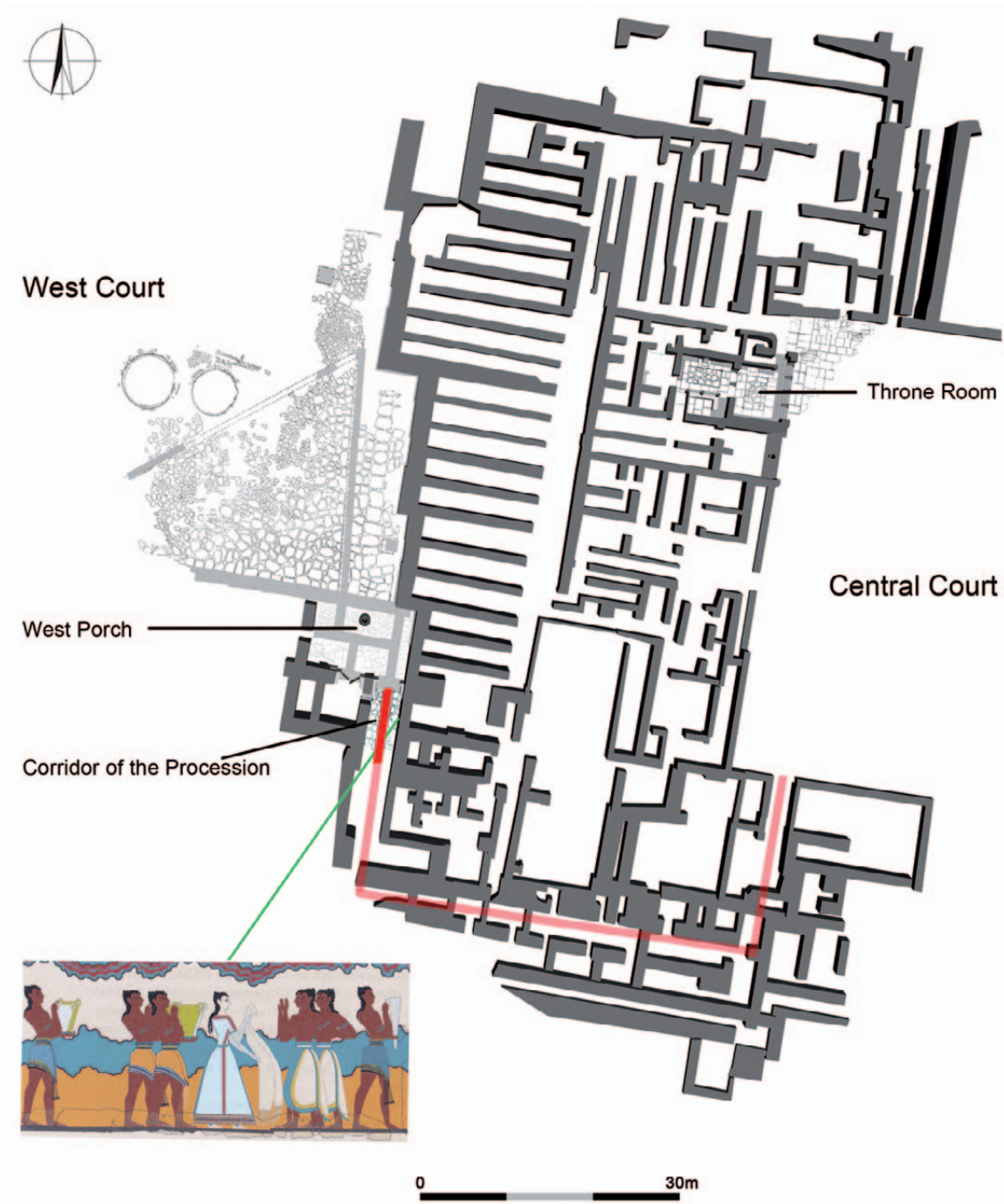
Fig. 2: The west side of Knossos showing the Corridor of the Procession (after Günkel-Maschek 2020, 157, fig. 4.1 and 259, fig. 4.16 [inset reconstruction]. Courtesy of Ute Günkel-Maschek. Red: painted Procession [light red: probable continuation of the painting]; grey in the West Court: causeways).

At Knossos, the raised walkways in the West Court marked performative movement, while signalling processional action towards the palace (Driessen 2004, 79–80; Panagiotopoulos 2006, 35–36, pl. 1; Vander Beken 2010, 145–148; Günkel-Maschek 2020, 162–163, fig. 4.1). Passing the guardian bull at the West Entrance, expressive of Knossian power (Hallager and Hallager 1995), into the Corridor of the Procession, the route, along a bent axis, provides visually sanctioned passage into the palace (Fig. 2). The action in the Procession Fresco, however, is nuanced in its directional thrust. Towards the centre of the east wall, four men face in the opposite direction to greet a female figure processing inwards. A cloth, surviving only in the lower fringe, was

either presented by the men to the female (Boulotis 1987, fig. 8) or was held out by the female (Fig. 2, inset; Günkel-Maschek 2020, fig. 4.16). The artist has subtly distinguished the spatial zones in front of the female figure by slightly raising the ground line of the group of men walking towards her and of the other men walking in the usual direction beyond this group (Günkel-Maschek 2011, 133, fig. 3; 2020, 176–177, 181, 253, 258, 270–271, fig. 4.5). The device of alternating the directions of figures expands the spatial and perhaps also temporal interactions between figures and may well have reflected movements of participants in ritual action.

A distinct engagement between figures in front and behind occurs when a figure looks over their shoulder, as in Xeste 3 (Figs. 6–8), where a youth looks back in the direction from which participants would be approaching, thus engaging with them, the girl with veil looks back at the altar to direct the viewer's gaze towards the focal point, and, on the floor above, a Crocus Gatherer looks back at her co-worker (Doumas 1992, pls. 107–109, 113; 107–108; 116–118; *cf.* Morgan 2000, 936, 941). It is a device that also appears in scenes of men meeting in the Miniature Friezes of Thera (Doumas 1992, pl. 27) and Kea (Morgan 2020, 48, 84, 203–204, cat. 36, fig. 7.12, pl. 4). Just as the change of direction in the Knossos Procession Fresco draws the viewer's attention towards a focal point, so these guide the eye in clarifying meaning and engaging with the potential movements or stasis of the participant.

The Knossos Procession Fresco is preserved only in the lower part, but at least one fragment shows a man with his lower hand at the base of his vessel while the other would have held the handle (Evans 1928, suppl. pl. XXVII; Rehak 1996, fig. 6; Günkel-Maschek 2020, figs. 4.2, 4.16). Some of the other figures in the Procession Fresco are reconstructed in the same manner, based on the better-preserved Cupbearer with his rhyton. The characteristic position of one hand below and one above is a variant of an 'offering gesture' used in Egyptian art for processional figures carrying produce as gifts, in which the lower hand is extended (Wilkinson 1992, 52–53) and the other hand (depending on the object(s) carried) is sometimes poised above in a gesture of praise or protection (Wilkinson 2001, 21, 23). In Aegean art, the size and weight of the object carried determines degree of separation of the hands but does not change the relationship between them (*cf.* Morgan 2000, 933). The Priestess from the door jamb between Rooms 4 and 5 in the West House at Akrotiri (Fig. 3b, inset; Doumas 1992, pls. 24–25) holds her hands in this position, the one below supporting the base of the brazier between fingers and thumb, the one above holding saffron over it in the offering gesture, despite the fact that the vessel has a functionable handle (Morgan 1988, 143, n. 4 on 207; brazier: Papageorgiou 2000, 959–961). All the male figures in Room 3b of the ground floor of Xeste 3 (Fig. 7; Doumas 1992, pls. 109–111) hold their hands in the same position, one below and one above, varied only by what they are carrying. The gesture is performative and together with the directional movements of the figures corresponds to potential ritual actions of human participants as they pass through thresholds and corridors.

Miniature friezes of Kea and Thera

The small scale and high position of Miniatures means that they acted as referents rather than directly engaging the participant. They were to be experienced alternately with the eyeline views of other people in the room and views from the windows. The movements and gestures of the painted figures led the eye through passages of meaning, sometimes echoing the action and views of the participants in the room.

In the Northeast Bastion at Agia Irini, Kea (Fig. 3a), participants would have entered through N.18, where they were enveloped by images of large-scale plants (Morgan 2020, 275–302, fig. 8.9), connecting outside and inside as they lingered or passed through. Their passage into N.20 revealed a completely different spatial experience (Morgan 2020, fig 7.27). There, with no large-scale figures, it was necessary to lift their heads and to turn their bodies in order to take in the various scenes of the Miniature Frieze painted, no doubt as at Akrotiri, above a series of windows. What they saw painted on the east wall – a marsh – most likely correlated with the
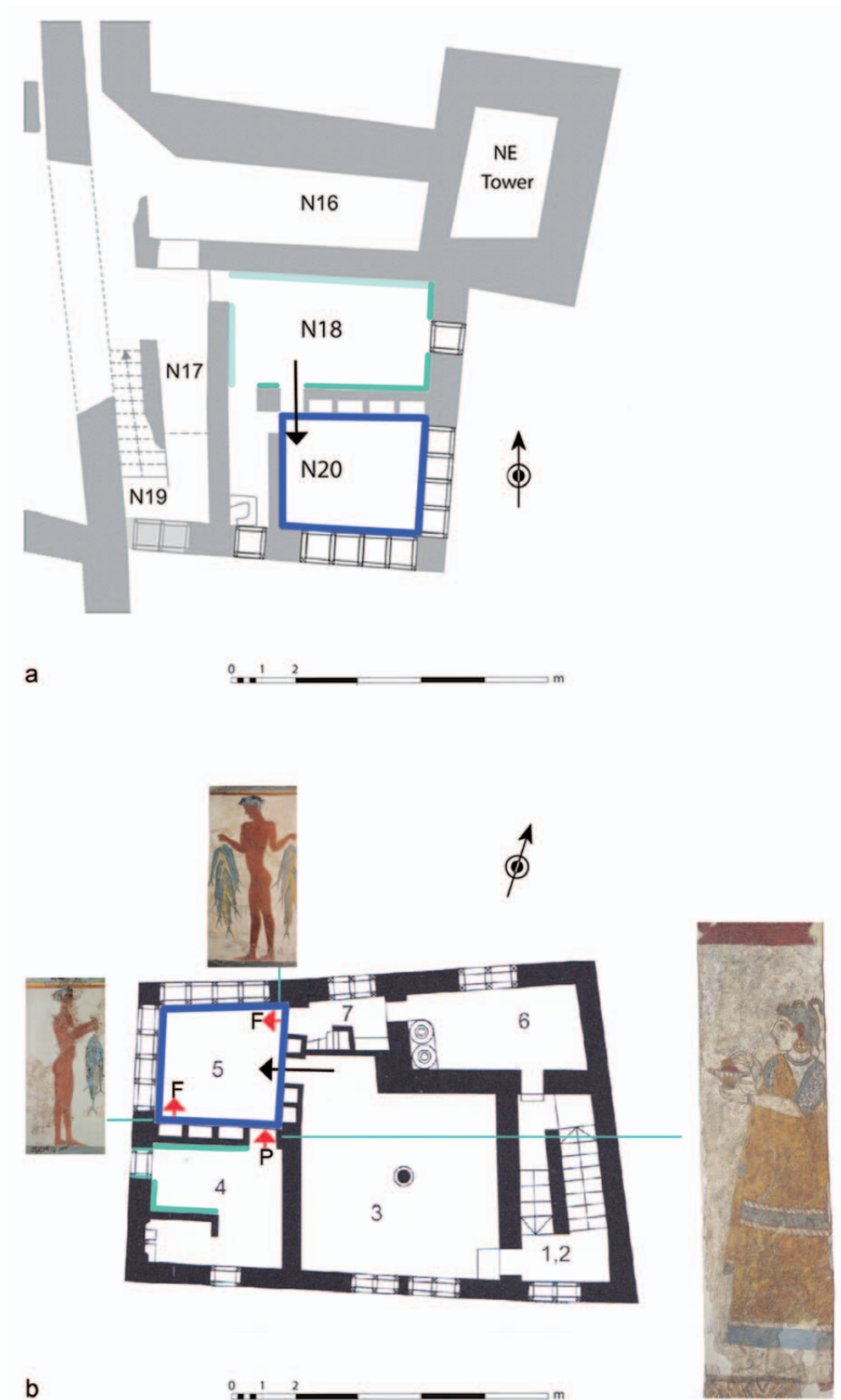
Fig. 3: (a) Northeast Bastion, Agia Irini, Kea (after Morgan 2020, fig. 11.2). (b) West House, Akrotiri, Thera (plan after Palyvou 2005, fig. 62; insets: Doumas 1992, pls. 18–19, 24). Colour Key: blue: Miniature Frieze; green: Panels (light green: not preserved); red arrows: directions of large painted figures; F: Fisherman; P: Priestess; black arrows: entry into the rooms.

view from the eastern windows. What they saw on the south wall – preparations for a feast out-doors and ships on the sea – was potentially what they would have seen through the southern windows. N.20 appears to have been a banquet hall in which visitors from overseas no doubt met with local elites (Morgan 2020, 389–408). In the painted scenes, figures communicate with one another with raised arms and distinct hand gestures (Morgan 2020, 50–53; *cf.* 1988, 117–118 on Thera). Amongst the south wall scenes were men greeting one another bearing gifts (Mor-gan 2020, figs. 7.11–12, pls. 2–3), their movements and gestures perhaps reflecting the meaning of the gathering in the room and echoing the participants' gift-bringing in a visual reinforcement of social performance.

The West House at Akrotiri, Thera (Morgan 1988; Doumas 1992, pls. 18–64; Televantou 1994) uniquely combines small- and large-scale imagery within a single space (Fig. 3 b). In Room 5, the ships in procession, flanked at both ends by townspeople focusing their attention in-wards, move from left to right (east to west). The south wall on which the painting lay faced the sea and probable harbour, thereby reflecting action outside (Morgan 2007a, 120–121). The two large-scale Fishermen on the north and west wall carrying their fish walk towards the north-west corner. They can be seen as guiding the viewer to the corner, where a marine table of offerings was found (Marinatos 1984, 37–38, foldout A, fig. 17; 1993, 216–217) or as facing one an-other "moving out of the walls and into the room towards its centre" (Palyvou 2012, 12–13, fig. 5). Slightly less than life-size, their feet rest on a painted dado, raising their heads to a height that relates to the human body (Palyvou 2012, fig. 4; *cf.* Palyvou 2000, figs. 4–6 and 2005, figs. 241–243 for this principle at Akrotiri). The design of the architecture ensures that the parti-cipant enters the centre of the room (Palyvou 2012, 11, fig. 3) guided in direction by the left-facing Fisherman at the north-east corner, following in his footsteps. At the same time, on enter-ing the room and turning towards the south, the culminating scene of the ships would have been flanked by two figures facing the participant: the other Fisherman at the south end of the west wall, immediately following the Ship Procession, and the Priestess on the door jamb between Room 4 (with its large-scale ships' cabins but no other access) and Room 5, seemingly entering the room. The participant as they turned on entering was greeted by these figures, both facing in-wards and both carrying an offering. The beginning of the Ship Procession is heralded by the Priestess, who makes an offering that would in life have taken place at the stern prior to the movement of the ships (Morgan 1988, 143–144); at the end of the procession of ships the Fish-erman at the corner of the adjacent wall leads the eye round to where the two Fishermen would, in the mind of the viewer, meet. The movements of the three large scale figures – all bringing of-ferings relating to the sea and the ships – lead the viewing patterns of the participant in the room. The Priestess, hands holding incense in the offering gesture, visually and conceptually linked the more secluded Room 4 and its Stern Cabins with Room 5 and its ships, leading the participant through the threshold.

Room for the Goddess: Agia Triada and Phylakopi

In contrast to Egyptian tomb chapels, where large-scale figures and small-scale registers coexist, in the Aegean (the West House excepted) large- and small-scale figures were usually in separate build-ings. Their contexts and functions are distinct. Rooms with large- or medium-scale figurative paintings of the LM I A/LC I period (Agia Triada, Thera, Melos,) were relatively small, secluded, and invariably interior (Morgan 2016, 188). These paintings focus on the realms of ritual and myth, incorporating the participant into those realms through the directional movements and ges-tures of the painted figures and enhancing participatory experience through mimesis.

In Room 14 at Agia Triada (Fig. 4) the participant entering the tiny space would have been enveloped by the three painted walls (Militello 1998, 250–282). Access and light were con-trolled through the multiple pier-and-door partitions on three sides of adjacent Room 13, itself painted with a landscape (Halbherr et al. 1977, 88–89, fig. 54; Militello 1998, 72–73, pl. 21 b; Vlachopoulos 2021, 276, pl. LXV b). The narrow rectangular room, only 1.60 m wide, suitable
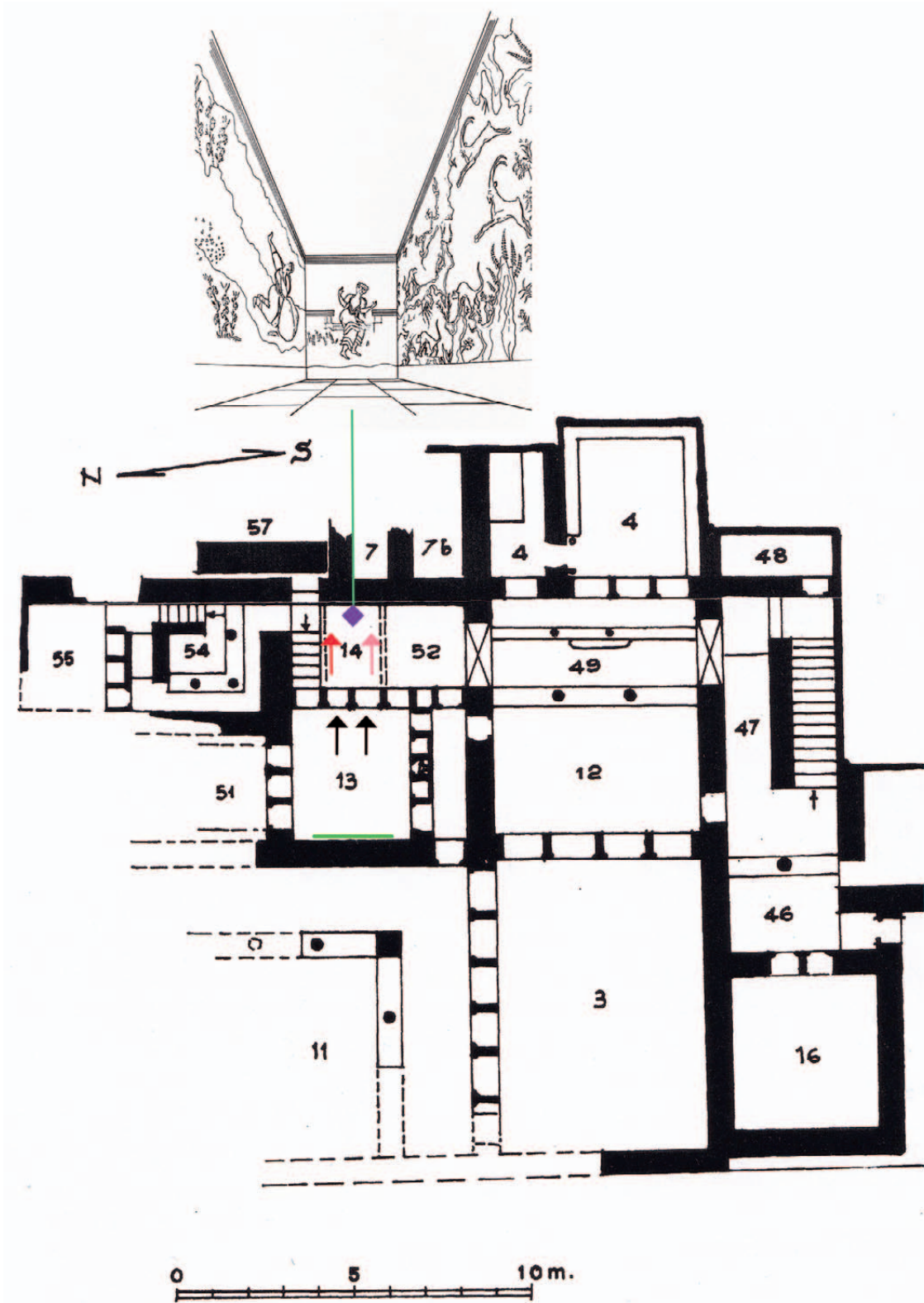
Fig. 4: Rooms 13 and 14 at Agia Triada (plan after Militello 1998, 67, fig. 4; inset: Militello 2000, 79, fig. 1. Courtesy of Pietro Militello). Key: red arrows: directions of painted figures (pink: main direction of animals); purple: central figure; green in Room 13: probable location of landscape; black arrows: passage into Room 14.

for a single worshipper (Rehak 1997, 174), was painted on the left wall with a kneeling female figure (and probably a second figure: Militello 1998, 119, V8; Militello and La Rosa 2000, 993; Jones 2014, 493–494, pl. CLIV b, d) and on the right with animals, both in a landscape. The protagonists of the two scenes led the eye to the short end wall on which a female figure, surely the Goddess, stood with bent knees before a platform (Militello 1998, pls. 3 a, D, E; 2018; Vlachopoulos 2021, pl. LXV a). The upper parts of the figures have not been preserved but the kneeling lady on the left wall clearly kneels towards the right, hence facing the Goddess. She has been reconstructed with head facing back (Militello 1998, pl. 2; *cf.* Blakolmer 2012, 94–96) or facing forward (Jones 2014, pl. CLIV a). In the former, she would be invoking a presence behind her, the direction from which the participant would enter the room. In either case, the direction of her kneeling posture guides the gaze of the viewer towards the end wall. The Goddess sways the lower part of her body to the right but turns her upper body to face the spectator approaching from the doorway. Her arms were raised. Her head, which has not survived, may have been turned either to the left, back towards the kneeling woman (Militello 1998, pl. 4), or to the right towards the animals (Cameron 1987, 326, fig. 10 [accidentally reversed]; Jones 2014, pls. CLIV f, CLV b; Blakolmer 2012, 94–96). Either way, the profile view of the head was an idiom that belies intention in terms of viewer response. Given the spatial position on the end wall, the frontal torso surely indicates that the Goddess is to be thought of as *facing* the spectator as they enter the room. (Compare the impact of the Throne Room at Knossos (most recently Galanakis et. al. 2017, 87–91; Günkel-Maschek 2020, 415–557) when the throne was occupied by a living person, seen in side-view as the participant approached and frontally as the participant stood before them.) Since the painted Goddess could not be depicted with frontal face according to the Minoan use of this idiom as liminal and associated with death (Morgan 1995), the opportunity

Fig. 5: The Pillar Crypt complex at Phylakopi (Morgan, in press b, fig. 1 and pl. XXII [inset reconstruction]; plan after Renfrew et al. 2007, 48, fig. 3.29).

for eye-contact between participant and deity was excluded (Hägg 1985, 213). However, the kneeling woman directs the participant, who then takes her place before the Goddess. Within the narrow space of Room 14, the bodies of the painted figures complement the movements inward and ahead and perhaps, for all we know, the gestures of the participant of the ritual.

A similar participatory role may have been played by the female figures in the Presentation scene of Room 6 of the Pillar Crypt Complex at Phylakopi on Melos (Fig. 5; Morgan 2007 b, 384–386; in press b, pls. XX–XXIV a). A seated female, most likely a Goddess, holds out a cloth which she appears to have received as an offering from a second female figure who bends forward towards her. Unfortunately, it is not clear to which wall this belonged (the Flying Fish frieze came from the same room) but the room is at the end of a series of three and hence secluded and there can be little doubt that the Presentation was the focal point encountered by participants.

At Agia Triada, Phylakopi and Xeste 3, the action culminates with a female, most likely a Goddess. In each, the secluded position heralded the focal point in the movement of participants through the building. And in each, the torso of the Goddess is partially or fully frontal, intimating that she turns not only to the figure painted before her in a narrative gesture but also towards the living participant who has reached and responds to the focal point of the series of images.

Experiencing Xeste 3

Much has been written about the phenomenal paintings of Xeste 3 (Figs. 6–8), in particular by Andreas Vlachopoulos, recently with stunning reconstructions of the layouts of the walls (Vlachopoulos 2008, 2016, 2021; Vlachopoulos and Zorzos 2014). I have previously focused on the boys on the ground floor (Morgan 2000, 2016). Each zone of the building was marked by indicators of participatory pauses and movement. As at Agia Triada, Phylakopi, and the House of the Ladies at Akrotiri, it was necessary to walk through the building before reaching the pivotal image, in each case with plants or landscape in an adjacent room. But at Xeste 3, figurative paintings accompanied the participant from start to finish, leading gradually and in multiple directions towards the focal point of revelation.

In the vestibule, pairs of young men grappled a bull (south wall) and a wild goat (north wall, Fig. 6 inset; Papageorgiou 2018, 2021; Vlachopoulos 2021, 253–256, pl. LX a), reminiscent of the charging bulls at the entrances at Knossos as well as the hunt scenes at the entrances to some Egyptian tombs, where the scenes had an apotropaic function of expelling chaos from the interior of the ritual space. Danger is averted from both directions for the participant, whether their destination is up or down the stairs or inwards on the ground floor. The young men simultaneously lead the way for the participants and protect the interior space from the outside world.

Walking into Room 4 on the ground floor, participants were surrounded by pier-and-door partitions affording choices of direction. Ahead lay the ritual zone of Room 3. Much discussed in terms of representations of what have been seen as initiation rites, the area is of fundamental interest in terms of potential movements and responses of human participants to the figures painted on the walls. Room 3, with its pier and door partitions, both on the ground and the first floor, exemplifies the principle of concealing and revealing. Crucially controlling light, visibility and access, the architecture was coordinated with the positions, postures, gestures and directional movements of the painted figures, anticipating the passage of living people through the spaces.

Room 3 on entry was lit by two windows on the right and controlled by pier and door partitions on the other three sides. On the left (3 b) these marked two narrow passageways, on the walls of which were painted three young males (Fig. 7; Doumas 1992, pls. 109–115). Participants would have walked in single file in such narrow spaces. In the *left* (south) passageway, the youngest boy (defined by diminutive size, yellow skin, and shaved head) has his hands in a variant of the offering gesture holding a vessel (apparent only as a faint outline) as he moves forward behind an older youth (Figs. 7, left inset; Doumas 1992, pls. 109, 112–113). The boy's knees are flexed but there is a feeling of concentration rather than fluidity in his movement and his
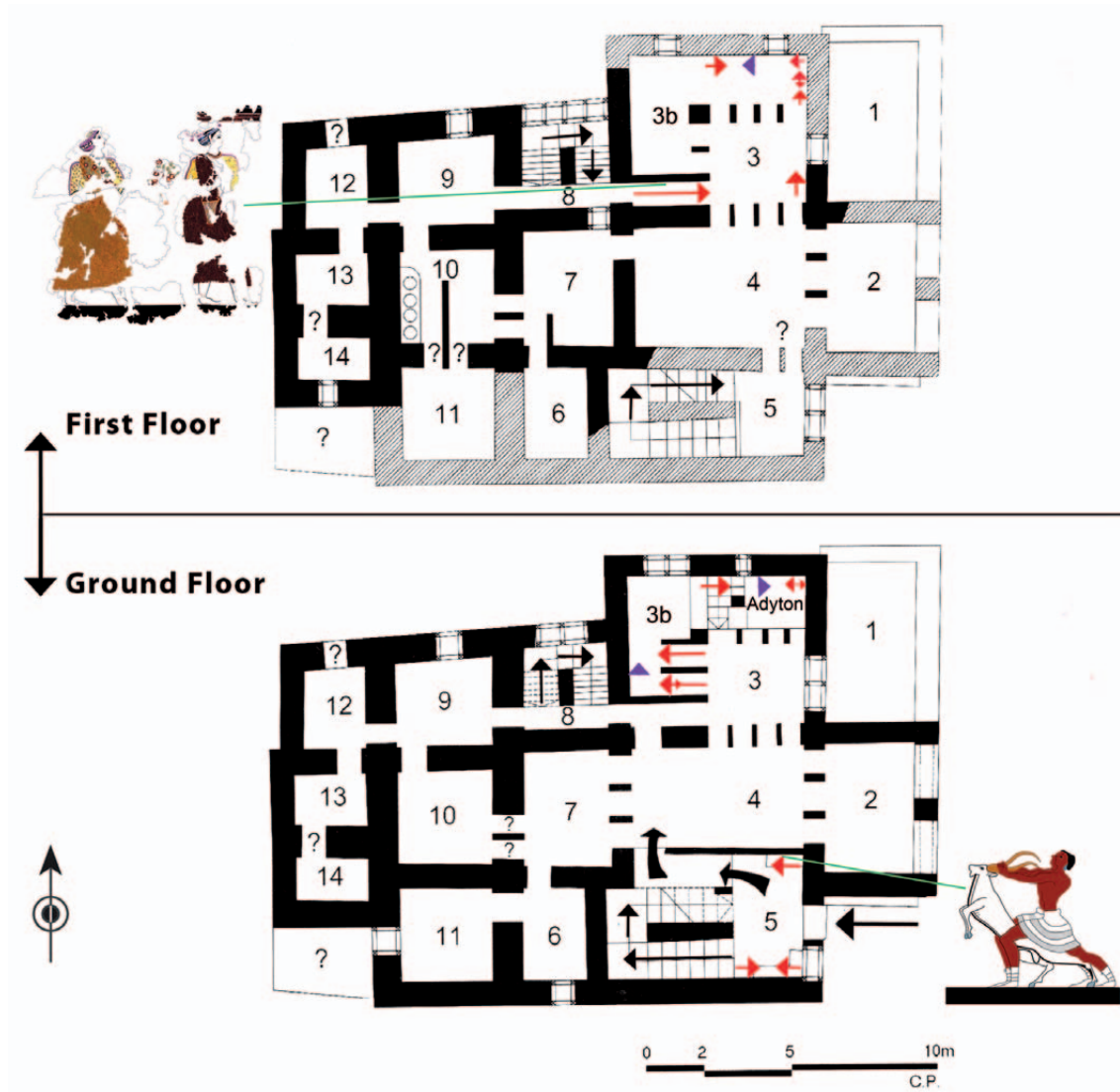
Fig. 6: Ground and first floor of Xeste 3 (plan after Palyvou 2005, 62). Key: Red arrows: directions of painted figures; small red arrows: figure turning head back; Purple triangles: central figures. Black arrows: passage through the building (excluding pier and door partitions, which offer multiple choices).

mouth is closed. In contrast, the animated movements of the youth in front, whose mouth is open in speech, signals not simply processional direction but communication with the human participant entering the passage. His shoulders are turned to the front and his head turns back. Though the eye is not preserved, the angle of his head indicates that he looks not down at the small boy but at the eye level of a person entering the passageway. His legs actively stride forward and with an open-angled offering gesture he holds out a patterned cloth, the curves of which echo those of his body. It is as though he calls back to the participant as they enter the passage, leading the way through his movement, signalling offering through his gesture, and speaking, not to the boy but to the viewer, as he moves. Attributed to the *right* (north) passageway was a male figure between the ages of the boy and the older youth (Doumas 1992, pls. 111, 115; Palyvou 2005, 166, fig. 245; Morgan 2016, pl. LXIV b). He holds a large gold vessel, also in a gesture of offering, his head erect, his mouth closed. Like the young boy, he is a processional figure, contained in his movements and apparently silent. The attribution of this figure to the northern passageway implies that both passageways were used to enter the ritual space, though presumably this was also the exit.

110
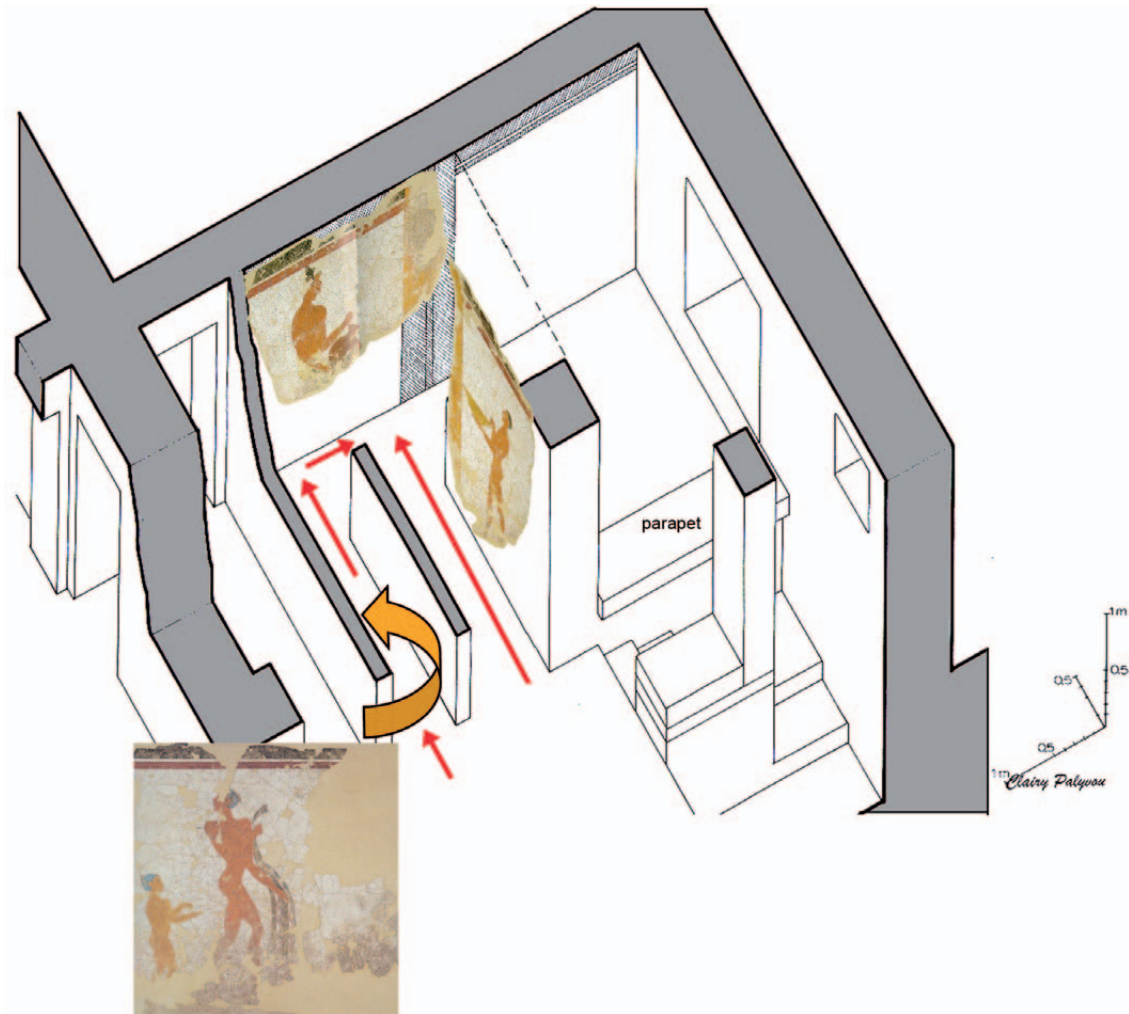
Fig. 7: Isometric drawing of Room 3b on the ground floor, showing the positions and directions of the figures (after Palyvou 2005, fig. 245 and Morgan 2016, pl. LXIVb. Courtesy of Clairy Palyvou).

The central partition that separated the two passageways would have at least partially obstructed from view the painting on the west wall of a mature man holding a large water jug, either seated or more likely standing with flexed knees (Doumas 1992, pls. 110, 114; Vlachopoulos 2019, pl. CLXV). He was both larger and on a higher level of the wall than the boy and youths (his head touching the border bands) and looks down, his mouth open in speech. The partition conceals, the boy and youths lead, the man is revealed. Movement, eyes, mouths open in speech, and no doubt the gesture of offering all serve to correlate painted imagery with the perambulation of human action.

The same is likely to have been the case with the girls depicted in the Adyton (Figs. 6, 8 below; Doumas 1992, pls. 100–108), glimpsed through four doorways separated by piers and reached via steps on the left (Marinatos 1984, fig. 57; Paliou, Wheatley and Earl 2011, fig. 5; Günkel-Maschek 2020, fig. 4.8). It was only from the top of the steps or through the level of the pier-and-door partitions that the participant would have been eye level with the figures (Palyvou 2005, 165, fig. 243). But only on entering would all the figures have been visible. The two flanking females, one holding a necklace, the other a veil, do not actively engage with the central seated, wounded female, as was the case with the boys and man in 3b. There, however, the youths with their vessels and cloth would have done so had they turned the corners at the ends of the passageways, a route that living participants would have followed. The youths, the man, and the two flanking girls are painted against plain white walls, indicative of internal space that
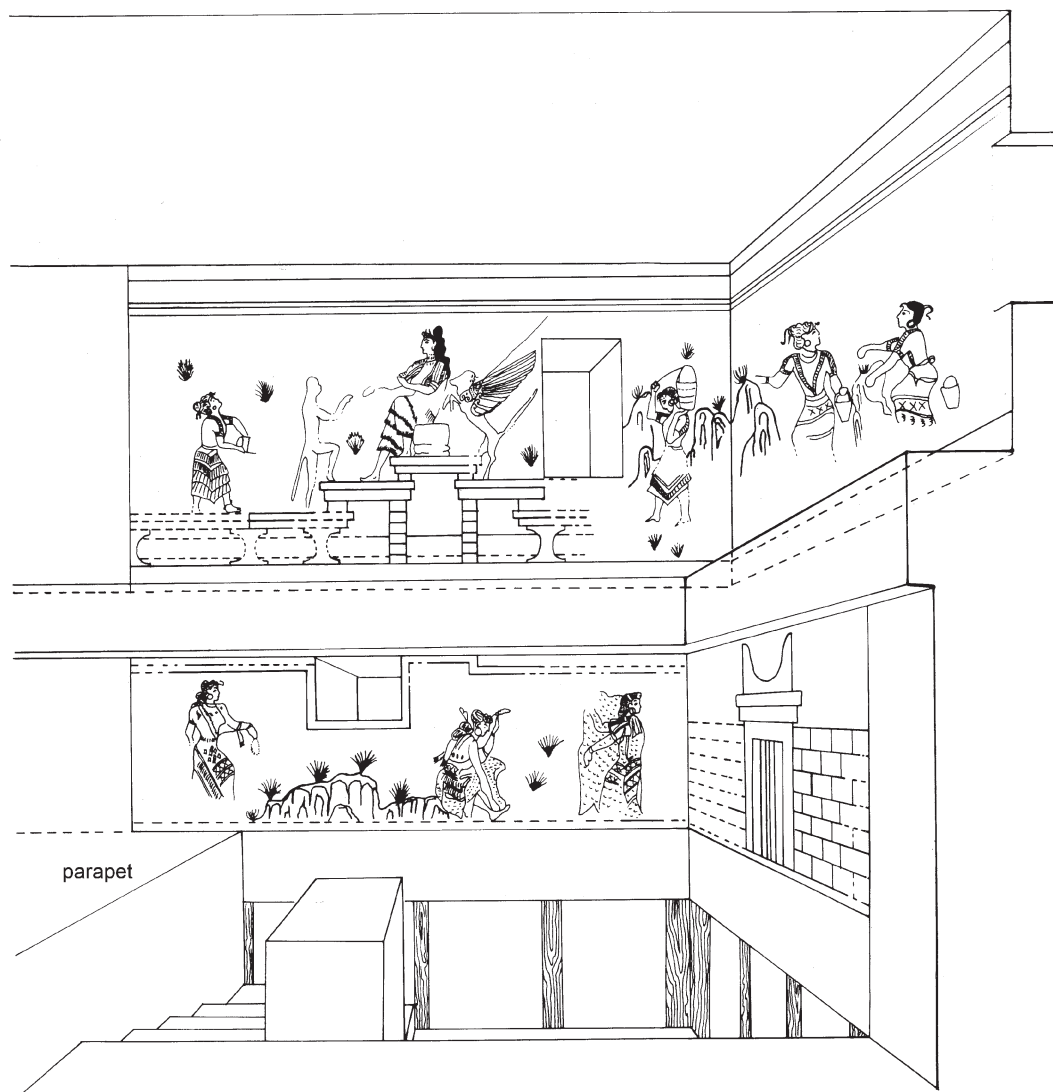
Fig. 8: Drawing showing the relationships between figures in the ground (adyton) and first floor of Room 3, Xeste 3. Drawing: Clairy Palyvou (after Immerwahr 1990, 60, fig. 20).

would enable the viewer to identify directly with their movements. In contrast, the central figure, the wounded female, sits on multi-coloured rocks dotted with crocuses, rocks also descending from above. This landscape relates her directly to the scenes in Room 3 above, as does the centrality of her position, corresponding to that of the seated Goddess in the Presentation above, with whom she is identified by Nanno Marinatos (2016, 8–9). Though the woman with necklace walks towards the wounded female, she is separated from her spatially by a small window (or niche: Doumas 2005, 76), just as a window separates the Crocus Gatherer from the Goddess on the north wall above (Vlachopoulos 2016, pl. CXIV, CXV a). Significantly, the painted landscape lies beneath the small window, symbolically linking interior and exterior space. We may imagine, therefore, that the woman on the left holding the necklace and the girl on the right with veil looking back at the altar on the adjacent wall are the painted equivalents of the human participants, whereas the wounded female transports the mind of the viewer to the outside and to the realm of myth.

Access to the male and female parts of the ritual space were separate and closely controlled. However, although the configuration of the northern part of 3b remains unclear, it is apparent that in the north-east part, beyond the northern passage wall, there was a low parapet that linked

3 b with the area of the steps that led into the adyton (Palyvou 2005, 165, 166, figs. 243, 245; Morgan 2016, pl. LXIV b). Perhaps this parapet served as an offering table or a place to store water for the rituals in both male and female areas (Morgan 2016, 193). Unless covered by a moveable curtain, the parapet would permit visibility from 3 b to the adyton, providing a direct view of the focal point of the altar painted on the east wall – a shrine within a shrine – towards which the girl with veil turns her head to view (Vlachopoulos 2016, pl. CXIV). One can only imagine the ritual movements of participants (presumably male) through 3 b as the mystery of the altar dripping blood and vegetation (in the presence of females) was revealed.

Both male and female sections of Room 3 closely integrate wall paintings with architectural space, creating links between painted figures and human participants through directional flow – through doorways, along passageways, down steps, at the parapet – towards focal points. The altar is the crucial link. Revealed visibly from either side of the parapet, the heads of the girl with veil and the youth with cloth turn back in its direction, suggesting that the altar may have been the ultimate focal point for the performance of the participants.

Ascending the secluded subsidiary staircase to the west of Room 3, ritual movement continued on the upper floor with the Procession of Mature Ladies along Corridor 8 leading to Room 3 (Fig. 6 inset; Vlachopoulos and Zorzos 2014, pls. LXI–LXIV). Two on each wall, their mouths closed in solemnity and silence, the Ladies walk towards the end, east wall at the entrance to Room 3. Each has flowers and one (on the south wall) wears an elaborate skirt of rocks and swallows, akin to that worn by the seated figure in the Phylakopi shrine (Fig. 5 inset; Morgan, in press b, pl. XXIV). They lead the way, but clearly the path they take must have been restricted to those initiated into the rituals enacted in Room 3 at this level. On the end wall, facing left, hence into Room 3, was a fifth woman, here with flying fish on her garment, again linking her with the shrine at Phylakopi.

On this floor, the multiple pier and door partitions to north and west controlled visibility without physically separating the areas through passageways or a parapet. It would therefore have been possible for perambulation to begin in the western part, with its marsh landscape with ducks and dragonflies, then to turn the corner to reveal the scenes of Crocus Gatherers and Presentation to the Goddess (Figs. 6, 8; Vlachopoulos and Zorzos 2014, pl. LXV; Vlachopoulos 2021, pl. LXIVa). The fact that there are no human figures in the western part, however, means there was no directional guidance as to movement. It was, therefore, most likely through the four doorways on the north side that the revelation of the Presentation to the Goddess was encountered (Günkel-Maschek 2020, fig. 10 a). On the east wall, above the image of the altar on the floor below, were the two animated Crocus Gatherers, communicating with eye contact and open mouths. They 'tell the story' of how the offerings to the Goddess were collected. A third Crocus Gatherer on the east edge of the north wall, behind the window, continues that narrative thread of bringing the stigmas to the Goddess. She links the two walls but though she walks in her direction she lies behind the Goddess, in her own space, separated from the divine realm by a window while directing the gaze of the participant from the scene of the Crocus Gatherers to the Presentation. This is the culminating scene of the entire programme (though reflected in the cosmological abstractions of the top floor above: Marinatos 2016, 5–7; 2018; Vlachopoulos 2016, 378–383 pls. CXV b–CXVIII): the seated Goddess, who, like the man in 3 b and the wounded female in the adyton on the ground floor, looks down, here in direct eye contact with the girl who tips the stigmas out of her basket to be presented to the Goddess by the intermediary monkey situated between them. The girl holds the basket in a variant of the offering gesture as she tips the contents out. The scene – girl, monkey, Goddess, protective griffin – is framed by two windows, which set the action outside that of the marsh to the left and the rocky landscape to the right, while continuing the theme of crocus symbolically in repetitive clumps on the white background. As on the ground floor, which doors were open and which closed affected visibility. Revelation was controlled. The girl on the left of the composition is the link with the human participant, the final human figure in the visual narrative, now with direct eye contact with the God-

dess. The Presentation is the culminating mystery in the cycle of paintings, revealed to the (presumably female) participants, whose way had been guided by the actions of the painted figures and the controlled spaces of the architectural plan.

Conclusion

Mural art guides the participant through architectural and ritual space, painted figures acting as focusing devices through their movements, gestures and relative placements. Human action is stimulated by responses to the interrelationships between built space and figurative imagery that surrounds the body. Processional figures moving along walls with their offering gestures may directly guide participants through passageways and thresholds, while interrelationships between figures in complex scenes more subtly but no less powerfully act as directives of viewing.

The structural patterns of ritual movement through architectural space cited in the examples at the beginning of this essay resonate with what we know of Aegean wall paintings. In Egyptian tomb chapels, as in temples, space and painted figures define movement inwards and, in the case of Rekhmire, upwards. In Byzantine churches, the body moves inwards while the eye reaches upwards in zoned hierarchy from human to divine realms. In Xeste 3 the participant moved both inwards and upwards, from the physicality of earth (hunters) through intermediary zones (ritual and mythological action) to the realm of the divine, revealed in the scene of Presentation to the Goddess. The path was led by communicating figures. Wonder is aroused through revelation.

Painted buildings such as those of Knossos, Agia Triada, Akrotiri and Phylakopi, in which access and light were controlled, were marked by pauses and perambulation, choices of direction (in Xeste 3), concealing and revealing. Focal points were structured through the architectural plan, the painted figures communicating with one another and with the participants in ritual action through their gestures, stance and movements. In the Aegean as elsewhere, programmes of paintings came to life through the bodily movements and directed viewing of the human participants.

References

Adams, E. 2013. "Representing, objectifying and framing the body at Late Bronze Age Knossos." *BICS* 56 (1): 1–25.

Barasch, M. 1990. *Giotto and the language of gesture.* Cambridge: Cambridge University Press.

Blakolmer, F. 2007. "Minoisch-mykenische 'Prozessionsfresken': Überlegungen zu den dargestellten und den nicht dargestellten Gaben." In *Keimelion. Elitenbildung und Elitärer Konsum von der Mykenischen Palastzeit bis zur Homerischen Epoche,* edited by E. Alram-Stern and G. Nightingale, 41–57. Vienna: Verlag der Österreichischen Akademie der Wissenschaften.

Blakolmer, F. 2008. "Processions in Aegean iconography II: who are the participants?" In *Dais: the Aegean feast,* edited by L. A. Hitchcock, R. Laffineur, and J. Crowley, 257–268. *Aegaeum* 29. Liège and Austin: Université de Liège and University of Texas at Austin.

Blakolmer, F. 2012. "Image and Architecture: reflections of mural iconography in seal images and other art forms in Minoan Crete." In Panagiotopoulos and Günkel-Maschek, eds. 2012, 84–114.

Bloomer, K., and Ch. W. Moore. 1977. *Body, memory and architecture.* New Haven: Yale University Press.

Boulotis, Ch. 1987. "Nochmals zum Prozessionsfresko von Knossos: Palast und Darbringung von Prestige-Objekten." In Hägg and Marinatos, eds. 1987, 145–156.

Boulotis, Ch. 2005. "Πτυχές θρησκευτικής έκφρασης στο Ακρωτήρι" ("Aspects of Religious Expression at Akrotiri"). ΑΛΣ 3: 20–75.

Cameron, M. A. S. 1970. "New restorations of Minoan frescoes from Knossos." *BICS* 17: 163–166.

Cameron, M. 1978. "Theoretical interrelations among Theran, Cretan and mainland frescoes." In *Thera and the Aegean World.* Vol. I, edited by Ch. Doumas, 579–592. London: Thera and the Aegean World.

Cameron, M. A. S. 1987. "The 'palatial' thematic system in the Knossos murals. Last notes on Knossos frescoes." In Hägg and Marinatos, eds. 1987, 321–328.

Davies, N. de Garis. 1944. *The tomb of Rekh-mi-Rē at Thebes.* New York: Metropolitan Museum of Art Egyptian Expedition.

Doumas, Ch. 1992. *The wall-paintings of Thera.* Athens: The Thera Foundation, Petros M. Nomikos.

Doumas, Ch. 2005. "La répartition topographique des fresques dans les bâtiments d'Akrotiri à Théra." In *L'artisan crétois. Recueil d'articles en l'honneur de Jean-Claude Poursat, publié à l'occasion des 40 ans de la découverte du Quartier Mu,* edited by I. Bradfer-Burdet, B. Detournay, and R. Laffineur, 76–81. *Aegaeum* 26. Liège and Austin: Université de Liège and University of Texas at Austin.

Driessen, J. 2004. "The Central Court of the palace at Knossos." In *Knossos: palace, city, state,* edited by G. Cadogan, E. Hatzaki, and A. Vasilakis, 75–82. *BSA Studies* 12. London: British School at Athens.

Evans, A. 1928. *The Palace of Minos at Knossos.* Vol. 2. London: Macmillan.

Galanakis, Y., E. Tsitsa, and U. Günkel-Maschek. 2017. "The power of images: re-examining the wall paintings from the Throne Room at Knossos." *BSA* 112: 47–98.

Goodison, L. 2001. "From tholos tomb to throne room: perceptions of the sun in Minoan ritual." In *Potnia. Deities and religion in the Aegean Bronze Age,* edited by R. Laffineur and R. Hägg, 77–88. *Aegaeum* 22. Liège: Université de Liège.

Goodison, L. 2004. "From tholos tomb to throne room: some considerations of dawn light and directionality in Minoan buildings." In *Knossos: palace, city, state,* edited by G. Cadogan, E. Hatzaki, and A. Vasilakis, 339–350, *BSA Studies* 12. London: British School at Athens.

Günkel-Maschek, U. 2011. "Visual Basic? Überlegungen zur Korrelation von Ikonographie und Raumfunktion in der minoischen Architektur." In *Österreichische Forschungen zur Ägäischen Bronzezeit 2009,* edited by F. Blakolmer, C. Reinholdt, J. Weilhartner, and G. Nightingale, 125–136. Vienna: Phoibos Verlag.

Günkel-Maschek, U. 2020. *Minoische Bild-Räume. Neue Untersuchungen zu den Wandbildern des spätbronzezeitlichen Palastes von Knossos.* Heidelberg: Heidelberg University Publishing.

Hägg, R. 1985. "Pictorial programmes in the Minoan palaces and villas?" In *L'iconographie minoenne,* edited by P. Darcque and J. C. Poursat, 209–217, *BCH Suppl.* 11. Athens: École française d'Athènes.

Hägg, R. 2001. "Religious processions in Mycenaean Greece." In *Contributions to the archaeology and history of the Bronze and Iron Ages in the eastern Mediterranean. Studies in honour of Paul Åström,* edited by P. M. Fischer, 143–147. *Österreichisches Archäologisches Institut Sonderschriften* 39. Vienna: Österreichisches Archäologisches Institut.

Hägg, R., and N. Marinatos, eds. 1987. *The function of the Minoan palaces, ActaAth* 4°, 35. Stockholm: Paul Åströms Förlag.

Halbherr, F., E. Stefani, and L. Banti, 1977. "Haghia Triada nel periodo tardo-palaziale." *ASAtene* 55: 63–98.

Hallager, B., and E. Hallager 1995. "The Knossian bull – political propaganda in Neopalatial Crete?" In *Politeia. Society and state in the Aegean Bronze Age,* edited by R. Laffineur and W.-D. Niemeier, 547–555. *Aegaeum* 12. Liège and Austin: Université de Liège and University of Texas at Austin.

Jones, B. R. 2014. "Revisiting the figures and landscapes on the frescoes at Hagia Triada." In *Physis. L'environnement naturel et la relation homme-milieu dans le monde égéen protohistorique,* edited by G. Touchais, R. Laffineur, and F. Rougemont, 493–497. *Aegaeum* 37. Leuven and Liege: Peeters.

Letesson, Q. 2012. "'Open day gallery' or 'private collections'? An insight on Neopalatial wall paintings in their spatial context." In Panagiotopoulos and Günkel-Maschek, eds. 2012, 27–61.

Maguire, H. 1998. "The cycle of images in the church." In *Heaven on Earth. Art and the church in Byzantium,* edited by L. Safran, 121–151. University Park, PA: Pennsylvania State University Press.

Marinatos, N. 1984. *Art and religion in Thera: reconstructing a Bronze Age society.* Athens: D. & I. Mathioulakis.

Marinatos, N. 1989. "The Minoan harem: the role of eminent women and the Knossos frescoes." *Dialogues d'histoire ancienne 15 (2): 33–62.*

Marinatos, N. 1993. *Minoan religion. Ritual, image, and symbol.* Columbia, SC: University of South Carolina Press.

Marinatos, N. 2016. "Myth, ritual, symbolism and the solar goddess in Thera." In *Metaphysis. Ritual, myth and symbolism in the Aegean Bronze Age,* edited by E. Alram-Stern, F. Blakolmer, S. Deger-Jalkotzy, R. Laffineur, and J. Weilhartner, 3–11. *Aegaeum* 39. Leuven and Liège: Peeters.

Marinatos, N. 018. "The waz-spirals of Xeste 3, Thera: regeneration and solar symbolism." In Χρωστήρες / Paintbrushes. Wall-painting and vase-painting of the second millennium BC in dialogue, edited by A. Vlachopoulos, 76–85. Athens: University of Ioannina and Hellenic Ministry of Culture and Sports – Archaeological Receipts Fund.

Marinatos, N. 2020. "A Minoan riddle: suggestions about the religious standard on a fresco from Xeste 4, Akrotiri." In *Current Approaches and New Perspectives in Aegean Iconography,* edited by F. Blakolmer, 191–203. *Aegis* 18. Louvain-la-Neuve: Presses Universitaires de Louvain.

Mauss, M. 1935/2005. "Techniques of the body." In *The body: a reader,* edited by M. Fraser and M. Greco, 73–77. *Routledge Student Readers* 6. London: Routledge.

Militello, P. 1998. *Haghia Triada,* Vol. I: *Gli Affreschi. Monografie della Scuola Archeologica di Atene e delle Missione Italiane in Oriente* 9. Padua: Bottega d'Erasmo.

Militello, P. 2000. "Nilotic models and local reelaboration: the Hagia Triada example." In Κρήτη − Αίγυπτος. Πολιτισμικοί δεσμοί τριών χιλιετιών, edited by A. Karetsou and M. Andreadaki-Vlazaki, 78–85. Athens: Υπουργείο Πολιτισμού.

Militello, P. 2018. "Altari, piattaforme, stendardi e festoni. Una nota sull'iconografia delle immagini cultuali minoiche", *RdA* 42: 13–26.

Militello, P., and V. La Rosa. 2000. "New data on fresco painting from Ayia Triada." In Sherratt, ed. 2000, 991–997.

Morgan, L. 1988. *The miniature wall paintings of Thera. A study in Aegean culture and iconography.* Cambridge: Cambridge University Press.

Morgan, L. 1995. "Frontal face and the symbolism of death in Aegean glyptic." In *Sceaux minoens et mycéniens,* edited by W. Müller, 135–149. *CMS Beiheft* 5. Berlin: Gebr. Mann Verlag.

Morgan, L. 2000. "Form and meaning in figurative painting." In Sherratt, ed. 2000, 925–946.

Morgan, L. 2007a. "Paintings, harbors, and intercultural relations." In *Krinoi kai Limenes. Studies in honor of Joseph and Maria Shaw,* edited by Ph. P. Betancourt, M. C. Nelson, and H. Williams, 117–129. *Prehistory Monographs* 22. Philadelphia: INSTAP Academic Press.

Morgan, L. 2007b. "The painted plasters and their relation to the wall paintings of the Pillar Crypt." In Renfrew *et al.* 2007, 371–399.

Morgan, L. 2016. "The transformative power of mural art: ritual space, symbolism, and the mythic imagination." In *Metaphysis. Ritual, myth and symbolism in the Aegean Bronze Age,* edited by E. Alram-Stern, F. Blakolmer, S. Deger-Jalkotzy, R. Laffineur, and J. Weilhartner, 187–197. *Aegaeum* 39. Leuven and Liège: Peeters.

Morgan, L. 2019. "Art, culture and memory: a case study." In Μνήμη/*Mneme. Past and memory in the Aegean Bronze Age,* edited by E. Borgna, I. Caloi, F. M. Carinci, and R. Laffineur, 371–376, *Aegaeum* 43. Leuven and Liège: Peeters.

Morgan, L. 2020. *Wall paintings and social context. The Northeast Bastion at Ayia Irini. Keos* XI. Philadelphia: INSTAP Academic Press.

Morgan, L., in press a. "Hunt scenes in context: Tell el Dabᶜa and the Theban tombs." In *Fifty years of excavation and research at Tell el-Dabᶜa/Avaris,* edited by M. Bietak, E. Czerny, K. Kopetzky, and S. Prell. Vienna: Österreichische Akademie der Wissenschaften.

Morgan, L., in press b. "The wall paintings of Phylakopi and the programme of the Pillar Crypt Complex." In *Phylakopi, Melos,* edited by R. Barber and D. Evely. London: British School at Athens.

Morgan, L., in preparation. *The power of paintings. Mural art and ritual space in ancient Egypt and the Aegean.*

Morris, Ch. 2001. "The language of gesture in Minoan religion." In *Potnia. Deities and religion in the Aegean Bronze Age,* edited by R. Laffineur and R. Hägg, 245–251. *Aegaeum* 22. Liège: Université de Liège.

Ousterhourt, R. 1998. "The holy space: architecture and the liturgy." In *Heaven on earth. Art and the church in Byzantium,* edited by L. Safran, 81–120. University Park, PA: Pennsylvania State University Press.

Paliou, E. 2008. "An autonomous agent approach to the investigation of intra-site movement and visibility: the visual consumption of Theran murals from the public spaces of LBA Akrotiri (Thera, Greece)." In *Layers of perception,* edited by A. Posluschny, K. Lambers, and I. Herzog, 328–335. *Kolloquien zur Vor- und Frühgeschichte* 10. Frankfurt: Römisch-Germanische Kommission des Deutschen Archäologischen Instituts.

Paliou, E. 2011. "The communicative potential of Theran murals in Late Bronze Age Akrotiri: applying viewshed analysis in 3D townscapes." *OJA* 30(3): 247–272.

Paliou, E., D. Wheatley, and G. Earl. 2011. "Three-dimensional visibility analysis of architectural spaces: iconography and visibility of the wall paintings of Xeste 3 (Late Bronze Age Akrotiri)," *JAS* 38: 375–386.

Palyvou, C. 1987. "Circulatory patterns in Minoan architecture." In Hägg and Marinatos, eds. 1987, 195–203.

Palyvou, C. 2000. "Concepts of space in Aegean Bronze Age art and architecture." In Sherratt, ed. 2000, 413–436.

Palyvou, C. 2005. *Akrotiri Thera: an architecture of affluence 3,500 years old. Prehistory Monographs* 15. Philadelphia: INSTAP Academic Press.

Palyvou, C. 2012. "Wall painting and architecture in the Aegean Bronze Age: connections between illusionary space and built realities." In Panagiotopoulos and Günkel-Maschek, eds. 2012, 9–26.

Palyvou, C. 2018. *Daidalos at work. A phenomenological approach to the study of Minoan architecture.* Philadelphia: INSTAP Academic Press.

Panagiotopoulos, D. 2006. "Der minoische 'Hof' als Kulisse zeremonieller Handlung." In *Constructing power. Architecture, ideology and social practice,* edited by J. Maran, C. Juwig, H. Schwengel, and U. Thaler, 31–48. *Geschichte, Forschung und Wissenschaft* 19. Hamburg and Münster: Lit Verlag.

Panagiotopoulos, D. 2012. "Aegean imagery and the syntax of viewing." In Panagiotopoulos and Günkel-Maschek, eds. 2012, 63–82.

Panagiotopoulos, D., and U. Günkel-Maschek, eds. 2012. *Minoan realities: approaches to images, architecture, and society in the Aegean Bronze Age. Aegis* 5. Louvain-la-Neuve: Presses universitaires de Louvain.

Papageorgiou, I. 2000. "On the rites de passage in Late Cycladic Akrotiri, Thera: a reconsideration of the frescoes of the 'Priestess' and the 'Fishermen' of the West House." In Sherratt, ed. 2000, 958–970.

Papageorgiou, I. 2018. "The iconographic subject of the hunt in the Cyclades and Crete in the second millennium BC: sounds and echoes in the art of wall-painting and vase-painting." In *Χρωστήρες / Paintbrushes. Wall-painting and vase-painting of the second millennium BC in dialogue,* edited by A. G. Vlachopoulos, 300–313. Athens: University of Ioannina and Hellenic Ministry of Culture and Sports – Archaeological Receipts Fund.

Papageorgiou, I. 2021. "The antechamber of Xeste 3: 'The Return of the Hunters'. Introductory remarks occasioned by two new wall-paintings from Akrotiri." In *Akrotiri, Thera. Forty Years of Research (1967–2007). Scientific Colloquium Athens, 15–16 December 2007,* edited by Ch. Doumas and A. Devetzi, 583–604. Athens: Society for the Promotion of Studies on Prehistoric Thera.

Patricios, N. 2014. *The sacred architecture of Byzantium: art, liturgy and symbolism in early Christian churches.* London and New York: I. B. Tauris.

Peterson, S. E. 1981. *Wall paintings in the Bronze Age: the procession frescoes,* Ph.D. diss., University of Minnesota.

Poole, S. E. 2020. *A consideration of gender roles and relations in the Aegean Bronze Age interpreted from gestures and proxemics in art. BAR-IS* 2980. Oxford: BAR Publishing.

Rehak, P. 1996. "Aegean breechcloths, kilts, and the Keftiu paintings." *AJA* 100: 35–51.

Rehak, P. 1997. "The role of religious painting in the function of the Minoan villa: the case of Ayia Triadha." In Hägg and Marinatos, eds. 1987, 172–173.

Renfrew, C., N. Brodie, C. Morris, and C. Scarre, eds. 2007. *Excavations at Phylakopi 1974–76, BSA Suppl.* 42. London: British School at Athens.

Sherratt, S., ed. 2000. *The wall paintings of Thera,* Vols. I–II. Athens: Thera Foundation.

Soar, K. 2018. "By the dawn's early light: colour, light and liminality in the throne room at Knossos". In *Colour and light in ancient and medieval art,* edited by C. N. Duckworth and A. E. Sassin, 46–60. New York and London: Routledge.

Televantou, Ch. A. 1994. *Ακρωτήρι Θήρας: Οι τοιχογραφίες της Δυτικής Οικίας. Βιβλιοθήκη της εν Αθήναις Αρχαιολογικής Εταιρείας 143.* Athens: Archaeological Society.

Vander Beken, N. 2010. "Processional behaviour in Neo-palatial Crete (1700–1450 BCE): the Minoan palaces as theatres for social interaction." *Rosetta* 8 (5): 139–163.

Vlachopoulos, A. G. 2008. "The wall paintings from the Xeste 3 building at Akrotiri: Towards an interpretation of the iconographic programme." In *Horizon. Ορίζων. A colloquium on the prehistory of the Cyclades,* edited by N. Brodie, J. Doole, G. Gavalas, and C. Renfrew, 451–465. Cambridge: McDonald Institute for Archaeological Research.

Vlachopoulos, A. G. 2016. "Images of physis or perceptions of metaphysis? Some thoughts on the iconography of the Xeste 3 Building at Akrotiri, Thera." In *Metaphysis. Ritual, myth and symbolism in the Aegean Bronze Age,* edited by E. Alram-Stern, F. Blakolmer, S. Deger-Jalkotzy, R. Laffineur, and J. Weilhartner, 375–385. *Aegaeum* 39. Leuven and Liège: Peeters.

Vlachopoulos, A. G. 2019. "Memne and techne in the Cyclades. The case of Akrotiri, Thera." In *Μνήμη / Mneme. Past and memory in the Aegean Bronze Age,* edited by E. Borgna, I. Caloi, F. M. Carinci, and R. Laffineur, 443–453. *Aegaeum* 43. Leuven and Liège: Peeters.

Vlachopoulos, A. G. 2021. "Divine acolytes: the animals and their symbols in the Xeste 3 wall-paintings." In *ZOIA. Animal-human interactions in the Aegean Middle and Late Bronze Age,* edited by R. Laffineur and T. G. Palaima, 249–280. *Aegaeum* 45. Leuven and Liège: Peeters.

Vlachopoulos, A., and L. Zorzos. 2014. "*Physis* and *techne* on Thera: reconstructing Bronze Age environment and land-use based on new evidence from phytoliths and the Akrotiri wall-paintings." In *Physis: L'environnement naturel et la relation homme-milieu dans le monde égéen protohistorique,* edited by G. R. Touchais, R. Laffineur, and F. Rougemont, 183–197. *Aegaeum* 37. Leuven and Liège: Peeters.

Wightman, G. J. 2007. *Sacred spaces. Architecture in the ancient world.* Leuven: Peeters.

Wilkinson, R. H. 1992. *Reading Egyptian art. A hieroglyphic guide to ancient Egyptian painting and sculpture.* London: Thames and Hudson.

Wilkinson, R. H. 2001. "Gesture." In *The Oxford Encyclopedia of Ancient Egypt,* Vol. 2, edited by D. B. Redford, 20–24. Oxford: Oxford University Press.

The 'Seated Woman' of the Adorants Fresco from Xeste 3 at Akrotiri, Thera: Female Initiation or Non-Narrative Absorption?

Lucie Valentinová

Abstract *Beginning with Nanno Marinatos (1984) and Ellen Davis (1986), the Adorants Fresco from Xeste 3 at Akrotiri, Thera, has long been interpreted as a depiction of a female rite of passage, or as a representation of different age stages of girls and adolescent females participating in an initiation ritual (Rehak 2007; Günkel-Maschek 2014, 2021). My critical view is based on three arguments. First, the rite of passage, as well as initiation into a cult, is transformative and thus a narrative-analytical model, which does not formally correspond to the non-narrative representative devices used on the Adorants Fresco. Second, even though initiation into adulthood is often assumed to be culturally universal, it does not correspond to some thematic restrictions present in Minoan visual culture: the absence of representation of male-female pairs, of women taking care of children, or of marriage. Third, the often-cited 'historical' evidence for the existence of Cretan rites of passage as preserved by Ephorus, which influenced Pierre Vidal-Naquet's model of the Athenian ephebe as a Black Hunter (1986), follows the specific cultural agenda of the milieu of the Athenian Academy, and Vidal-Naquet's method of structuralist substitution does not allow for assuming the historical existence of all the particular components. Based on these arguments, we cannot exclude the historical existence of Minoan rites of passage, but we can challenge their depiction on the preserved visual material, including the Adorants Fresco. As an alternative, I propose to focus more closely on representative devices, especially the impression of the Seated Woman's absorption, and the suggested simultaneity of temporal relationships in the fresco.*

Introduction: The Adorants Fresco as a Depiction of Initiation Ritual

As part of the decoration of Room 3 of the Late Bronze Age Xeste 3, Akrotiri, the Adorants Fresco (Doumas 1992, 136–145, figs. 100–108; Fig. 1) is generally interpreted as visualizing age-grades reaching from girlhood into full fertile womanhood based on cultural (hair arrangement, clothes; Davis 1986) *and* physiological signs (development of breasts, body posture, hair growth; Chapin 1997–2000; 2021, 28–30).

Two lines of interpretation have been developed so far; both involve an initiation scenario and overlap to some degree. The first is initiation into adulthood – a rite of passage – which is supposed to be either depicted on the fresco itself (Marinatos 1984, 64, 73–84; 1993, 203–209) or derived from the whole pictorial program of Room 3. In that case, the rite-of-passage interpretation is broadened to rituals of coming of age performed differently according to sex (Doumas 1992, 129–130; Morgan 2000, 940–941; Gesell 2000, 950–955) focusing on social constructions of gender (Chapin 2021, 33), possibly culminating in a marriage (Davis 1986, 402–403; Vlachopoulos 2007, 110), even of the whole group (Koehl 2000, 141). In theory this interpretation follows Arnold van Gennep's (1960 [1909]) tripartite scheme of rite-of-passage phases of separation, transition, and reintegration, and the emphasis later put by Victor Turner (1969) on the middle phase of the liminal transformation. The critical moment of transformation is generally supposed to be represented by the Seated Woman, the middle figure of the Adorants Fresco (except for Vlachopoulos 2007, 110, who assumes she is more probably the initiator of the Veiled Girl on the right). The red sign on her feet is interpreted as blood, referring to

Fig. 1: Adorants Fresco *(the Necklace Swinger, the Seated Woman, and the Veiled Girl), Xeste 3, Room 3, Akrotiri, LM I (after Doumas 1992, 136, pl. 100, courtesy of the Archaeological Society of Athens).*

some kind of "bloody initiation" (Marinatos 1993, 206–209), menarche (Rehak 2004, 94), defloration (Davis 1986, 402–403), or marriage (Chapin 1997–2000, 13; 2021, 34; Koehl 2000, 140–141).

The second line of interpretation is more concerned with the institutional religious framework. The Adorants Fresco becomes part of the depiction of a ritual serving "affirmative and educational purposes" and "designed to prepare Theran girls for marriage and child-bearing" (Günkel-Maschek 2021, 305–306), while attending a crocus-gathering service to their tutelary goddess, who is compared to Artemis or Demeter (Rehak 2004, 91–94; 2007, 223–224 for Artemis; Vlachopoulos 2007, 111–116 for Demeter; see also Günkel-Maschek 2021, 305–306; 2014, 123–128). Such ritual form is derived from the 'model' offered in historical times by the cult of Artemis in Brauron (Rehak 2007, 223–224), generally interpreted as Athenian female initiation. Even in this approach, the Veiled Girl is detected as being in a "transitional state" from childhood to adolescence, the Seated Woman as "dramatically represent[ing] the social transition from adolescence to adulthood," and Xeste 3 as functioning as a place for celebrating marriage (Günkel-Maschek 2021, 306–307). Moreover, the assumed reference to remote locations by the tree-shrine with bloodstained horns of consecration depicted on the adjunct wall, and the crocus-gathering depicted on the first floor (Günkel-Maschek 2021, 306), echoes the role played by secluded locations in models of rites of passage (van Gennep 1960 [1909], or Vidal-Naquet 1986 in Classical Studies).

In what follows, I will suggest, based on three different arguments, that these interpretations follow a particular model of ritual as if existing per se, which runs the risk of filling in the missing material based more on the modern theoretical model of a ritual than on actual evidence of Bronze Age cultural phenomena (see also Valentinová 2022, 190). First, initiation is a transformative and thus narrative-analytical model, but the non-narrative representative devices used on the Adorants Fresco do not correlate with it. Second, the existence of rites of passage is often assumed to be culturally universal, but it does not correspond with other cultural values represented by Minoan visual culture. Third, it is often argued that we have historical evidence for the existence of Minoan male rites of passage, as allegedly preserved by the 4th century BC Greek historian Ephorus, which allows us to assume the existence of female equivalents. However, Ephorus' testimony probably reflects his own cultural agenda and the very limited knowledge of the actual historical situation in Crete (not to mention the cultural situation in the Bronze Age). Based on these arguments, we cannot completely exclude the historical existence of Minoan rites of passage, but we can challenge their depiction in the preserved visual material, including the Adorants Fresco. As an alternative, I propose to focus more closely on the representative devices,

especially the self-absorption of the Seated Woman, and the suggested simultaneity of temporal relationships in the fresco.[1]

The Intricacies of the Initiation Interpretation
Missing correspondence with representative devices

Even though ritual is nowadays often understood as a quality of action, or is described in terms of ritualization to avoid an image of a stable, fixed, and framed cultural phenomenon (Stephenson 2015, 3), this elusive concept is difficult to apply in the case of vanished cultures, especially when written narratives are missing. Instead, the popular model of ritual as transformative action is often applied precisely because it represents a highly fixed form tightly framed in terms of time, place, and symbolic expression.

Societies indisputably create various institutionalized processes to promote change – besides rites of passage and initiation into a cult, for example, there are healing ceremonies, funeral rituals, or magic (Stephenson 2015, 54). Up to this point, the transformation model is a valid research tool. However, scholarship has often assumed that based on the universal model of ritual as a transformative action changing state in a period of time – a model clearly expressed in van Gennep's sequence of separation/transition/reintegration – if we see two or even one 'phase' of a postulated ritual, then we can infer the rest. And, more importantly, if we see separate phases, we may infer the transformative dynamics. Framing is definitely a quality of ritual when enacted by its participants (Douglas 1966, 64; Handelman 2006); to use its model to frame material evidence may however be misleading (Valentinová 2022, 189–192).

The Adorants Fresco does not display any narrative coherence as regards shared space, temporal relationships, inner communication, or the relationship with the beholder of the representation. Visual access to the Adorants Fresco was restricted to separate figures thanks to the wooden construction in front of it, as modeled by Ute Günkel-Maschek (2014, 119, fig. 2). Although viewed from below, where the lustral basin is situated, no internal communication between the figures is depicted, including views and body postures or other communicative body movements. Doumas (1992, 129) proposed that the shrine on the adjacent fresco is the focalizing point, but at least the Seated Woman does not seem to look in that direction; instead, she is absorbed in herself (see below). As there is no figure functioning as an internal focalizer and, as Anne Chapin shows in case of landscape representations, Minoan fresco painting omits any reference to the fixed point of the external viewer (Chapin 1995, 58–59), the structured relationship with the beholder of the representation is also absent (Valentinová 2022, 184–188).

Even though in general the missing narrative coherence of the Adorants Fresco was recognized repeatedly (Marinatos 1984, 74; 1993, 208; Vlachopoulos 2007, 112), it was paradoxically taken as an argument for the depiction of ritual (*cf.* Cain 1997, 146–150, 173). Andreas Vlachopoulos, one of the strongest proponents of the narrative interpretation of Theran frescoes as illustrations of some form of oral epic tradition, elaborates on this approach, suggesting that we are dealing here with a "composite scene articulated from three distinct episodes," which form a "pictorial cycle around the transitional phases of girls into womanhood" (Vlachopoulos 2007, 111, 113). These 'episodes', which are entirely non-narrative, are thus supposed to be interlocked into the unified pattern of female life by the lost mythological narratives. As we do not have anything from the assumed Minoan mythological corpus, in order to 'read' the pictorial program, we must substitute it with Greek mythology. This is confusing, not only because another civilization is used for interpretation but mainly because there are no reasons to suppose that the fresco pro-

---

1 The general part of the first argument is developed in detail in Valentinová 2022, in which the author introduces an interpretive approach based on perception of the non-narrative dimension of Minoan fresco painting and methodological avoidance of culturally conditioned secondary narrativization that occurs when we are invited to narrativize not by the operation of the original representational devices but by association with our own cultural contents (Valentinová 2022, 172). This paper presents an extended application of this approach to the *Adorants Fresco*.

gram of Xeste 3 functions as an illustration of narratives. As Svetlana Alpers (1983) showed in the case of Dutch paintings of the seventeenth century, instead of 'reading' and narrativizing, the cultural preference may well be for seeing and non-narrative representation (Valentinová 2022, 177–179).

Because narrative reading requires change, the model of initiation requires even existential transformation and the fresco depicts no change, the blood on the Seated Woman's feet cannot be just blood. It must refer to something else. Since this else "is not explained visually" (Vlachopoulos 2007, 112), we intervene here with our cultural expectations of marriage, menarche, or hymenal blood. When we interpret a cultural representation, in this case a fresco, in such an intensive narrative way, without analyzing its narrative coherence, we open a channel for our cultural imagination to infiltrate the material we are studying in ways we cannot control. If we assume that narrative content needs narrative devices to be expressed, the fresco of the Enthroned Goddess may represent a transformative ritual, but the Adorants Fresco does not.

Missing correspondence with other represented cultural values

The articulation of a linear progression of the life cycle is a feature resonating strongly with modern Western cultural experience. It is assumed frequently that rites of passage into adulthood occur in every culture, except, paradoxically, modern Western society, which allegedly desperately misses them. They are theorized as the main tool for inculcating society's rules and values and integrating them with biological destiny. However, this assumption presupposes that all cultures perceive adulthood as the culturally most valuable and productive state; that in women's case, it is marked by reaching full fertility, marriage, or childbirth (as opposed to a male's initiation, which is more often connected with power, prestige, and political office); that transition into it is a critical process for the operation of the whole society and thus must be controlled by its authorities; and that individual identity can be shaped into a processual movement and narrated in that way.

Even though our ideas about traditional cultural arrangements are undermined by the developing diversity of Western society, they persist as the building blocks of the theoretical models we develop for understanding foreign societies. Not surprisingly, the self-representation of the remote Minoan society does not correspond to these models. We have no iconographic evidence of a nuclear family (for the hypothesis that nuclear families were *not* the basic social units of Minoan society see Driessen 2010; Driessen and Letesson 2023) or man-woman pair, and the kourotrophos image seems to be deliberately omitted (Budin 2011, 269–299; Chapin 2021, 34). In such a society, it is rather unlikely that marriage played such a significant structural role. Blackwood (2005) argued against the centrality of marriage and the conjugal couple within the kinship and culture of matrifocal societies, pointing to the way the anthropological concept of marriage was traditionally structured around the 'trope' of dominant heterosexual men, thus creating an impression that other kinship structures are somehow incomplete. Using the examples of Afro-Caribbean and West Sumatran matrifocal societies, Blackwood shows that the heterosexual couple does not play a prominent role in these, and that, depending on their patterns of locality, marriage may only be a secondary, weak, repeatable, non-exclusive or easy-to-leave social bonding. Importantly, in these societies, male dominance is generally not translated into female dominance, which may also have a Minoan parallel, as representations of persons in authoritative body postures are rare. Given Minoan women's privileged access to the products of the time- and capital-intensive textile industry, as testified by Theran frescoes, their economic independence and prominent access to wealth may also be expected. We do not have enough information to say what the kinship and social structures of the Minoans were. However, scholars such as Blackwood, when shifting the focus from gender, kinship, and sex to their social constructs warn against uncritically assuming the universal existence of the cornerstones of patriarchal societies. And these are exactly rites of passage as a society-controlled mechanism for producing and celebrating the readiness for marriage as the threshold of women's lives.

Minoan society paid great attention to the pre-adult stage. Although Cretan depictions of adolescents cannot compete with the density of depictions from Thera, from the stunning bronze figurine of a crawling infant from the Psychro Cave to the boys depicted playing a game on the miniature fresco fragment from Knossos to the Palaikastro Kouros, Cretan artists also carefully observed the particularities of pre-adult physiognomy and postures (Rutter 2003, 36–43; Chapin 2021, 28–32). Images of girls are much less frequent, but they are present on gold rings (Rutter 2003, 42; Günkel-Maschek 2021, 308) and possibly also in the frescoes (for the hypothesis of young ladies of the miniature Grandstand Fresco being in the age of late adolescence see Chapin 2021, 29). Like the little attention paid to burials and burial rites, correlating with the absence of prominent individual figures, this may signal that it was not adulthood and the articulation of individual identity that stood at the center of cultural attention. According to Ellen Adams (2017, 221), the cultural focus could be very 'forward-looking'.

Confused historical evidence for rites of passage in Minoan Crete
The third reason for the endurance of the concept of rites of passage into adulthood in Minoan studies is its twofold connection with the theory of initiation developed in Classical Studies. Firstly, through the saffron motif, the fresco decoration at Xeste 3 has been associated with the cult of Artemis at Brauron ("Athens in historical times offers a model for interpretation of the prehistoric evidence", Rehak 2007, 223), which since Angelo Brelich (1969, 247–279) has been generally understood as an Athenian female rite of passage. However, the conceptualization of the Brauronian cult as a rite of passage is not consensual (Faraone 2003, 43–68); it is difficult to transfer such a conception to Bronze Age Thera because of different representations of social organization (my second argument), and it suffers from the import of the motif of 'wilderness' and dwelling in remote places from Pierre Vidal-Naquet's Black Hunter model of Athenian male rites of passage (1986). Secondly, this very model of the Black Hunter is also supported by an uncritical reading of Ephorus, which, combined with a literal understanding of Vidal-Naquet's model, allowed Robert Koehl (1986, 2000, 2016) to conclude that the Chieftain Cup depicts a Minoan male initiation ritual that took place at the sanctuary at Kato Syme. This then became another argument for the analogous existence of Minoan female initiation.

According to Vidal-Naquet, in contrast to the Greek adult man – a hoplite warrior, husband, father, and citizen – the Greek adolescent boy in the period of 'ephebeia' is supposed to be a hunter in the wild, with ambiguous or inverted sexuality, and dependent on tricks and deception (1986, 106–128). Irene Polinskaya (2005, 85–106), however, showed that this cultural construction, and mainly the essential liminal experience of 'wildernesses' and of dwelling in remote locations, is visible only through the method of "structuralist substitution" of various elements of myth, ritual, and social custom and was not historically present in Classical Athens. Polinskaya showed that the frontiers of Attica, where the ephebes spent their two years of service, did not consist of empty mountain ranges but of a cultural landscape of urban settlements, villages, and isolated areas. If there was a motif of 'wilderness' present in Brauron, Thera, or Kato Syme, it does not seem to be analogous to Athenian 'ephebeia'.

There is, however, also a tacit evolutionistic dimension to Vidal-Naquet's theory. He suggested that the elements of his model once historically existed, according to the evidence from remote locations such as Sparta and Crete. Here, as opposed to the almost 'secularized' Athens, where the initiatory elements lose their 'original functional integrity,' archaic institutions are supposed to have been conserved (Vidal-Naquet 1968, 113–114, 144; also citing Brelich 1969, 227). We allegedly know this also from Ephorus, who, following his comparison of Cretan and Spartan customs, depicts the contemporary (4th century BC) Cretan ritual abduction of a boy by an adult male lover with whom he stays in the mountains for two months, hunting and feasting. After their return, the boy is rewarded with military equipment, an ox, and a drinking cup. Both the group of the man ('andreion') and the boy ('agele') are involved (FGrHist 70F149, Strabo 10.4.21; Vidal-Naquet 1968, 117). However, Paula Perlman (1992, 2000) has shown that the

narrative of the affinity between the 'ideal' Cretan and Spartan constitutions and the social organization popular in Athenian philosophical writings first emerged in the Athenian Academy, where the lack of historical and contemporary knowledge of the situation in Crete was compensated for by information about the Spartan colony of Lyktos. More than an anthropological report of the most primitive form of pederasty as part of a tribal initiation, Ephorus's account is reminiscent of placing the idea of pederasty, which in contemporary Athens was seen as a kind of idealized tool of philosophical education, in a culturally distant space where it could serve as an ideal to which Athenian aristocrats could look when contemplating how politics and social relations could be better organized (Dodd 2000). From this point of view, the idea of rites of passage in Minoan Crete seems more like a by-product of the theorization of male rites of passage in Classical Greece.

Interpretation: Simultaneous Aspects of Female Identity

If not rites of passage or age-based cult initiation, then what? Trying to avoid secondary narrativization of the material by a modern model of a transformative initiation ritual helps to remove the accretion of foreign cultural content but does not lead to any deciphering of the "true meaning" of the fresco. This approach, however, allows us to focus more on the relationship that the painting establishes with the beholder, and therefore with us as the beholders.

The Seated Woman is depicted from a three-quarter view, sitting in a rocky landscape among scattered clumps of crocuses. Our approach to her is restricted, as her inaccessibility is articulated through her body posture. One hand is held to her forehead, with the other hand resting on her leg; her right shoulder partially covers her chest and breasts. She does not look at us, nor is our gaze guided by another focalizing figure. She is absorbed in herself as Chapin (2001, 7) suggested, but is probably not in pain (see also Rehak 2004, 94; contra Marinatos 1984, 79 and Chapin 1997–2000, 7); her lips are open and she seems relaxed, whereas pain is accompanied by an increase in muscle tension (Fig. 2). If we look at her, as she does not return our gaze, we are also absorbed in her self-possession and elusiveness. The absence of a structured relationship between her and us, however, also keeps us, the viewers, at a distance (see also Valentinová 2022, 188–189).

Michael Fried analyses Denis Diderot's critique of 18th century French painting, which addressed the crisis of beholding and the need to "detheatricalize" it, thus excluding any consciousness of viewing from the representation. If the subject of the painting is represented as being oblivious to the surroundings and not exhibited to the beholder's gaze, the effect of 'absorption' is produced. The intentional ignoring of the viewer is supposed to allow the painting to be convincingly accessed, helping to realize Diderot's "supreme fiction" of the nonexistence of the viewer (Fried 1986, 103–104). One of the painters whose work Fried discusses in great detail is Jean-Baptiste Greuze, a French portrait painter of the second half of the 18th century. The study of a young girl, *Jeune fille au ruban bleu* (Fig. 3; not cited directly by Fried), attributed to him, depicts her relaxed facial expression as devoid of any inner tension or any tension between her and the viewer. This French girl seems considerably more childlike than the Seated Woman of Akrotiri and has a slightly more fragile appearance. The representation of both, in the same way, however, does not allow the viewer to get too close to them, because they are not psychologically present (see also Fried 1986, 35). Nevertheless, they invite the viewer to be absorbed by their calmness and elusiveness.

In his urge to remove the beholder from in front of the painting, even more than depicting figures engaged in "absorptive activities", Diderot emphasized the experience of nature provided by landscape paintings. These enrapture the observer to such an extent that they create the illusion of physically entering the painting. The observer is immersed in the landscape and thus disappears as an observer altogether (Fried 1986, 131). Even though the Adorants Fresco is primarily figurative, the rocks 'hanging' upside down from the upper frame, above the Seated Woman, may stimulate a similar effect of landscape immersion and strengthen the effect of absorption.

Fig. 2: Adorants Fresco, *detail: the Seated Woman. Xeste 3, Room 3, Akrotiri, LM I (after Doumas 1992, 136, pl. 100, courtesy of the Archaeological Society of Athens).*

Fig. 3: *Jean-Baptiste Greuze (1725–1805, attributed to),* Jeune fille au ruban bleu. *Rennes, Musée des Beaux-Arts Paris, MR 177; D.1934.1.3, Photo (c) MBA, Rennes, Dist. RMN-Grand Palais, Jean-Manuel Salingue.*

Together with the lack of articulation of temporal relations, this brings us to the idea of simultaneity. A similar principle has been earlier discussed in the case of the Minoan landscape paintings, the Monkeys and Blue Birds Fresco at Knossos, or the fresco cycle of Room 14 in the Royal Villa at Agia Triada. Here, different habitats are found side by side, with many species of plants that naturally flower in different seasons shown in full bloom. This "simultaneity of flowering" is interpreted by Chapin as alluding to the "totality of nature" (2004, 57–58; however, I do not agree with her conclusion that an "eternal, timeless landscape" is thus depicted [2004, 59]).

Although scholars assume that the fresco program of Room 3a in Xeste 3 depicts an autumn ritual, as autumn is the season for gathering saffron (Günkel-Maschek 2021, 304), it seems to me more likely that this activity is related to the first floor. In the Adorants Fresco, the main theme may be the simultaneous depiction of femaleness. Does the Veiled Girl represent girlhood and the Seated Woman a "bleeding woman"? We do not know for sure. But given the representative devices used in the depiction, it is more likely that an enduring condition is depicted rather than a transformative event. While landscapes may be endowed *also* with religious meaning, they should not be limited to it, and Chapin (2004, 62) cautions us against considering them as mere "devotional paintings" or "backgrounds of religious rituals." Even in the case of the Adorants Fresco, rather than considering it a ritual illustration, we should accept what this cultural representation reveals about the ideas and values of this very different culture: that occasionally, simultaneity can be culturally more highly valued than processual movement.

Conclusion

Instead of the transformation of individual women's lives, the Adorants Fresco in Xeste 3 at Akrotiri may depict different aspects of female identity, arranged in a diagrammatic rather than a linear way. It displays female identity as almost fragmentary, absorbed into the landscape and the world. Do the depicted women perform ritual behavior? Without context, we do not know. But we can conclude that the Adorants Fresco does not depict a rite of passage, generally understood as a transformative ritual characterizing the critical passage into the most culturally valuable period of fertile adulthood. Instead of following this idea, in the future, we may focus more closely

on the fascinating dynamics between the non-narrative figural representations of the ground floor, the narrative fresco of the Enthroned Goddess, and the purely geometrical composition of the second floor of Xeste 3.

Acknowledgments

References

Classical Authors

Strabo, *Geography*

Modern Authors

Adams, E. 2017. *Cultural identity on Minoan Crete: social dynamics in the Neopalatial period.* Cambridge: Cambridge University Press.

Alpers, S. 1983. *The art of describing: Dutch art in the 17th century.* Chicago: University of Chicago Press.

Blackwood, E. 2005. "Wedding bell blues: marriage, missing men, and matrifocal follies." *American Ethnologist* 32.1: 3–19.

Brelich, A. 1969. *Paides e parthenoi.* Rome: Edizioni dell'Ateneo.

Budin, S. L. 2011. *Images of the women and child from the Bronze Age: reconsidering fertility, maternity, and gender in the ancient world.* Cambridge: Cambridge University Press.

Cain, C. D. 1997. "The question of narrative in Aegean Bronze Age art." Ph.D. diss., University of Toronto.

Chapin, A. P. 1995. "Landscape and space in Aegean Bronze Age art." Ph.D. diss., University of North Carolina at Chapel Hill.

Chapin, A. P. 1997–2000. "Maidenhood and marriage: The reproductive lives of the girls and women from Xeste 3, Thera." Aegean Archaeology 4: 7–25.

Chapin, A. P. 2004. "Power, privilege, and landscape in Minoan art." In *ΧΑΡΙΣ: Essays in honor of Sara A. Immerwahr,* edited by A. P. Chapin, 47–64, *Hesperia Suppl.* 33. Princeton, NJ: The American School of Classical Studies at Athens.

Chapin, A. P. 2021. "What is a child in Aegean prehistory?" In *Children in antiquity: perspectives and experiences of childhood in the ancient Mediterranean,* edited by L. A. Beaumont, M. Dillon, and N. Harrington, 26–41. London, New York: Routledge.

Davis, E. N. 1986. "Youth and age in the Thera frescoes." *AJA* 90: 399–406.

Dodd, D. B. 2000. "Athenian ideas about Cretan pederasty." In *Greek Love Reconsidered,* edited by T. K. Hubbard, 33–41. New York: W. Hamilton Press.

Douglas, M. 1966. *Purity and danger.* London and New York: Routledge.

Doumas, C. 1992. *The wall-paintings of Thera.* Athens: The Thera Foundation.

Driessen, J. 2010. "Spirit of place: Minoan houses as major actors." In *Political economies of the Aegean Bronze Age,* edited by D. J. Pullen. Oxford: Oxbow, 35–65.

Driessen, J., and Q. Letesson. 2023. "The Gathering: collectivity and the development of Bronze Age Cretan society." *Journal of Archaeological Research.* https://doi.org/10.1007/s10814-023-09183-1.

Faraone, Ch. A. 2003. "Playing the bear and the fawn for Artemis: female initiation or substitute sacrifice?" In *Initiation in ancient Greek rituals and narratives,* edited by D. B. Dodd and Ch. A. Faraone, 43–68. London and New York: Routledge.

Fried, M. 1980. *Absorption and theatricality: painting and the beholder in the age of Diderot.* Chicago and London: University of Chicago Press.

Gesell, G. 2000. "Blood on the horns of consecration?" In *The wall paintings of Thera: proceedings of the first international symposium, Petros M. Nomikos Conference Centre, Thera, Hellas, 30 August–4 September 1997,* Vol. II, edited by S. Sherratt, 947–957. Athens: Thera Foundation.

Günkel-Maschek, U. 2014. "Time to grow up, girl! Childhood and adolescence in Bronze Age Akrotiri, Thera." In *Mädchen im Altertum/Girls in antiquity,* edited by S. Moraw and A. Kieburg, 117–133. Münster: Waxmann.

Günkel-Maschek, U. 2021. "Children and Aegean Bronze Age religion." In *Children in antiquity: perspectives and experiences of childhood in the ancient Mediterranean,* edited by L. A. Beaumont, M. Dillon, and N. Harrington, 299–313. London and New York: Routledge.

Handelman, D. 2006. "Framing." In *Theorizing rituals: issues, topics, approaches, concepts,* edited by J. Kreinath, J. Snoek, and M. Stausberg, 571–582. Leiden: Brill.

Koehl, R. B. 1986. "The Chieftain Cup and a Minoan rite of passage." *JHS* 106: 99–110.

Koehl, R. B. 2000. "Ritual context." In *The Palaikastro Kouros: a Minoan chryselephantine statuette and its Aegean Bronze Age context,* edited by J. A. MacGillivray, J. M. Driessen, and L. H. Sackett, 131–143. London: The British School at Athens.

Koehl, R. B. 2016. "Beyond the 'Chieftain Cup': more images relating to Minoan male 'rites of passage'. In *Studies in Aegean art and culture: a New York Aegean Colloquium in memory of Ellen N. Davis,* edited by R. B. Koehl, 113–132. Philadelphia, PA: INSTAP Academic Press.

Marinatos, N. 1984. *Art and religion in Thera: reconstructing a Bronze Age society.* Athens: D. and I. Mathioulakis.

Marinatos, N. 1993. *Minoan religion: ritual, image, and symbol.* Columbia: University of South Carolina Press.

Morgan, L. 2000. "Form and meaning in figurative painting." In *The wall paintings of Thera: proceedings of the first international symposium, Petros M. Nomikos Conference Centre, Thera, Hellas, 30 August–4 September 1997,* Vol. II, edited by S. Sherratt, 925–946. Athens: Thera Foundation.

Perlman, P. J. 1992. "One hundred-citied Crete and the 'Cretan ΠΟΛΙΤΕΙΑ'." *Classical Philology* 3: 193–205.

Perlman, P. J. 2005. "Imagining Crete". In *Imaginary polis: symposium January 7–10, 2004,* edited by M. H. Hansen, 282–334. Copenhagen: Der Kongelige Danske Videnskabernes Selskab.

Polinskaya, I. 2003. "Liminality as metaphor: initiation and the frontiers of Ancient Athens." In *Initiation in ancient Greek rituals and narratives,* edited by D. B. Dodd and Ch. A. Faraone, 85–106. London, New York: Routledge.

Rehak, P. 2004. "Crocus costumes in Aegean art." In *ΧΑΡΙΣ: Essays in honor of Sara A. Immerwahr,* edited by A. P. Chapin, 85–100. *Hesperia Suppl.* 33. Princeton: American School of Classical Studies at Athens.

Rehak, P. 2007. "Children's work: girls as acolytes in Aegean ritual and cult." In *Constructions of childhood in Ancient Greece and Italy. Hesperia Suppl.* 41, edited by A. Cohen and J. B. Rutter, 205–225. Athens: American School of Classical Studies.

Rutter, J. 2003. "Children in Aegean prehistory." In *Coming of age in Ancient Greece: images of childhood from the Classical past,* edited by J. Neils and J. H. Oakley, 30–57. New Haven: Yale University Press.

Stephenson, B. 2015. *Ritual: a very short introduction.* New York: Oxford University Press.

Turner, V. 1969. *The ritual process: structure and antistructure.* Chicago: Aldine Publishing Company.

Valentinová, L. 2022. "Miniature crowd frescoes from Knossos: a topography of the world seen." *Journal of Mediterranean Archaeology* 35.2: 169–197.

van Gennep, A. 1960 [1909]. *The rites of passage.* Translated by M. B. Vizedom and G. L. Caffee. Chicago: University of Chicago Press.

Vidal-Naquet, P. 1986. *The black hunter: forms of thought and forms of society in the Greek world.* Translated by A. Szegedy-Maszak. Baltimore: The Johns Hopkins University Press.

Vlachopoulos, A. 2007. "Mythos, logos, and eikon. Motives of early Greek poetry in the wall paintings of Xeste 3 at Akrotiri." In *EPOS: Reconsidering Greek epic and Aegean Bronze Age archaeology, proceedings of the 11th International Aegean Conference, Los Angeles, UCLA – The J. Paul Getty Villa, 20–23 April 2006,* edited by S. Morris and R. Laffineur, 107–118. Liège and Austin: Université de Liège and University of Texas.

Feeling Around in the Dark: Bodily Movement as Multisensorial Experience in Minoan Cavernous Spaces

Maria Mina

Abstract   *This contribution focuses on the study of Minoan anthropomorphic figurines, which have been recovered from sacred caves on Crete dating from the Protopalatial to the Postpalatial period (ca. 1900–1070 BCE). The first section discusses sacred caves and the ritual practices that took place within their enclosed spaces. In the second section, figurines are reintroduced into caves, and they are discussed in relation to their context of ritual use, and the associated dark and concealed conditions. In the third section it is proposed that the presence and handling of figurines contributed to the participants' attainment of an altered state of consciousness, which in turn facilitated a multi-sensorial religious experience inside sacred caves. The integrated study of figurines, which considers their active interaction with the spatial setting and the participants, aims to reconstruct movement and ritual practice as a three-dimensional, multisensorial experience of cavernous spaces.*

Sacred Caves in Minoan Religion

Chronologically, the use of sacred caves in Minoan religion spans the Protopalatial period (ca. 1900–1720 BCE), the Neopalatial period (ca. 1720–1470 BCE), and the Post-palatial period (ca. 1470–1050 BCE) (Tyree 2001, 39; for sites mentioned in the text see Fig. 1). Ritual caves paralleled peak sanctuaries during the Protopalatial and Neopalatial periods. Similar finds recovered from peak sanctuaries suggest that there was little difference between ritual practices that took place in caves and peak sanctuaries, with the exception that bronze figurines are far more numerous in caves (Tyree 2013, 181–182 with references).

According to Paul Faure, there are seven criteria for identifying a cave as sacred: (i) the consistent and numerous quantity of distinct offerings (such as ceramic vessels, figurines, libation tables, weapons and double-axes); (ii) the presence of water inside the cave; (iii) traces of fire; (iv) the organisation of the internal space to accommodate cult activities; (v) the awe-inspiring natural features of caves (*e.g.* stalagmites formations); (vi) oral or written traditions surrounding the sacred use of the cave, and (vii) the proximity to a settlement (Faure 1969, 204). Sacred caves can also be distinguished from funerary ones by the lack of human bones (Tyree 2013, 176).

Regarding the location of ritual caves, Loeta Tyree has noted that they were visible from the nearest settlement or palace on a mountainside, or in the case of subterranean caves, contiguous terraces overlooked the surrounding area (Tyree 2001, 40–41). A second point of departure of caves from other locales is that they are situated in the natural environment, often at some distance from the inhabited space. Peter Tomkins (2009, 146) has proposed that caves occupied a liminal position in Minoan religion as the domestic was transformed through its employment in a ritual context. The transportation and collection of objects from other settings (*e.g.* every-day activities in open-air settlements) and their subsequent appropriation in caves, in effect contributed to the enchainment of people and places across time and space in the context of ritualisation practices. Furthermore, caves, owing to their marginal location, existed in nature at some distance from settlements (Tomkins 2009, 146) and may have constituted cosmological spaces occupying an intermediate space between the infinite sky and the chthonic depths.

Entering a cave, therefore, may have marked a walkthrough portal that could lead from daylight to the underworld, a supernatural locale that in many cultures is perceived as the birthplace

Fig 1. Map showing caves mentioned in the text (map processed by the author; source: European Space Agency ESA, https://www.esa.int/esearch?q=crete).

of everything (Kedar et al. 2021, 196). According to Hesiod, who recounts the myth surrounding the birth of Zeus, Rhea carried her new-born to Lyttos peak of Lasithi massif and from there to a cave in Mount Aigaion, the north-western peak of ancient Dikte (Hogarth 1899/1900, 95). Furthermore, the sacred Eileithyia Cave was dedicated to the goddess of childbirth, Eileithyia, and recovered figurines represented as pregnant women confirm the association between subterranean caves and birth. Although it is not possible to confirm with certainty the connection of childbirth goddess Eileithyia with the cave in the Minoan period, Proto-Geometric figurines representing erotic couples and pregnant women suggest that the goddess' veneration could be traced through the cave's diachronic use (Kanta and Davaras 2010, 28–29). A reference to the goddess on Linear B tablets from Knossos and Pylos could be interpreted as an indication that her worship may have its roots in an earlier Minoan deity of childbirth (Kanta and Davaras 2010, 40 with references).

Moving on to the interior spaces of sacred caves, those used during the palatial era tended to have downward sloping surfaces which retained cold temperatures throughout the year, or they were horizontal (Tyree 2013, 178). The downward sloping caves comprise several chambers at different elevations (*e.g.* Psychro Cave, Skoteino Cave, Melidoni Cave), whereas the chambers in horizontal caves were all situated on the same level (*e.g.* Phaneromeni Cave, Tylissos Cave; see Tyree 2013, 178). Minoan ritual caves were also mostly spacious, which would have allowed ritual practices to take place at their deepest location, as is discussed later.

Faure has observed that stalagmites or the presence of water often marked the focal point for ritual practices and for the deposition of offerings. Such examples include Psychro Cave, Melidoni Cave, Tylissos Cave and Skoteino Cave (Tyree 2001, 41; 2013, 179). In Psychro Cave, for example, two double-axes were inserted in stalagmites to mark the area where offerings were deposited (Tyree 2001, 41). In Skoteino Cave, it is possible animate qualities were projected onto stalagmites due to their alluding form, and a broad stalagmitic surface may have even served as an altar (Tyree 2005–2006, 55). In Minoan religion water in the form of springs or a well must have had symbolic significance as suggested by their association with peak sanctuaries (*e.g.* Jouktas, Kophinas, and Karphi). In the case of the sanctuary of Kato Syme, where the spring runs through part of the shrine, associated offering tables allude to the religious meaningfulness of water as a purifying agent (Peatfield 1995, 223 with references).

The unique conditions that prevailed in the interior space of sacred caves, compared with outdoor locales or open-air settlements, is that they provided a naturally (as opposed to a manmade) concealed setting, a theatre in which activities took place in enclosed conditions. The circumstances that were exclusive to subterranean environments exhibited a combination of special

features (such as limited natural light, humidity, speleological formations, sound effects, etc.) that could not be simulated authentically even in constructed indoor spaces (for instance, pillar crypts or tholos tombs). Regarding the qualities of the sacred cave chambers, those were deep and dark, and it is possible that this choice was deliberate as the lack of natural light was conducive to the attainment of ecstatic trance states which formed part of Minoan cult practices (Tyree 2001, 43, n. 29; Flor-Henry et al. 2017), as discussed in greater detail in the following section.

Anthropomorphic Figurines in Their Context: Space, Ritual Action, and Material Culture

Material traces of ritual activity

The finds associated with ritual activities that were performed inside sacred caves include utilitarian pottery, which nevertheless differs from domestic contexts in that the ceramic assemblage also comprises shapes associated with ritual practices, such as rhyta, or specialised shapes (including chalices, or pottery with appliqué decoration). In addition to vessels, cultic objects were also included, such as anthropomorphic figurines, stone libation tables, and metal votive double-axes (Hogarth 1899/1900, 107, pl. X; Tyree 2013, 176). It is worth juxtaposing the assemblages from sacred caves with the example of 'Tis Ouranias to Phroudi' Cave at Zakros whose finds contained domestic pottery, tools, and animal bones, but no cultic objects (*e.g.* figurines), thus demonstrating the habitational use of its space (Kopaka 2011, 276–278).

The recovery of finds in deep and secluded areas inside caves, confirm that the focus for the performance of ritual activities was removed from the entrance, with limited exposure to natural light (Tyree 2013, 178, 179 with references). The example of Melidoni Cave (Tyree and Kanta 2005) confirms the distinctive features of Minoan sacred caves, but also illustrates the nature and the range of activities that took place inside their walls. Inside Melidoni Cave, a prominent stalagmite and a seasonal water source formed part of a small, enclosed area. The dark, semi-secluded chamber whose walls were framed by stalactites, yielded a considerable number of cooking vessels together with jars, jugs, shallow bowls, cups, and braziers. The cooking pots and other vessels were found in connection to fires that were lit in a confined chamber with a partially open ceiling, which nevertheless could not have served as a kitchen area due to the enclosed, dark, and damp conditions (Tyree 2001, 41; Tyree and Kanta 2005, n. 4).

To summarise the ritual activities that were performed inside sacred caves, the presence of transportation and storage vessels (amphorae, narrow or wide necked jars and pithoi) indicate that cult practices presupposed the transference and storage of food and liquid for future visits (Tyree 2013, 180 with references). The presence of spouted jars, cup rhyta and "communion cups" reveal that pouring and drinking formed part of the ritual practices during the palatial phases (as in the case of Kamares, Psychro, Amnisos and Skoteino). The consumed liquids may have included water (for example, from the deepest area of Psychro), or wine (Hogarth 1899/1900, 98; Tyree 2001, 45 with references; 2013, 179 with references). Cult activities during the Protopalatial period involved also cooking or heating as indicated by evidence from Melidoni, Skoteino and Kamares caves which yielded tripod cooking pots associated with ashy deposits, as well as signs of use and wear on the Kamares cooking pots (Tyree 2013, 179 with references). Food consumption also formed part of ritual behaviour as suggested by evidence of animal bones, cooking and eating-related equipment in association with fire pits, as illustrated by the caves of Melidoni, Skoteino and Kamares (Tyree 2001, 45 with references; 2013, 179).

Evidence suggests that the rituals that took place inside caves during the Neopalatial period were formally organised, as attested at Psychro Cave where part of the upper cave is paved, and a stand for offerings and libation tables were recovered (Hogarth 1899/1900, 98; Tyree 2001, 46). To conclude, it is possible that cult activities during the Protopalatial and Neopalatial periods remained largely unchanged, with certain differences regarding primarily organisational aspects (Tyree 2001, 46).

Anthropomorphic figurines and their connection to sacred space

Regarding the use of anthropomorphic figurines inside caves, evidence suggests that their transportation is associated with Protopalatial burial rites. Such examples include the small burial at Elenes Amariou Cave, which most probably was used for funerary deposition, and produced an assemblage comprising several figurine fragments possibly attached to a plaque (Tyree 2013, 176). Other examples come from the Agios Charalambos Cave where a considerable number of figurines in a variety of materials, were also connected to burial deposits. These finds were shaped as either anthropomorphic or amorphous figures, half of which could be used as pendants (Betancourt et al. 2008, 572). It appears, therefore, that figurines were already being transferred to caves in connection with burial rites before they were incorporated into ritual activities that took place in sacred caves. The introduction of figurines into sacred caves can be placed in the Neopalatial period, as suggested by the available archaeological data.

A review of the available evidence demonstrates that bronze figurines held a special place in the assemblages recovered from sacred caves. They are also known as 'votary' figurines because of their association with sacred spaces (such as peak sanctuaries), but also because their gestures and postures have been understood as an expression of their veneration to the deities (Morris and Peatfield 2001, 105, 107). The use of bronze figurines in sacred caves spans the Neopalatial–Postpalatial period. In terms of quantity, Tyree's study estimates that of the known figurines, thirty date to the Neopalatial period, seven to the Final Palatial and thirty-six to the Postpalatial period. These finds were recovered from the Idaean Cave, Patsos, Phaneromeni, Psychro, Skoteino, Trapeza Tylissou and Eileithyia caves (Tyree 2001, 41, 46, table 1). Bronze figurines, due to their prestigious material, have been interpreted by many scholars as votive offerings by elite community members, and their recovery from caves suggests the involvement of the elite in the associated ritual practices (Tyree 2013, 181–182). Moreover, the fact that not all sacred caves have produced bronze figurines confirms the restricted use of such prestigious paraphernalia.

Apart from bronze figurines, clay examples have also been recovered from sacred caves. Tyree (2013), in an article that aims to define the nature of Bronze Age sacred caves on Crete, presents data drawn from several studies which corroborate the presence of clay figurines among the associated assemblages. Regarding their distribution, a study carried out by Donald Jones (1999, 5–7), which comparatively analysed assemblages from cave and peak sanctuaries, has concluded that clay figurines are clearly associated with peak sanctuaries (often occurring in thousands), whereas there are significantly fewer in caves. Other clay models which are numerous in peak sanctuaries, but show a limited or no connection with caves, include clay votive limbs and animal figurines. The differences noted in the assemblages between peak sanctuaries and caves would suggest, therefore, that different types of ritual activities were performed in those spaces (Tyree 2013, 181–182 with references).

Examples of clay figurines from Protopalatial and Neopalatial sacred caves include one male figure from Chosto Nero, six figurines from Psychro Cave, as well as a shoulder fragment of a large female figure (Tyree 2013, 181–182 with references). Eileithyia Cave has also produced several fragmentary clay figurines dating to the Neopalatial period, the LM III phase and to the Subminoan phase, which are consistent with the diachronic ritual use of the cave (Kanta and Davaras 2010, 84, 92–93, 98–101, nos. 86–88, 91–99). An exceptional find, reported to have been found in the same cave, is a clay model of a rectangular structure which incorporates part of a compound, as well as two holes where a large standing figurine would have rested (Kanta and Davaras 2010, 89, 94, no. 89). The find in question suggests a differential use to the smaller bronze figurines. The size of the (missing) clay figurine would suggest that it would have held a more prominent place within the sacred space. Another difference from the smaller bronze figurines is that it could stand upright with the support of the base, which also would have not encouraged its manipulation.

Aside from bronze and clay figurines, Neopalatial lead examples are also known from Eileithyia Cave, including a lead male figurine with a disc-shaped headdress (Kanta and Davaras

2010, 89, no. 81). Also of special interest is a lead amulet representing a female body in the standing posture with both hands clutched and resting on the chest (Kanta and Davaras 2010, 89, no. 82). A gold parallel known from Gournia with bent elbows and hands resting by the sides of the head (Kanta and Davaras 2010, 89, pl. 32) suggests the use of such objects in living contexts, prior to their deposition in ritual caves.

To elucidate the connection of figurines with the sacred space of caves, we will refer briefly to the example of Skoteino Cave, an important sacred cave, which illustrates well the range of finds that were associated with bronze figurines. The cave produced three bronze anthropomorphic figurines, as well as a collection of artefacts that included ceramic pots of utilitarian character, numerous sherds decorated with appliques, as well as vessels identified on a functional basis as rhyta (Tyree et al. 2008, 179). The assemblage of Skoteino Cave, therefore, suggests that anthropomorphic figurines formed part of ritual activities that involved the consumption of food and wine, the preparation and mixing of substances, as inferred by the presence of a variety of ceramic shapes.

Regarding the recovery location of bronze figurines, they were discovered in a small ritual chamber situated deep within the cave (Tyree 2001, 42). In fact, several Minoan bronze figurines of Neopalatial date suggest that these were often deposited deep inside caves (Tyree 2001, 41). The location of the associated activities in the cave's adyton would suggest that a limited number of select participants would have been allowed to engage in ritual action. We can tentatively suggest that these actors may have constituted members of the elite through their connection with prestigious goods, such as bronze figurines, libation tables or double axes, also recovered from peak sanctuaries. To corroborate the hypothesis, the presence of metal imitations of weapons has been interpreted as evidence for depositional practices performed by groups with political and economic authority (Platon 2013, 157). As a note of caution, however, these objects were not exclusively restricted to community members of high status as suggested by the presence of similar finds in households of various tiers (Haysom 2018, 22).

Apart from the concealed areas of caves, figurines were also found near the entrances of sacred caves (Tyree 2001, 41). Evidence would suggest, therefore, that ritual activities may have also taken place around and at the entrance of the sacred caves, and that the positioning of figurines at the mouth of the cave may have marked the passageway into a sacred space. Alternatively, worshippers arriving or leaving sacred caves may have deposited figurines near the entrances as offerings to deities, as witnesses to their visit, or even as effigies of 'guards' protecting their sacred space.

The Multi-Sensorial Experience of Sacred Caves

In this section an attempt is made to reconstruct the experience of sacred caves on the part of the participants through the stimulation of their senses. It is proposed that the presence and handling of figurines contributed to the participants' attainment of an altered state of consciousness, which in turn facilitated a multi-sensorial religious experience inside sacred caves.

Caves constitute a theatre where their distinct qualities trigger the senses and in turn inform the human experience of their subterranean spaces. The special morphology and conditions prevailing in caves also contribute to the creation of altered states of consciousness in connection to their enclosed spaces and the activities that took place between their walls, as demonstrated by a study by Yafit Kedar and colleagues (2021). One such activity is the burning of torches, which when practiced inside deep and dark caves can cause a decrease in oxygen levels. Limited oxygen supply can induce a state of hypoxia which increases dopamine hormone levels and are in turn responsible for causing hallucinations and out-of-body experiences (Kedar et al. 2021, 181–183). It has been observed that increased dopamine concentrations in the brain can generate dreams and hallucinations, both of which are associated with out-of-body experiences and sensations, such as flying and floating (Kedar et al. 2021, 186 with references).

The enclosed subterranean environment, which was conducive to esoteric experiences, may also explain why caves were chosen in antiquity for oracular activities, as suggested by Yulia Ustinova (2009). Divination could have been achieved through the attainment of hallucinatory states, visions, and revelations which experiments have shown were caused by sensory deprivation and the reduction of external stimuli (Ustinova 2009, 265, 267 with references). Mystics and ascetics, who sought social isolation inside caves in their quest for enlightenment, could reach ecstatic states through the limitation of external stimuli, which contributed to disturbed perceptions of body image, accompanied by auditory and visual hallucinations (Ustinova 2009, 268–269 with references).

To reconstruct the conditions that may have prevailed inside prehistoric sacred caves, we can draw inferences from tests that have been carried out in Skoteino Cave on Crete. Analysis has revealed that carbon dioxide values generally remained below toxic levels, which nevertheless could be increased with the use of hearths, torches or lamps, the number of participants in relation to the available space, and in connection to the distance from the entrance (Tyree et al. 2009, 60).

Underground spaces would have also affected vision, as natural light entering their depths would have been limited. The penetration of natural light would have differed, however, in relation to the time of the day and the season of the year, periodically illuminating different parts of the cave through a glowing beam of light. The limited amount of light that entered caves was conducive to the illusory perceptions of their spaces by creating shadows, or by emphasising impressive speleothems (Tyree 2001, 44; Tyree et al. 2009, 61).

Apart from vision, other senses were also affected inside caves. The osphretic and palatable stimuli associated with the food prepared and consumed inside caves further enhanced the sensorial experience of their settings (Skeates 2013, 212). Moreover, the consumption of hallucinogenic substances and alcohol is also believed to have contributed to the ecstatic states that participants of ritual practices could attain. The variety of storage jars, pouring and drinking vessels recovered from sacred caves on Crete suggests that alcohol is likely to have formed part of Minoan ritual activities (Tyree et al. 2009, 45). Although the consumption of narcotic substances cannot be unequivocally proven, it is possible that the Minoans were aware of the psychotropic qualities of opium. Finds such as a small limestone capital from the Palace at Knossos in the shape of a poppy capsule, the goddess from the Late Minoan sanctuary at Gazi wearing a headdress decorated with incised poppy capsules, as well as a Minoan-style gold ring from Mycenae depicting a female figure clasping a bunch of opium poppies, suggest that the Minoans had access to opium (Tully and Crooks 2015, 137 with references).

A study conducted by Margarita Díaz-Andreu and Tommaso Mattioli (2016) has suggested that awe-inspiring acoustic phenomena could also arouse the senses inside cavernous spaces. Such phenomena could be responsible for generating intense experiences and lasting memories through the production of echoes (waves of sound bounced off a hard surface), resonance (the amplification of sound), and reverberation (increase of sound levels, distortion and intelligibility of speech as repeated sound waves reflect off surrounding surfaces) (Díaz-Andreu and Mattioli 2016, 1049–1050). Sound tests that were carried out inside Skoteino Cave, with the assistance of a professional singer, revealed that the voice diffused clearly to the lower levels and the result was paralleled to the clarity and tone achieved in a fine concert hall (Tyree et al. 2009, 61). Additionally, altered states of consciousness could be reached in areas of complete darkness through the repetitive employment of a rattle, sistrum or drum, but also through the echo of rhythmic chanting (Tyree 2001, 43).

Another difference between open-air settings and subterranean spaces with their confined chambers, narrow passageways, and the unique morphology of their enclosing walls, is that they can impose a particular way of bodily movement. The notion of kinesthesis, which can be defined as bodily awareness of space through the movement and position of body parts, can provide insights into the corporeal experience of cavernous environments on the part of the

participants involved in cave-bound ritual practices (Skeates 2013, 209). One form of bodily movement through which cavernous spaces could be experienced involved rhythmic dancing or gestural and postural comportment that instigated ecstatic states of consciousness.

An alternative way of experiencing caves could be gained through the sixth sense, which presupposed the activation of the participants' intuition or their instinctive awareness that did not rely on the five senses. Such metaphysical experiences could include the epiphany of a spirit or religious figure evoked in underground spaces (Skeates 2013, 214–215). Relevant to the sixth sense, as discussed later, is the attainment of ecstasy through gestures and postures elicited by the visual and haptic interaction with anthropomorphic figurines (Morris and Peatfield 2004, 52–54). Such out-of-body sensations, which were fuelled through the engagement of all senses, contributed to the mystical experience of caves.

The sense of touch also enhanced the experience of sacred caves. One way participants could gain a tactile sense of caves was through their fingers and hands, as they ran them over the hard, moist, or smooth texture of surfaces. A haptic experience of cavernous spaces could further be complemented through the handling of objects that were transported and employed between their walls (Skeates 2013, 211). Objects that would have been sensed through the outer surface of the body would have included the vessels used for the heating, pouring, and drinking, together with the texture and temperature of the consumed substances. Anthropomorphic figurines would also have been handled by participants (especially as their size allowed such manipulation), and their modelled postures and gestures may have alluded to the appropriate comportment assumed by participants. The handling of objects would have served to authenticate or materialise the ritual performance through the correct order of anticipated actions (such as presenting the offerings, heating and drinking substances, or playing instruments).

In an attempt to connect figurines to the performed ritual practices and the existential experiences of the adorants, it is proposed here that the transportation of figurines into caves contributed significantly to the effective performance of ritual activities by instigating bodily movement and trance-inducing postures through a reverse mirror image. A key idea to the argument is that figurines constituted representations of the adorants. Christine Morris and Alan Peatfield have convincingly argued that the deposition of votive body parts at peak sanctuaries was connected to supplication practices for healing. Votive body parts were also deposited in later periods at the shrines of Asclepius and at Greek Orthodox churches in the form of 'tamata'; in fact, Christian 'tamata' are believed to be a continuation of ancient practices (Teske 1985, 208; Morris and Peatfield 2004, 45).

Actual figurines may have constituted representations of the worshipping participants who visited sacred caves (Myres 1902/3; Morris and Peatfield 2006, 46). Apart from body parts, 'tamata' can also take the form of effigies which are depicted on metal plaques or wax models, and they represent the worshippers who offer them to the church when they plead for their healing (Teske 1985, 214). Moreover, the offering of representative 'tamata' give worshippers the opportunity to insert themselves in religious cosmology and forge their relationship with the divine as ecclesiastical architecture and art encapsulate the value system of the Orthodox dogma (Teske 1985, 214, 220).

Following on from the idea that 'tamata' represented the worshipers, we can tentatively suggest that figurines transported to sacred caves may have served as self-reflective 'eidola' of participants. An important difference from the static representations of 'tamata', however, is that Minoan figurines were modelled by comparison in a relatively animated state as they featured a set of postures and gestures (with their varieties) through which adorants expressed veneration (see Morris and Peatfield 2001, 105, 107). Figurines, therefore, as self-reflective effigies of the participants were likely to have a two-directional interaction with the participants: on one hand they may have mirrored the comportment adorants assumed in the ritual setting of a sacred cave, and on the other they may have elicited the appropriate gestures and postures conducive to an effective religious experience. It is possible that the handling of figurines and the visual awareness

of their vivid gestures and postures (especially in the case of larger models supported by a base) could instigate bodily movement on the part of the participants. Even in the dimmed environment of caves, the light emanating from torches or lit hearths in their deepest chambers, under certain conditions may have amplified the size of figurines as their shadows were reflected against their surrounding walls.

Apart from vision, touch is the other sense through which movement may have been transferred from figurines to the ritual participants. The term 'haptics' refers to active touch, which is typically used for object recognition through tactile interaction (Reed and Ziat 2018, 2, 12). Haptic perception, or somesthesis, refers to our ability to inform our knowledge through touch, and to explore our environment through our fingers and bodies. Haptic perception, however, goes beyond static touch and it involves the active exploration of objects and their surfaces through our hands and bodies. Such a perception entails kinaesthetic and proprioceptive information, the latter referring to the awareness of our own body, that is the body's ability to sense its location, movements, and actions (Reed and Ziat 2018, 2–3). In the case of dark, low-lit sacred caves, we can appreciate the necessity of haptic perception in the performance of cult activities through the handling of objects, such as figurines.

Research carried out in neuroscience has explored 'mirrored touch' synaesthesia, a form of synesthetic experience that elicits conscious tactile experiences in the perceiver through the combined engagement of vision and touch. Tests that were carried out revealed that the observation of another person being touched is experienced as tactile simulation on the observer's own body through overactivity in the neural system (Blakemore et al. 2005, 1571). What is proposed, therefore, is that we can explain the effect of a tactile trigger on others through the somatosensory mirror system, which identifies observed touch with felt touch (Blakemore et al. 2005, 1581).

The above findings could be relevant for the perception of figurines in the context of ritual action that was performed inside sacred caves. This is even more pertinent if we consider that figurines depicted the human form in gestures and postures that involved tactile touch of the body (*e.g.* hand-to-head gesture). The observation, therefore, of an (or even their own) 'eidolon' being touched, combined with the tactile experience through the figurine's handling, may have elicited the simulation of analogous sensations and actions in the participants' bodies. According to the proposed hypothesis, the handling of figurines, in combination with their visual perception through 'mirrored touch' synaesthesia (which would have generated a reverse mirror effect), could have enabled the transferal of movement to the participants.

The two-directional connection between figurines and participants becomes more relevant as the modelled gestures and postures are believed to be instrumental to the attainment of ecstatic states in Minoan religious experience. In recent years, it has been established in archaeology that the mind-body union holds a central position in shamanic practice and an embodiment approach aims to capture the physical action which contributes to the attainment of altered states of consciousness, and the communication with the otherworld. Caroline Tully and Sam Crooks (2015, 131) have argued that Minoan religious practices were characterised by shamanistic traits and involved the use of narcotic substances, somatic performance, altered states of consciousness, metaphysical communication with spirits and ancestors, therianthropic metamorphosis, and supernatural journeying.

Morris and Peatfield (2006, 52–53) and Tully and Crooks (2015, 136 with references) have linked the formalised, repeated repertoire of physical gestures of Minoan figurines recovered from ritual caves and peak sanctuaries with the work by anthropologist Felicitas Goodman. Goodman (1986, 1988, 1990) experimented with various restrictive body postures derived from ethnographic examples of shamanistic rituals in combination with 'sonic driving' (that is the repetitive application of sound) and found that they generated altered states of consciousness (Tully and Crooks 2015, 138). Drawing on Goodman's hypothesis, it is postulated that gestures and postures modelled by Minoan figurines, if held for extended periods of time, represented one

method by which ritual participants could achieve a trance state in Minoan ritual experience (Tully and Crooks 2015, 131, 136, 139, 152).

Morris and Peatfield, drawing on the anthropological work on shamanic practices, have proposed that specific bodily postures performed by the ritual participant could have generated a trance-like state through which Minoan spirits and deities were encountered. The extrasomatic states could be achieved through rhythmic movement and gestures, but also through sensory deprivation, sound and fasting (Morris and Peatfield 2006, 40–41). Depictions of the gestures and postures on gold rings (*e.g.* the Isopata gold ring), combined with the postural variety demonstrated by anthropomorphic figurines from peak sanctuaries (especially Atsipades Korakias peak sanctuary) suggest that the figurines depicted ritual postures which in a Minoan ritual experience generated altered states of consciousness, trance-induced epiphany, healing, and divination (Morris and Peatfield 2006, 42–43, 45–46, 48–50, 53).

The tests carried out by Erin McGowan in a darkened room with the use of a sistrum are particularly relevant for the use of figurines inside sacred caves, as the conditions were intended to assimilate those prevailing in a subterranean context. The results revealed that the gestures experienced by the participants led to altered states of consciousness of visual and aural complexity. Included amongst the tested postures were the hand-to-head and the folded-hands-on-the-chest gestures, which are also modelled by figurines recovered from caves (McGowan 2006, 40, 45, 49–50). Most participants in McGowan's experiment reported visual experiences while holding these postures, and even suffered aural distortions or sensations of heat, dizziness and numbness. Overall, it was noted that 86 % of the participants experienced visual phenomena, such as eyes and birds, which parallel the Minoan iconography of epiphany. It cannot be ruled out, therefore, that Minoan postures and gestures have the potential to generate visual effects, and ancient adorants may have relied on these postures for an efficient summoning of a deity through visionary experiences in a ritual context (McGowan 2006, 45, 47; Rimell 2021, 32–33).

If we examine the main gestures and postures modelled by Minoan figurines, it is possible to suggest that they could induce ecstatic states in Minoan ritual experience. Although the hand-to-head gesture does not have ethnographic parallels for its trance-inducing properties, its depiction in ritual ecstasy and epiphany scenes on Neopalatial gold rings (*e.g.* Isopata gold ring) demonstrates its association with extrasomatic religious experience (Tyree 2001, 42). The hands-to-chest gesture associated with female figurines and sacred caves (Psychro) (Hitchcock 1997, 113, 118, table 9.1, fig. 3) has also been identified as a trance posture through ethnographic parallels and experimentation by Goodman (1990) and Belinda Gore (1995). Experiments have revealed that this gesture was employed to gain extra energy for physical acts or for healing (Tyree 2001, 42, n. 26 with references, 47 with references). Following on from the understanding of gestures and postures in the context of Minoan religion, it is possible that the transportation and employment of figurines inside sacred caves was conducive to religious experiences through the visual and haptic interaction of their modelled bodily comportment. Moreover, it is possible that the employment of more than one figurine inside caves provided a theatre of interacting miniature eidola, perhaps eliciting the appropriate and expected choreography performed by participants' bodies.

Conclusion

In conclusion, it is proposed that approaching the modelled gestures and postures of figurines as more than static representations of religious comportment allows us to capture their interaction as three-dimensional objects with their handlers and viewers on multiple levels. The transportation of anthropomorphic figurines into caves, the visual stimuli generated by their presence, as well as their manipulation, would have elicited bodily movement on the part of the participants or attendees, which subsequently would have contributed to an altered state of consciousness. If we consider the presence of figurines with both male and female anatomical traits which equally feature trance-inducing states, we can tentatively suggest that sacred caves were not gender-exclusive spaces, assuming gender was related to phenotypical sex. The choice of bronze and lead figur-

ines, however, in connection to caves may be interpreted as evidence for the involvement of elite participants in cave-bound rituals, which is also consistent with the caves' limited space.

Finally, the physical and cultural context within which these animated objects were employed is another aspect that needs to be taken into consideration when examining the interactive property of figurines to elicit movement. Cavernous spaces would have generated spiritual experiences that paralleled those attained in peak sanctuaries, as suggested by Morris and Peatfield (2004). Nevertheless, the seclusion, privacy and exclusiveness imposed by the liminal and narrow spaces of caves, combined with the multi-sensory stimuli in their subterranean backdrop, may have generated qualitatively different experiences to those produced in an open-air setting. Moreover, caves may have served as unique sacred topoi where participants could claim their place in the chthonic, as opposed to the celestial cosmology of peak sanctuaries.

Acknowledgements

References

Betancourt, Ph. P., C. Davaras, H. M. C. Dierckx, S. C. Ferrence, J. Hickman, P. Karkanas, P. J. P. McGeorge, J. D. Muhly, D. S. Reese, E. Stravopodi, and L. Langford-Verstegen. 2008. "Excavations in the Hagios Charalambos Cave: a preliminary report." *Hesperia* 77: 539–605.

Blakemore, S.-J., D. Bristow, G. Bird, C. Frith, and J. Ward. 2005. "Somatosensory activations during the observation of touch and a case of vision-touch synaesthesia." *Brain* 128 (7): 1571–1583.

Díaz-Andreu, M., and T. Mattioli. 2016. "Archaeoacoustics of rock art: quantitative approaches to the acoustics and soundscape of rock art." In *CAA 2015: Keep the revolution going: proceedings of the 43rd annual conference on computer applications and quantitative methods in archaeology,* edited by S. Campana, R. Scopigno, and G. Carpentiero, 1049–1058. Oxford: Archaeopress.

Faure, P. 1969. "Sur trois sortes de sanctuaires crétois." *BCH* 93 (1): 174–213.

Flor-Henry, P., Y. Shapiro, and C. Sombrun. 2017. "Brain changes during a shamanic trance: altered modes of consciousness, hemispheric laterality, and systemic psychobiology." *Cogent Psychology* 4 (1). https://doi.org/10.1080/23311908.2017.1313522.

Goodman, F. D. 1986. "Body posture and the religious altered state of consciousness: an experimental investigation." *Journal of Humanistic Psychology* 26: 81–118.

Goodman, F. D. 1988. *Ecstasy, ritual and alternate reality: religion in a pluralistic world.* Bloomington: Indiana University Press.

Goodman, F. D. 1990. *Where the spirits ride the wind. Trance journeys and other ecstatic experiences.* Indiana: Bloomington.

Gore, B. 1995. *Ecstatic body postures. An alternate reality workbook.* Rochester, Vermont: Bear & Co.

Harner, M. 1990. *The way of the shaman.* San Francisco: Harper & Row.

Haysom, M. 2018. "Mass and elite in Minoan peak sanctuaries." In *Popular religion and ritual in prehistoric and ancient Greece and the eastern Mediterranean,* edited by G. Vavouranakis, K. Kopanias, and Ch. Kanellopoulos, 19–28. Oxford, UK: Archaeopress.

Hitchcock, L. 1997. "Engendering domination: a structural and contextual analysis of Minoan Neopalatial bronze figurines." In *Invisible people and processes: writing gender and childhood into European archaeology,* edited by J. Moore and E. Scott, 113–130. London: Frances Pinter Publishers.

Hogarth, D. G. 1899/1900. "The Dictaean Cave." *BSA* 6: 94–116.

Jones, D. 1999. *Peak sanctuaries and sacred caves in Minoan Crete: a comparison of artifacts. SIMA-PB* 156. Jonsered: P. Aströms.

Kanta, A., and C. Davaras. 2010. *ΕΛΟΥΘΙΑ ΧΑΡΙΣΤΗΙΟΝ. Το Ιερό Σπήλαιο της Ειλειθνίας στον Τσούτσουρο.* Irakleio: Editions Athanasia Kanta and Costis Davaras.

Kedar, Y., G. Kedar, and R. Barkai. 2021. "Hypoxia in Paleolithic decorated caves: the use of artificial light in deep caves reduces oxygen concentration and induced altered states of consciousness." *Time and Mind: The Journal of Archaeology, Consciousness and Culture* 14 (2): 181–216.

McGowan, E. R. 2006. "Experiencing and experimenting with embodied archaeology: re-embodying the sacred gestures of Neopalatial Minoan Crete." *Archaeological Review from Cambridge* 21 (2): 32–57.

Morris, C., 2001. "The language of gesture in Minoan religion." In *Potnia. Deities and religion in the Aegean Bronze Age, proceedings of the 8th International Aegean Conference Göteborg, Göteborg University, 12–15 April 2000,* edited by R. Laffineur and R. Hägg, 245–251. *Aegaeum* 22. Liège and Austin: Université de Liège and University of Texas at Austin.

Morris, C., and A. Peatfield. 2001. "Feeling through the body. Gesture in Cretan Bronze Age religion." In *Thinking through the body. Archaeologies of corporeality,* edited by Y. Hamilakis, M. Pluciennik, and S. Tarlow, 105–120. New York: Kluwe Academic/Plenum.

Morris, C., and A. Peatfield. 2004. "Experiencing ritual: shamanic elements in Minoan religion." In *Celebrations: sanctuaries and the vestiges of cult activity. Selected papers and discussions from the Tenth Anniversary Symposium of the Norwegian Institute at Athens,* 12–16 May 1999, edited by M. Wedde, 35–58. Bergen: Greig Medialog.

Morris, C., and A. Peatfield. 2012. "Dynamic spirituality on Minoan peak sanctuaries." In *Archaeology of spiritualities,* edited by K. Rountree, C. Morris, and A. Peatfield, 227–245. New York: Springer.

Myres, J. L. 1902/3. "Excavations at Palaikastro II. The sanctuary-site of Petsofa." *BSA* 9: 356–387.

Peatfield, A. 1995. "Water, fertility, and purification in Minoan religion." In *Klados: essays in honour of J. N. Coldstream,* 217–227. *BICS* Suppl. 63. Oxford: Oxford University Press.

Platon, L. 2013. "The uses of caves in Minoan Crete: a diachronic analysis." In *Stable places and changing perceptions: cave archaeology in Greece,* edited by F. Mavridis and J. Tae-Jensen, 155–165. Oxford: Archaeopress.

Reed, C. L., and M. Ziat. 2018. "Haptic perception: from the skin to the brain." *Reference Module in Neuroscience and Biobehavioral Psychology.* https://www.sciencedirect.com/science/article/pii/B9780128093245031825.

Rimell, B. 2021. *The Minoan epiphany: a Bronze Age visionary culture. Archaeological evidence for ecstatic ritual and altered states of consciousness in Cretan prehistory.* Xibalba Books. https://www.biroz.net/xibalbabooks/research-minoan-epiphany.htm.

Skeates, R. 2013. "Making sense of the Maltese Temple Period: an archaeology of sensory experience and perception." *Time and Mind: The Journal of Archaeology, Consciousness and Culture* 1 (2): 207–238.

Teske, R. T. 1985. "Votive offerings and the belief system of Greek-Philadelphians." *Western Folklore* 44 (3): 208–224.

Tomkins, P. 2009. "Domesticity by default: ritual, ritualization and cave-use in the Neolithic Aegean." *OJA* 28 (2): 125–153.

Tully, C., and S. Crooks. 2015. "Dropping ecstasy? Minoan cult and the tropes of shamanism." *Time and Mind: The Journal of Archaeology, Consciousness and Culture* 8: 129–158.

Tyree, L. 2001. "Diachronic changes in Minoan cave cult." In *Potnia: Deities and religion in the Aegean Bronze Age, proceedings of the 8th International Aegean Conference Göteborg, Göteborg University, 12–15 April 2000,* edited by R. Laffineur and R. Hägg, 39–50. *Aegaeum* 22. Liège and Austin: Université de Liège and University of Texas at Austin.

Tyree, L. 2013. "Defining Bronze Age ritual caves in Crete." In *Stable spaces – changing perception: cave archaeology in Greece,* edited by F. Mavridis and J. T. Jensen, 176–187. Oxford: Archaeopress.

Tyree, L., and A. Kanta. 2005. "Cooking pots: in the depths of Minoan sacred caves." Paper read at the International Conference Cibo per Gli Uomini, Cibo per Gli Dei (Food for Men, Food for Gods), *The Archaeology of Ritual Meal in The Greek World, Piazza Armerina, Sicily.*

Tyree, L., A. Kanta, and H. L. Robinson. 2008. "Evidence for ritual eating and drinking: a view from Skoteino Cave." In *Dais. The Aegean feast. Proceedings of the 1th International Aegean Conference, University of Melbourne, Centre for Classics and Archaeology, 25–29 March 2008,* edited by L. A. Hitchcock, R. Laffineur, and J. Crowley, 179–185. Liège and Austin: Université de Liège and University of Texas at Austin.

Tyree, L., C. F. McCoy, A. Kanta, D. Sphakianiakis, A. Stamos, K. Aretaki, and E. Kamilaki. 2009. "Inferences for use of Skotino Cave during the Bronze Age and Later based on a speleological and environmental study at Skotino Cave, Crete." *Aegean Archaeology* 8 (2005/6): 51–63.

Ustinova, Y. 2009. "Cave experiences and ancient Greek oracles." *Time and Mind: The Journal of Archaeology, Consciousness and Culture* 2 (3): 265–286.

III. Gesture, Posture, and Societal Matters

The Orientation and Posture of the Human Torso as a Convention in Neopalatial Iconography

Céline Murphy

Abstract *A recent examination of LM I and LC I iconography reveals that the orientation (frontal or profile) and posture (straight, arched or hunched) of the human torso function together as a subtle yet significant visual convention. Used in scenes depicting direct communication between pairs of figures, and in scenes depicting groups of figures who do not directly interact but engage in collective action, the convention helps define these figures' roles in the represented activities and the nature of the relationship they maintain with each other. In conveying a precise message to the viewer about function, status and hierarchical position, the convention belongs to a standardised visual tradition which – it is here proposed – is concerned with the representation of, on the one hand, social differentiation and, on the other hand, social collaboration.*

The Human Torso: A Subtle Yet Significant Iconographic Feature

Interpretations on communication between human figures in Aegean Bronze Age art have to date been built upon examinations of the positioning of hands, arms, heads and of the careful rendering of facial features (*e.g.* Wedde 1999; Morgan 2000; Cain 2001; Morris 2001; Boulotis 2011). Through the observation of patterns of recurrence of gesture, posture, stance and movement, a number of visual iconographic conventions have been identified, and it has thus been possible to tease out the nature and meaning of some of these interactions. A fresh survey of Neopalatial iconography however shows that there is also another, subtle but significant, convention used in the representation of interaction and communication: that of the orientation and posture of the torso. The torso is shown in two orientations – frontally or in profile – and in one of three postures – straight, arched, or hunched. A careful examination of this convention in wall paintings, glyptic, on stone vessels and other portable objects (excluding figurines)[1] furthermore reveals that two types of torso orientation and posture combinations (henceforth referred to as 'couplings') exist among interacting figures. The first (Coupling 1) involves a figure with a frontal torso and a figure with a profile torso, and the second (Coupling 2) involves two figures with frontal torsos (Fig. 1). The survey moreover reveals that torso orientation and posture are also carefully represented in scenes in which human figures are shown alone with an animal or in which figures do not directly interact but engage in collective action.

While this convention is identified and analysed for the first time here, the human torso has frequently been referred to in studies on the Minoan body. Variations in orientation and posture have certainly been noted, and on a few occasions have been remarked upon (see *e.g.* Peterson Murray 2004, 108–110; Wedde 2004, 157–158). On most occasions, however, discussions have been more general: the male torso has mostly been discussed in terms of shoulder breadth, waist width, and muscular development (*e.g.* Coulomb 1981, 1985, 1990; Marinatos 1995; Weingarten 2000; Chapin 2007, 2009, 2012), whereas the female torso has been examined principally for the baring, size and shape of the breasts (*e.g.* Evans 1930; Davis 1986; Coulomb 1989; Morris 2009; Chapin 2011). It would appear that the torso has in fact mostly been per-

---

1 Figurines are not considered in this discussion because three-dimensional representations of the body require a different form of analysis.
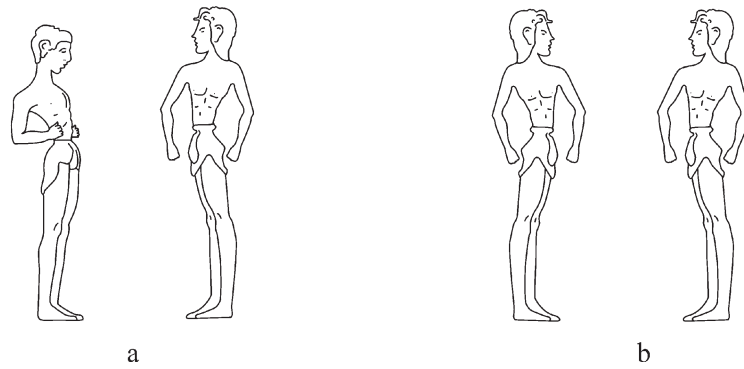
Fig. 1: Technical illustration indicating the composition of Coupling 1 (a) and Coupling 2 (b). Sketch by the author.

ceived as a secondary feature, in other words, as a canvas upon which informative details on the figures' age or status – encapsulated by anatomical features and adornment – are applied rather than as a directly meaningful iconographic feature per se. The present study, however, reveals that torso orientation and posture function in tandem and actively contribute to the message a scene seeks to convey to its audience. Owing to the systematic consistency with which the couplings and torso arrangements recur throughout the iconography, it is evident that they consist of more than mere technical features or the result of arbitrary choices. A mapping of this convention's occurrence reveals that it serves to indicate the nature of the activity the figures engage in, the latter's role in the interaction and their position in the social group they are shown in. Here, the first attempts at articulating the essence of this subtle iconographic feature are undertaken.

The iconography discussed in this paper is limited to the LM I[2] and LC I periods, and mostly originates from Crete and Thera although other comparative contemporary Cycladic material is also included.[3] The detail with which human anatomy is rendered in wall paintings and on stone vessels in this period allows, in most cases, for an easy identification of the orientation of the torso. For glyptic, which exhibits more visual complexity, however, the representation of the shoulders also serves as a qualifying criterion. The rendition of both shoulders correlates with a frontally oriented torso while the rendition of one shoulder correlates with a profile oriented torso.[4] The imagery upon which the study relies therefore belongs to a standardised iconographic repertoire, which flourished with the rise of the second palaces and the establishment of political and religious institutionalisation. The discussed convention can thus be considered as a widely-recognised visual cue, carefully represented by the images' producers in order to communicate a specific message.

Torso Orientation and Comportment for Figures Engaging in Direct Interaction
Coupling 1: frontal + profile torsos
The iconographic convention of Coupling 1 appears in scenes of direct interaction showing figures engaged in clearly identifiable activities, as is demonstrated by their gestures, postures, outfits, hairstyles, the objects they manipulate, and the environment in which they are depicted

---

2 The precise dating of certain wall paintings remains a matter of debate, and it is possible that a number may originate from MM III.

3 Material from the mainland, however, is mostly excluded from this paper. Despite the visual similarities apparent between Cretan and mainland iconography, these cultures employ different conventions. This is particularly apparent where the torso is concerned. Depictions of the torso in mainland iconography thus deserve their own

focused investigation. The miniature wall painting from the West House on Thera is also excluded owing to its extensive variety and to the vast space subsequently required to discuss its numerous scenes. Several points made here are nevertheless relevant to it and can be considered in future studies.

4 Scenes in which the torso's orientation is not clearly rendered are not cited as supporting evidence in this paper but were nevertheless considered in the analysis.

Coupling 1: frontal + profile torsos			
Activity	Media	Sources	Gender/species
Saffron gathering	Wall paintings	Xeste 3, Room 3a (Thera)	Female-Female
Object bearing	Wall paintings	Xeste 3, corridor west of lustral basin (Thera)	Male-Male
Fishing	Wall paintings	West House, Room 5 (Thera)	Male-Male
Service	Wall paintings	Xeste 3, Room 3a (Thera)	Female-Female
		Pillar Crypt (Phylakopi)	Female-Female
		House of the Ladies, Room 1 (Thera)	Female-Female
	Glyptic	*CMS* II 8, no. 268 (Knossos)	Female-Female
		CMS II 7, no. 8 (Kato Zakros)	Female-Female
		CMS VI, no. 283 (Kydonia)	Female-Female
		CMS II 7, no. 3 (Kato Zakros)	Male-Male
	Vessels	Rhyton (Knossos) (Warren 1969, P476)	Male
Combat	Glyptic	*CMS* II 6, no. 15 (Agia Triada)	Male-Male
		CMS II 7, no. 20 (Kato Zakos)	Male-Male
Boxing	Wall paintings	House Beta, Room 1 (Thera)	Male-Male
	Glyptic	*CMS* II 8, no. 280 (Knossos)	Male-Male
	Vessels	Boxers Rhyton register 3 (Agia Triada)	Male-Male
		Rhyton (Knossos) (Warren 1969, P472)	Male-?Male
		Rhyton (Knossos) (Warren 1969, P475)	Male-Male
Hunting	Wall paintings	Xeste 3, vestibule (Thera)	Male-Male-Bull
	Glyptic	*CMS* IX, no.152 (Sitia)	Male-Lion
		CMS V, Suppl. 1A, no. 135 (Kastelli Chania)	Male-Lion
		CMS II 6, no. 37 (Agia Triada)	Male-Bull
		CMS IV, no. 233 (Sitia)	Male-Lion
		CMS II 7, no. 33 (Kato Zakos)	Male-Male-Lion
Animal domestication	Wall paintings	Xeste 3, Room 3a (Thera)	Female-Monkey
		House of the Saffron Gatherers (Knossos)	Monkey
	Glyptic	*CMS* III, no. 358 (Sitia)	Female-Monkey
		CMS III, no. 357 (Prassa)	Male-Monkey
		CMS II 7, no. 24 (Kato Zakros)	Female-Monkey
		CMS II 3, no. 103 (Kalyvia)	Female-Monkey
Formal exchange	Wall paintings	Priest King (Knossos) *extended arm*	Male-?
		Captain and Warrior (Knossos) 2+ figures	Male-Male
		Sacred Grove and Dance (Knossos) 2+ figures	Male-Male
	Glyptic	*CMS* II 8, no. 256 (Knossos) *extended arm*	Male-Male
		CMS VI, no. 281 (Knossos) *extended arm*	Female-Male
		CMS II 6, no. 8 (Agia Triada) *extended arm*	Female-Female
		CMS V, Suppl. 1A, no. 180 (Kastelli Chania)	Female-Male
		CMS II 3, no. 103 (Kalyvia)	Female-Female
		CMS XI, no. 29 (unprov. Berlin ring) 2+ figures	Female-Male
	Vessels	Chieftain Cup (Agia Triada) *extended arm*	Male-Male

Table 1. Instances of Coupling 1.

(Table 1). These activities consist of saffron gathering, object bearing, fishing, service, combat and boxing, hunting and animal domestication. Coupling 1 also appears in scenes of interaction where figures are involved in some less clearly identifiable activities, but which have generally been described as bearing religious connotations, and as depicting epiphanies or engagements between deities and humans (*e.g.* Nilsson 1951; Hägg 1983; Marinatos 1993; Cain 2001). For the sake of simplicity, these less clearly identifiable activities are here referred to as 'formal exchange'.

Coupling 1 in scenes depicting saffron gathering, object bearing and fishing
In scenes depicting saffron gathering, object bearing and fishing, Coupling 1 serves to mark a difference in knowledge and practical experience between the interacting figures. The figures whose torsos are shown frontally are more experienced than those with the torso rendered in profile. The painting on the east wall of Room 3a in Xeste 3 on Thera, in which two girls communicate while gathering saffron, illustrates this clearly (Fig. 2a) (for photograph see Doumas 1992, 152, fig. 116). Although it has been proposed that the interaction is evocative of anecdotal chitchat (Boulotis 2011, 8), the scene has also been interpreted as capturing an educational moment:

the older left-most figure supervises, advises or corrects the attentive, younger, right-most figure (Tzachili 2005, 113–114; Vlachopoulos 2008, 493). A similar arrangement, which also includes the particular positioning of one of the figures' head, is visible in the painting on the south wall of the corridor west of the lustral basin in Xeste 3 (Fig. 2b) (for photograph see Doumas 1992, 146, fig. 109). A young boy carrying a vessel apprehensively raises his gaze towards a youth holding a cloth, possibly in expectation of advice or praise. Finally, while the spatial positioning of the two fishermen in Room 5 of the West House on Thera (Fig. 2c) (for photograph see Doumas 1992, 52, figs. 18–19) does not immediately impart an impression of direct communication between the figures, they nevertheless face each other. The profile figure, in the south-west corner of the room, is slightly shorter and holds less fish than the youth with a frontally depicted torso placed in the north-west corner of the room. It is conceivable that he is also learning from the older figure.

Coupling 1 in scenes depicting service

In scenes of service, Coupling 1 is employed to differentiate the servant from the person being served. Its use is characterised by the depiction of one or more figure(s) in profile approaching a seated figure with a frontally depicted torso. Examples of such interactions appear in the central arrangement of the north wall of Room 3a in Xeste 3 (Fig. 2d) (for photograph see Doumas 1992, 158, fig. 122), and on three sealings from Knossos, Kato Zakros and Kydonia (Figs. 2e, f) (Table 1). In all the cited examples, it is clear that the frontally-depicted figure is older in age than the figures depicted in profile, as is indicated by the clear rendering of the former's breasts and of the latter's flat chests. It is also very likely that the seated figure is of a higher social status than the serving figures owing to her lavish jewellery and her association with 'official' symbolism.

While fragmentary and heavily reconstructed, the wall paintings from the Pillar Crypt at Phylakopi on Melos (for illustration see Morgan 1990, 259, fig. 8) and the corridor in Room 1 in the House of the Ladies on Thera (Fig. 2g) (for photograph see Doumas 1992, 38, figs. 6–7) also deserve a mention as some – although not all – of their compositional elements echo those from the scenes discussed above. Regularly referred to as depictions of robing events (Marinatos 1984, 102; Peterson Murray 2004, 107; Morgan 2007, 384), these two wall paintings show profile-positioned figures tending to another female figure. Regardless of the latter's positioning, posture and age – details which have provoked debate (Marinatos 1984, 103, fig. 71; Peterson Murray 2004, 112 and 116, figs. 6.10 and 6.12; Jones 2014) – the figures in profile, like those on the sealings, all present slightly hunched shoulders and are depicted as leaning forwards or extending their arms in front of them.

Although some technical reasons certainly lie behind the leaning and slightly hunched rendering of these figures' upper bodies – mainly because it facilitates the representation of the depicted action and places visual emphasis on the handled object – it may also have been included in the scene in order to communicate some additional contextual information. Because the leaning and slightly hunched posture, which is also accompanied by slightly flexed and bent knees, is always rendered on the servant and never on the figure being served, might it also be interpreted as an expression of deference, as indicative of the serving figure's lower status, or as defining the type of service the figure is engaged in? The scenes discussed so far have only involved women, but it is noticeable that leaning male figures in profile are also rendered on a rhyton fragment from Knossos (for photograph see Alexiou, 1959, 353, pl. ΛΔ) (Fig. 2h) and on sealing *CMS* II 7, no. 3 from Kato Zakros (Fig. 2i). In the latter, the posture is typically regarded as expressive of submission to a hierarchically superior figure (see *e.g.* Marinatos 2010, 182–184; Koehl 2016, 118–127; Blakolmer 2019, 51–53).

Coupling 1 in scenes depicting combat and boxing

Turning to scenes depicting more violent activities, such as combat and boxing, Coupling 1 serves to indicate a figure's degree of physical strength and to differentiate the victor from the

Fig. 2 a: Wall painting, Xeste 3, Thera; b. Wall painting, Xeste 3, Thera; c. Wall painting, West House, Thera; d. Wall painting, Xeste 3, Thera; e. CMS II 8, no. 268; f. CMS VI, no. 283; g. Knossos rhyton; h. CMS II 7, no. 3. Images not to scale. Sketches by the author.

vanquished. The figures whose torsos are depicted frontally are winning while those with a torso rendered in profile are being defeated. This is best illustrated by two sealings from Agia Triada (Fig. 3 a) and Kato Zakros (Fig. 3 b) (Table 1), and by boxing scenes such as the third register of the Agia Triada Boxer Rhyton (Fig. 3 c) (for illustration see Koehl 2006, fig. 29) and the wall painting from House Beta on Thera depicting two young pugilists (Fig. 3 d) (for photograph see Doumas 1992, 112, fig. 78). Through comparison with these scenes, it can therefore be argued that the fragments of other contemporaneous boxing scenes show the victorious figure (Table 1). Although Coupling 1 is the most prevalent torso arrangement in scenes of agonistic sports and combat, exceptions do occur. For example, sealings *CMS* II 6, no. 16 and *CMS* II 6, no. 17 from Agia Triada and the fourth register of the Boxer Rhyton (Figs. 5 a–c) present both the victorious and the defeated figures with a frontally depicted torso. These instances are discussed further below, in the section devoted to Coupling 2.

Coupling 1 in scenes depicting hunting and animal domestication
Coupling 1 appears principally in scenes depicting direct engagement between humans, but it can nevertheless also be noted in scenes involving animals. Hunting scenes also contain violent action and the convention might, as in the case of combat and boxing, here be understood as indicative of domination and defeat. While animals are usually depicted in profile in Minoan iconography, the frontal positioning of the human figures on sealings from Kastelli Chania, Agia

Triada and Sitia (Figs. 3 e, f) (Table 1) likely serves to indicate their superiority or control over the beasts.

Moreover, Coupling 1 is also shown in hunting scenes in which two human figures engage with an animal. In these instances, one of the men is also represented in profile, but unlike the animal, does not appear to have been defeated. Might such instances, best represented by *CMS* II 7, no. 33 from Kato Zakros (Fig. 3g), and possibly also shown in the recent reconstruction of the wall painting in the vestibule of Xeste 3 (Vlachopoulos 2021, pl. LXa), consequently also depict educational events? Or might they, as in the case of the service scenes, depict a status difference between the figures, with the profile figure being the frontal figure's attendant or assistant?

Coupling 1 also appears in non-violent engagements between humans and animals. Three sealings from Sitia, Prassa and Kato Zakros (Figs. 3h, i) (Table 1) depict humans, with frontally depicted torsos, facing monkeys rendered in profile. As in the case of hunting, this arrangement most likely represents the human's superiority or control over the animals, but it may, as in the saffron gathering scenes discussed earlier in this paper, also contain an educational dimension. Might the figures be training the monkeys to collect saffron? The presence of a lead around the monkey's waist on the Prassa sealing, and the presence of a harness on the monkey in the Knossos wall painting (for photograph see Morgan ed. 2005, pl. 4) – who is incidentally in a similar position to the younger saffron gatherer in Xeste 3 (Fig. 2a) – might indicate that the animal is domesticated, or is in the process of being domesticated. Indeed, despite their clear association with fauna, monkeys are also often anthropomorphised in Minoan iconography (see *e.g.* Rehak 1999, 707; Vlachopoulos 2008, 493).
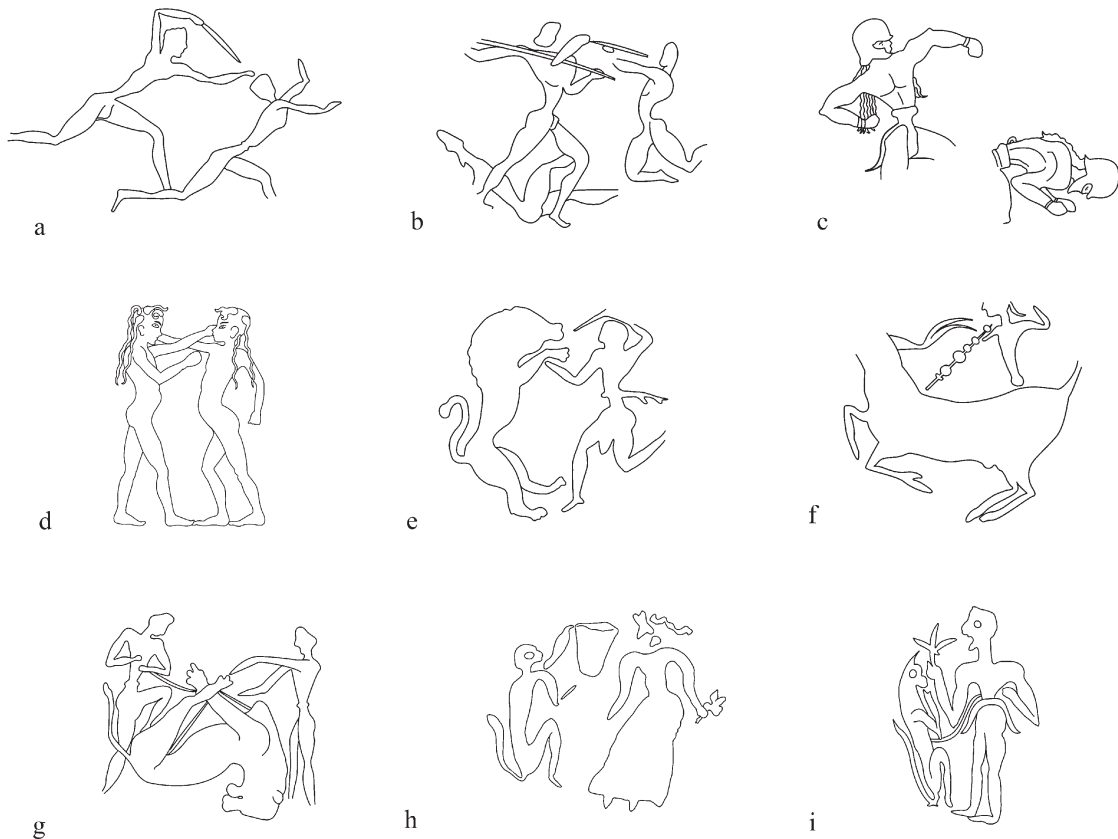

Fig. 3a: CMS II 6, no. 15; b. CMS II 7, no. 20; c. Boxers Rhyton register 3; d. Wall painting, House Beta, Thera; e. CMS V, Suppl. 1A, no. 135; f. CMS II 6, no. 37; g. CMS II 7, no. 33; h. CMS III, no. 358; i. CMS III, no. 357. Images not to scale. Sketches by the author.

Coupling 1 in scenes of 'formal exchange'

The last type of scene in which Coupling 1 occurs depicts various types of 'formal exchange'. Two or more figures appear in these scenes and, as was stated above, the exact nature of the interactions is less clear than those discussed so far as the figures' hands are, for the most part, not occupied with objects but instead perform symbolic gestures. Often, these scenes have been interpreted as depicting epiphanies or the sanctioning of rulership (see *e.g.* Nilsson 1951; Hägg 1983; Rutkowski 1986; Marinatos 1993; Krattenmaker 1995; Cain 2001). Coupling 1 here nevertheless seems to help define the figures' role, and in some cases, probably their position in a hierarchy too. The convention is included in scenes in which a figure extends an arm (sometimes holding a staff) towards another figure (Figs. 4a–d) (Table 1).[5] This out-going gesture has consistently been interpreted as expressive of 'command' while the more contained gesture of the responding figure has been interpreted as indicating deference and 'adoration', and in some cases as consisting of a 'salute' (see *e.g.* Krattenmaker 1995, 49–50; Cain 2001, 40).[6] In most cases, the figure with the extended arm is rendered with a frontally depicted torso and the respondent's torso is rendered in profile: details which indeed support the suggestion of one figure's seniority, superiority or pre-eminence over the other. Nevertheless, the figure on sealing *CMS* II 6, no. 8 from Agia Triada (Fig. 4d), whose arm is extended, is in profile and faces a larger seated woman. It can consequently be suggested that, despite the fact that the smaller figure is 'commanding' and thus performing a prescribed – and likely authoritative – role, hierarchy between the figures is demarcated by the torso orientation. The combination of a seated position and a frontally depicted torso can thus be regarded as a convention for hierarchical superiority, as it does in scenes of service. Before examining scenes in which multiple figures occur, it must be noted that Coupling 1 also appears in interactions between two figures – such as those depicted on *CMS* V, Suppl. 1A, no. 180 from Kastelli Chania and *CMS* II 3, no. 103 from Kalyvia (Fig. 4e) – with raised forearms rather than fully extended arms. The frontal torso of the female figures may also be regarded as indicative of a superior role. Noteworthy are the parallels existing between the Kalyvia ring and the wall painting from Room 3a in Xeste 3 (Fig. 2d).

Turning to scenes of 'formal exchange' in which multiple figures occur (Table 1), a similar function can be assigned to Coupling 1. Although it remains unclear whether direct interaction occurs between only two of the depicted figures, or whether it involves all of them, it is nevertheless also likely that torso orientation marks a functional, and possibly also hierarchical, difference between the communicating figures. In the 'Captain and Warrior' fragment of the Knossos Sacred Grove and Dance wall painting (Fig. 4f) (for photograph and reconstruction see Morgan ed. 2005, pl. 10), for example, a staff-wielding man stands before a crowd of identically clad men, some of whom also wield staffs. Alongside the fact that the figure stands apart from the crowd, his frontally depicted torso,[7] and the latter's partially hidden torsos,[8] indicate that he holds a different – and probably more authoritative – role than the other figures. A comparable use of Coupling 1 to demarcate function or role is also evidenced on an unprovenanced[9] signet-ring held in Berlin (Fig. 4g) (Table 1) in which a male figure with a frontally depicted torso engages with a profile positioned female figure holding a bow.

---

5 While the illustration of *CMS* II 6, no. 6 shows a floating figure with an extended arm, the poor preservation of the sealing makes this hard to confirm. This piece is therefore excluded from the argument.

6 Niemeier's (1987) reconstruction of the Knossos 'Priest King' relief wall painting can also be included here.

7 Although the torso is only partially preserved, the overt rendering of the musculature strongly suggests that it was depicted frontally.

8 Their torsos are for the most part eclipsed by their

fellows' heads and thus their exact orientation cannot be securely confirmed, but the profile rendering of similar figures in the Sacred Grove and Dance section of the wall painting suggests that they are in profile.

9 While it cannot be verified whether this ring was Minoan in origin, it presents a consistent use of Coupling 1. Noteworthy is the fact that, although from the mainland, the much-discussed Elateia ring (*CMS* V Suppl. 2, no. 106) also presents similar characteristics.
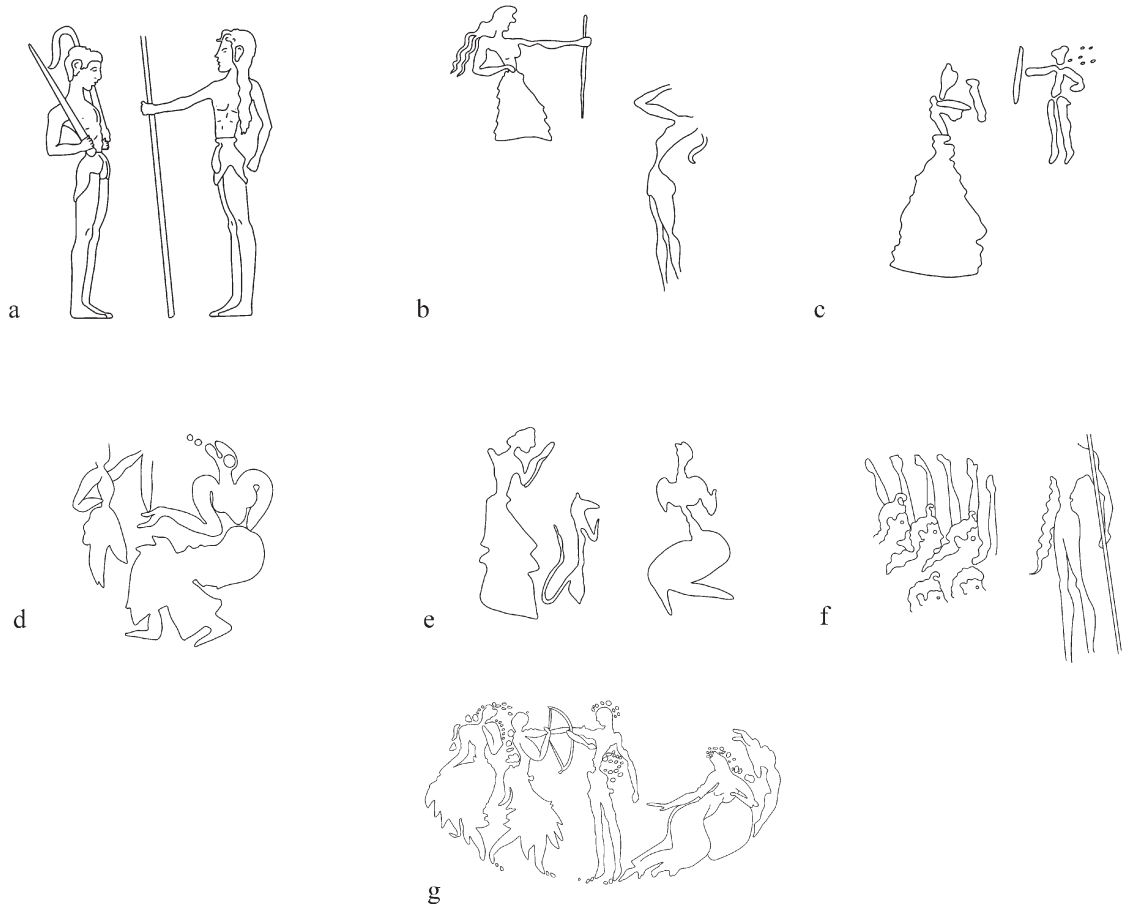
Fig. 4a: Chieftain Cup; b. CMS II 8, no. 256; c. CMS VI, no. 281; d. CMS II 6, no. 8; e. CMS II 3, no. 103; f. Wall painting, Knossos; g. CMS XI, no. 29. Images not to scale. Sketches by the author.

Overall, the bodily comportment of the male figures positioned in profile in scenes of 'formal exchange' is tense. They all maintain an upright posture, and in some cases, also present a slight arch in their lower back. Their legs, moreover, are not flexed but are kept straight. Contrastingly, owing the volume of their skirts and to the slight crane of their necks, the demeanour of the female figures appears less strained. It was previously suggested that the leaning and slightly hunched posture of figures in service denotes a form of deference, and the comportments identified here may also convey such a meaning, but may nonetheless be expressive of respect of a slightly different nature – for example, a form of respect which does not involve service. Noteworthy is also the fact that, except for the Chieftain Cup (Fig. 4a) (for photograph see Dimopoulou-Rethemiotaki 2005, 154), no overt age distinction conventions are visible between the figures in these scenes. They all appear to be adults – or near adulthood – as is indicated by their hairstyles and the presence of breasts for the female figures. Finally, scenes of 'formal exchange' in which Coupling 1 occurs depict interaction between both male and female figures, which is a phenomenon that does not occur in the other instances of Coupling 1 examined above.

Coupling 2: frontal + frontal torsos
Coupling 2 is characterised by direct engagement between two figures with frontally depicted torsos. Instances of this coupling are much fewer than Coupling 1, and it is also noticeable that in a number of scenes, the torso orientation can be slightly ambiguous. Nonetheless, a number of examples do exist and deserve careful examination (Table 2). Overall, Coupling 2 occurs principally in scenes of 'formal exchange' but, as was mentioned earlier in this paper, it also appears in three

scenes depicting combat. Despite its sparsity, it is nevertheless also considered as indicative of the type of interaction depicted and of the relationship maintained between the figures.

Coupling 2 in scenes of combat
Sealings *CMS* II 6, no. 16 and *CMS* II 6, no. 17 from Agia Triada (Figs. 5a, b) show figures engaged in combat with frontally depicted torsos. Another likely instance of Coupling 2 appears on the fourth register of the Boxer Rhyton (Fig. 5c), and while the torso of the figure lying in front of the frontally depicted victor is not visible owing to the vessel's fragmentary state, the torso of the defeated man behind the victor appears to have been represented frontally (note the difference with the profile positioning of the figure on the second register and Fig. 3c). He has been knocked down by another boxer whom, in the light of his typical lunging posture, can also be considered as rendered with a frontally oriented torso. While the presence of Coupling 2 may, at first glance, be interpreted as indicative of another – for example, earlier – stage of battle than that shown in the scenes with Coupling 1, the presence of defeated figures on the rhyton and on *CMS* II 6, no. 17 suggest otherwise. Rather, Coupling 2 in fact seems to imply a different form of interaction between the figures. The frontal depiction of all fighters' torsos imparts a visual impression of balance although the imagery is clearly evocative of victory and defeat. Moreover, the presence of helmets on the victorious figures in the glyptic scenes differentiate them from the bare-headed figures on *CMS* II 6, no. 15 and *CMS* II 7, no. 20 (Figs. 3a, b) examined above. The reverse phenomenon is visible on the Boxers Rhyton, and noteworthy is also the absence of columns on the vessel's fourth register. Was Coupling 2 therefore employed to show that the figures are fair adversaries, with equal levels of strength and experience? Do these scenes represent more gruelling combats than those in which Coupling 1 is shown? Alternatively, it is also conceivable that the convention served to indicate that the warriors are of the same hierarchical position or social status.

Coupling 2 in scenes of 'formal exchange'
In scenes of 'formal exchange', Coupling 2 appears principally in glyptic, and namely on a signet-ring from Knossos, on a sealing from Malia, and on an unprovenanced seal held in Geneva (Figs. 5d, e) (Table 2).[10] In all instances, two figures with frontally depicted torsos extend their arms towards each other. The figures' mirrored gestures further contribute to the impression of balance created by the orientation of their upper bodies. As a result, the direction of the communication is more difficult to identify than in scenes of 'formal exchange' containing Coupling 1, and generally the interactions appear less authoritarian. Might Coupling 2 therefore point to a more equal form of communication between the figures than that expressed by Coupling 1? As was noted earlier, however, the figures must not necessarily be perceived as holding the same function and status or as being of the same hierarchical positioning. The seated position of the woman on the on the Geneva seal (Fig. 5d) indeed differentiates her from the standing figure, in a way reminiscent of the seated ladies in the aforementioned scenes of service.

   Coupling 2 also appears in 'formal exchange' scenes in which figures do not perform the same gestures (Figs. 5f–h) (Table 2). Although the imagery generates less of a visual balance than scenes in which figures do mirror each others' arm positioning, it nevertheless produces less of a contrast than Coupling 1. It is thus conceivable that, similarly to the above, Coupling 2 serves to mark a different form of interaction to that depicted in scenes including figures in profile, although its exact nature remains unclear. Nevertheless, like in the scenes of 'formal exchange' discussed in the previous paragraph, the seated position of the ladies on the Poros Ring (Fig. 5f), on *CMS* V, Suppl. 1A, no. 177 (Fig. 5h), on the Mochlos Pyxis (for image see Soles 2019, pl. X)

---

   10 The clear rendering of the standing figure's right shoulder on this seal suggests that the torso is depicted frontally. Moreover, although from the mainland, the Ka-lapodi ring (*CMS* V, Suppl. 3, no. 68) also presents similar characteristics.
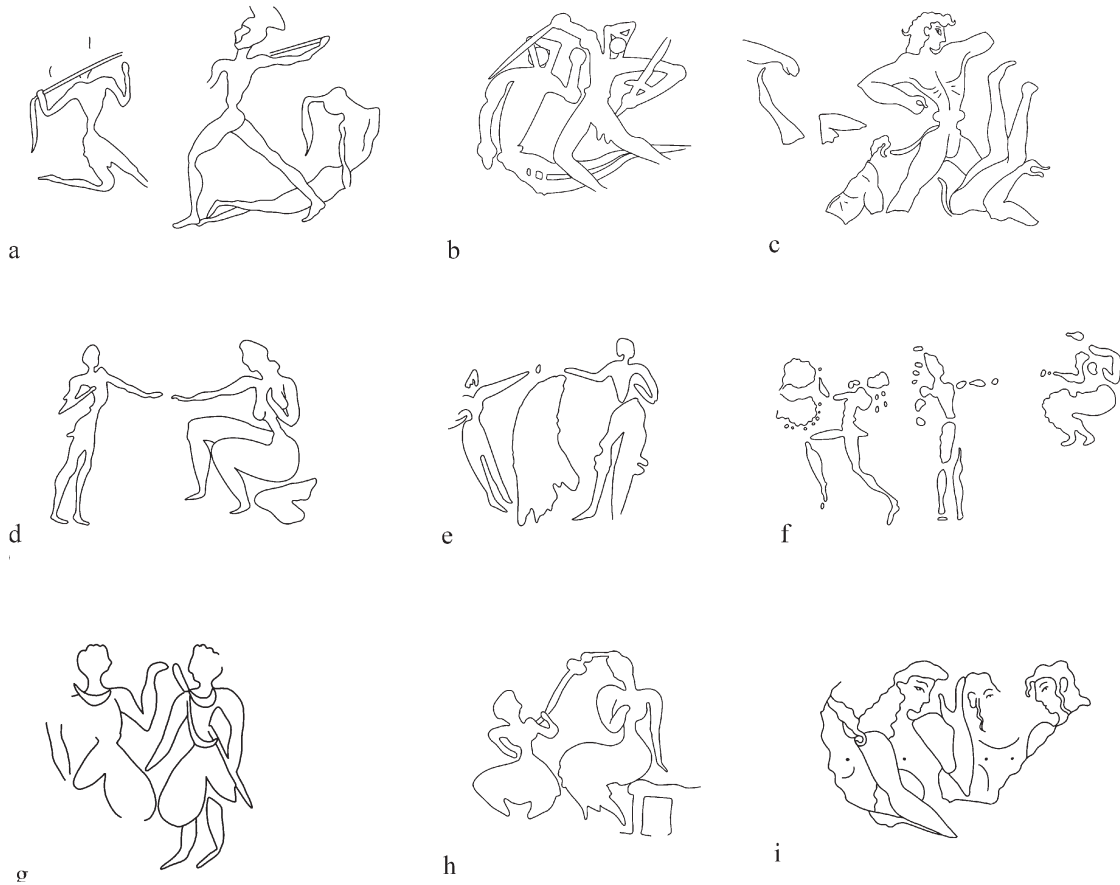
Fig. 5 a: CMS *II 6, no. 16; b.* CMS *II 6, no. 17; c. Boxers Rhyton register 4; d.* CMS *X, no. 261; e.* CMS *II 3, no. 145; f. Poros ring; g.* CMS *II 7, no. 18; h.* CMS *V Suppl. 1A, no. 177; i. Wall painting, Knossos. Images not to scale. Sketches by the author.*

and in the reconstruction of the Pseira mural (for image see Betancourt and Davaras 1998, pl. H) clearly differentiates them the other standing figures facing them. A similar phenomenon, but depicted on a larger scale, can be noted on the Knossos Grandstand wall painting (Fig. 5 i) (for photograph and illustration see Morgan ed. 2005, pls. 10–11), where a group of seated ladies with frontally depicted torsos communicate with each other while surrounded by figures represented in profile.

Coupling 2: frontal + frontal torsos			
Activity	Media	Sources	Gender/species
Combat	Glyptic	*CMS* II 6, no. 16 (Agia Triada)	Male-Male
		CMS II 6, no. 17 (Agia Triada)	Male-Male
	Vessels	Boxer Rhyton register 4 (Agia Triada)	Male-Male
Formal exchange	Wall paintings	Grandstand (Knossos)	Female-Female
		Building AC (Pseira)	Female-Female
	Glyptic	*CMS* VI, no. 280 (Knossos)	Female-Male
		CMS II 3, no. 145 (Malia)	Male-Male
		CMS X, no. 261 (unprov. Geneva)	Female-Male
		Poros Ring (Dimopoulou and Rethemiotakis 2000, fig. 4)	Female-Male
		CMS V, Suppl. 1A, no. 177 (Chania Kastelli)	Female-Female
		CMS II 7, no. 18 (Kato Zakros)	Male-Male
		CMS II 7, no. 1 (Kato Zakros)	Female-Male
	Vessels	Pyxis (Mochlos)	Female-Male

Table 2. Instances of Coupling 2.

Overview: torso orientation and posture as a convention in scenes of direct interaction
The mapping out and analysis of recurring instances of Couplings 1 and 2 in Neopalatial iconography show that the depiction of the orientation and posture of the human torso was structured and intentional, and that it did not result from a haphazard choice on the part of the artist. It is moreover evident that, in most instances, the rendering of the torso was not dictated by technical limitations encountered in the representation of human anatomy, as a number of identical gestures and actions are performed by figures with torsos shown both frontally and in profile. In the few instances – such as scenes of service – in which the choice of torso orientation does however artistically facilitate the representation of certain elements, the frontal torso orientation of the figures being served is not strictly necessary from a technical perspective. In the light of the analyses presented above, it in fact appears that Couplings 1 and 2 were principally used to define the type of relationship maintained between the interacting figures.

Coupling 1 clearly indicates an asymmetry, be it in terms of skill, knowledge, role, and sometimes age and status. Coupling 1 therefore shows a vertical hierarchy, in which one figure is presented as more experienced or socially superior to the other. The convention furthermore simultaneously contributes to a clearer delineation of individual characters. Because it does not create the visual contrast projected by Coupling 1, however, Coupling 2 contrarily implies more of a horizontal type of relationship between interacting figures. Nevertheless, differences in role, status, and possibly age are certainly shown through other means, thus also allowing for the portrayal of individual characters.

The discussed torso orientation and posture conventions consequently serve to define the figures' position in the social group they are depicted as a part of, and to effectively mark social differentiation. In fact, it can be argued that, in certain cases, the couplings depict different stages of socialisation in Minoan society: Coupling 1 frequently appears in relation to training and formative acclimatising to certain socially constructive tasks and Coupling 2 is associated with accomplished figures who are beyond training and have proved their competence. The torso is thus a subtle but significant element of visual vocabulary which has different layers of meaning and which functions on different levels simultaneously. It can function as a primary marker of role or status but it can also function as a secondary sub-status marker. It is consequently a flexible and adaptable convention, which can be used in a number of different contexts.

Torso Orientation and Posture as a Convention for Figures Not Engaged in Direct Interaction

Having examined the use of the convention in scenes depicting figures engaged in direct interaction, the question remains whether the rendering of the torso plays the same role in scenes in which no direct interaction between figures is represented, or in which lone human figures are shown with animals. Does the frontally depicted torso also indicate a figure's hierarchical superiority over another, or her or his status? Does the torso in profile also show a figure's hierarchical inferiority, juniority or trainee status? Is social differentiation as keenly emphasized as in scenes of direct interaction? Below, a selection of representative iconographic scenes in which groups of non-interacting or lone figures with animals are depicted are analysed (Table 3).

The torso convention in scenes depicting bull leaping
In LM I, most representations of bull leaping appear in glyptic. In these scenes, figures are frequently represented alone with the bull, but on *CMS* II 7, no. 35 and *CMS* II 8, no. 221 from Kato Zakros (Figs. 6 a, b), two non-interacting figures are shown. It remains unclear whether they represent different stages of the leap or two separate acrobats (see *e.g.* Younger 1986, 135–136) but, regardless, the figures' torso orientations differ. The figure leaping over the bull's head is represented in profile, as is the case with most other leaping scenes showing a single figure (Figs. 6 c, d) (Table 3). The figure behind the bull is presented frontally: this depiction of the torso is rarer but also appears on *CMS* II 6, no. 43 from Agia Triada (Fig. 6 e) and its parallel
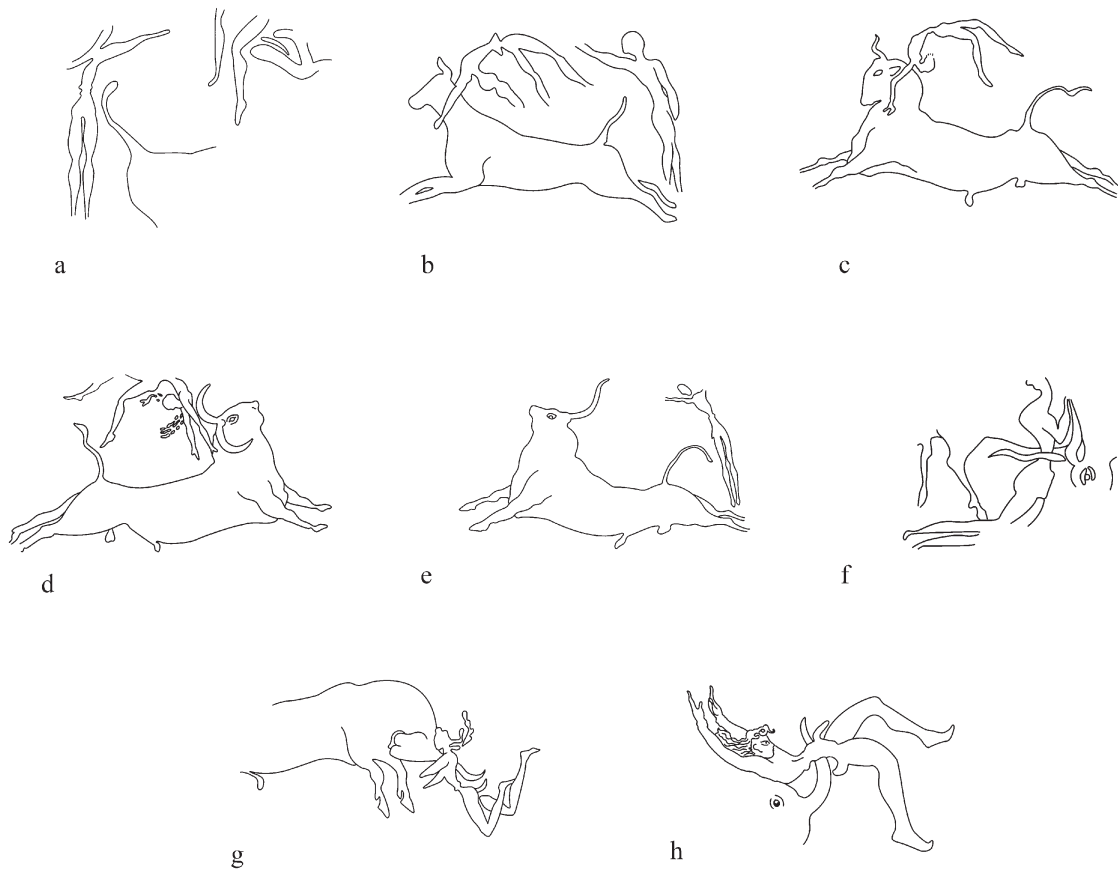
Fig. 6a: CMS *II 7, no. 35; b.* CMS *II 8, no. 221; c.* CMS *II 6, no. 44; d.* CMS *V, Suppl. 2, no. 392; e.* CMS *II 6, no. 43; f.* CMS *II 8, no. 228; g.* CMS *V Suppl. 3, no. 395; h. Boxer Rhyton register 2. Images not to scale. Sketches by the author.*

CMS II 6, no. 161 from Gournia. Most striking about the scenes is their representation of a hazardous act in its midst. Where the profile positioned figure is concerned, he is at the most dangerous stage of the stunt: one wrong move could jeopardise its success and thus his survival. Owing to the incomplete nature of the action, however, the profile positioning of the torso cannot here be regarded as indicative of defeat as it does in other scenes of athletic or violent action. Moreover, given the hazardous nature of the acrobatics, it is unlikely that the scene depicts a training event. Rather, the profile orientation of the torso may here be interpreted as simply indicative of an uncertain outcome depending on the acrobat's skill and luck, of an incomplete activity, and possibly also of a compromising situation.

Worth a mention are nevertheless the profile positioned figures depicted on *CMS* II 8, no. 228 from Knossos, *CMS* V Suppl. 3, no. 395 from Akrotiri (Figs. 6 f, g), and on the second register of the Boxers Rhyton (Fig. 6 h). It is noticeable that their engagement with the bull is slightly different to that rendered on the scenes discussed above. The leapers either appear in contact with the bull's horn or are depicted in proximity to the ground. Might these details, alongside the animals' reared or lowered head position, imply an unfortunate outcome to the stunt?[11] Might the profile torso here demonstrate defeat? If so, the convention, even when included in scenes depicting the same kind of activity, can clearly function in different ways. It is therefore evident that its meaning is defined not only by a scene's general context, but also a number of other subtle details.

---

11   Although later in date and from the mainland, the unsuccessful leapers on the Vapheio cup are also positioned in profile and in a similarly catastrophic situation.

Finally, turning to the figures whose torsos are oriented frontally in scenes of bull leaping, it can consequently be argued that the convention serves to represent successful athletes, whose survival is guaranteed. Indeed, as shown on sealings *CMS* II 6, no. 43 from Agia Triada (Fig. 6e), *CMS* II 7, no. 35 and *CMS* II 8, no. 221 from Kato Zakros (Figs. 6a–b), the figures are positioned behind the bull, rather than above its head or back. Positioning is key as it clearly shows that the most dangerous part of the stunt is over. While the figures are still in the air, they have successfully completed the perilous leap and are landing to safety. The convention of the frontally depicted torso can thus here be understood as demonstrative of accomplishment, in a similar way as it does in scenes including Couplings 1 and 2.

The torso convention in scenes depicting parades

Of the twenty-six male figures rendered on the Agia Triada Harvesters Vase (Fig. 7a.1–3), seventeen are presented with a frontally depicted torso, five with a profile depicted torso (the sistrum player and the four men involved in the tripping incident), and four with a covered torso precluding the observation of its exact orientation (the three singers and the leader) (for photographs see Dimopoulou-Rethemiotaki 2005, 186–189). While the figures do not directly address each other, they participate in a collective event. The scene has been variously described as a religious procession, a processional dance, a military march, and an agricultural celebration (Forsdyke 1954, 1–9; Warren 1969, 175–176; Hood 1978, 145; Blakolmer 2007, 204), but for the sake of analysis, it is here referred to as a parade – a term used to describe a number of figures advancing in a specific direction in a lively and usually celebratory way. Except for the small section reserved to the depiction of a tripping incident, the scene overall imparts an impression of cohesion. As in the case of the couplings discussed above, the frontally depicted torso can consequently also here be understood as an indication that the figures are accomplished practitioners who are beyond training or, as in the case of the frontally-depicted warriors or bull leapers, that they have successfully achieved or completed a physically demanding task.

A close observation of the other figures involved in the scene suggests that the profile orientation of the torso also functions in two ways. First, the profile positioning of the figures involved in the tripping incident (Fig. 7a1) serves to indicate failure. Owing to the context in which the incident is shown – in other words, a context in which training or instruction is not implied given the absence of Coupling 1 – and owing to the tripping figures' identical outfit to that of the men with frontally oriented torsos, the use of the profile torso can be conceptually compared to its appearance on the second register of the Boxers Rhyton, on aforementioned *CMS* II 8, no. 228 and on *CMS* V Suppl. 3, no. 395 (Figs. 6f–h), where it shows failure related to poor judgement, incompetence or bad luck rather than to the figure's trainee status. Moreover, the impact that the trip bears on the collective harmony is clearly accentuated as three figures are shown as disturbed by the falling man, thus emphasizing the importance of attention to each performed movement. Second, the profile torso of the sistrum player mainly serves to differentiate him from the parading men (Fig. 7a.2). While the musician is depicted in the foreground of the scene – possibly to allow for a clear rendition of the instrument – his torso's orientation indicates that he is accompanying the men but is not one of them. His different clothing, lack of headdress, and stockier corpulence may also indicate that he belongs to a different age group. Owing to the straightness of his back, and in the absence of hunched shoulders, however, it is difficult to assess whether he is also of a different social status to the other figures involved in the parade.[12]

The covered torsos of the cloaked figure leading the parade (Fig. 7a.3) and of the three singers (Fig. 7a.2) also serve to differentiate them from the twenty-one parading men and the sistrum player. The three singers' position in the background, their different garb and hairstyle moreover suggest that they should be differentiated from the long-haired leading figure, who has also been described as the eldest in the scene (*e.g.* Koehl 1986, 103). The covered torso, which appears in

---

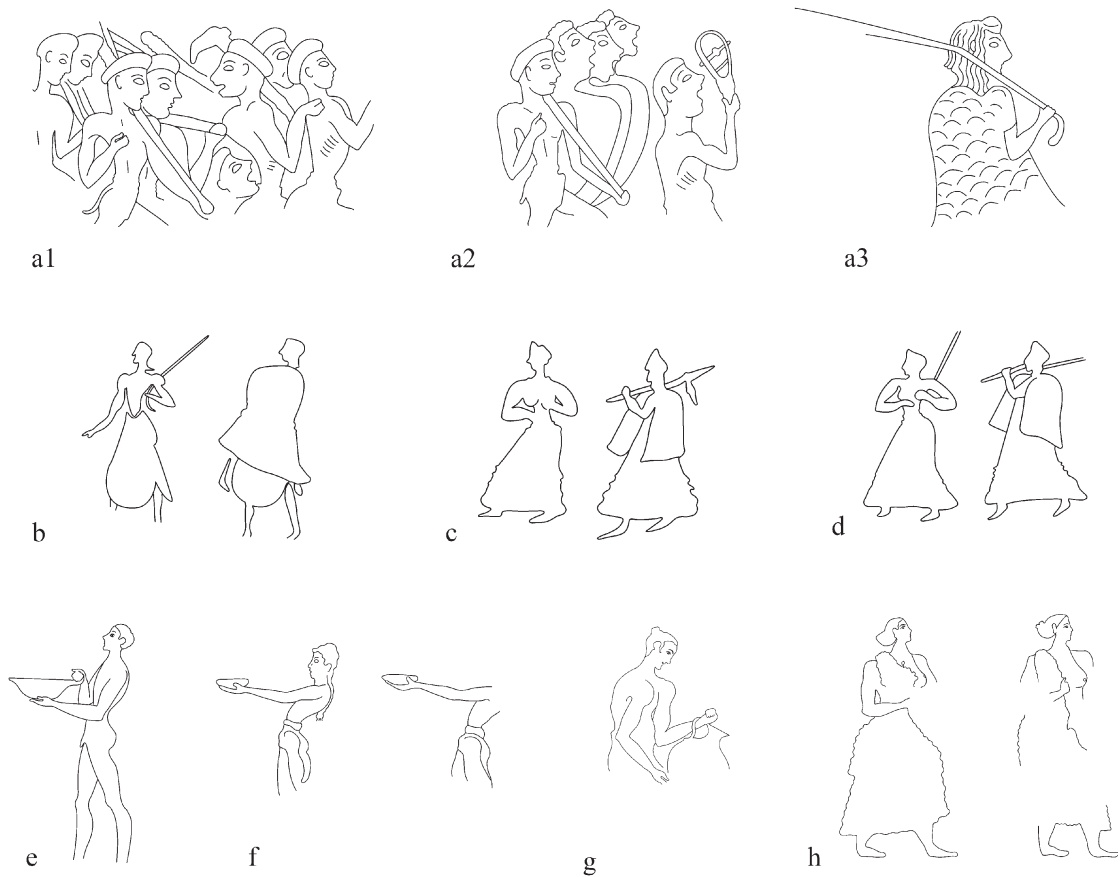12 For a note on class difference in this scene see van Effenterre and van Effenterre 1999, 885.

Fig. 7a: 1–3 sections of the Harvesters Vase; b. CMS II 6, no. 11; c. CMS II 7, no. 17; d. CMS II 7, no. 16; e. Wall painting, Xeste 3, Thera; f. Knossos rhyton P474; g. Wall painting, Xeste 3, Thera; h. Wall painting, Xeste 3, Thera. Images not to scale. Sketches by the author.

other scenes, such as the miniature wall painting (for photograph see Doumas 1992, 58, fig. 26) and the priestess figure (for photograph see Doumas 1992, 56, fig. 24) in the West House, the Chieftain Cup, and numerous glyptic representations, points to the figures' different function – and possibly status – to figures with nude or partially nude torsos. Indeed, cloaks have been interpreted as a sign of high rank (*e.g.* Nilsson 1968, 160; Marinatos 1993, 137; Blakolmer and Hein 2018, 197). The covered torso, however, cannot be regarded as a marker of age, as both youths and older figures are clad with cloaks, gowns, hides or are hidden by shields. The covered torso of the men in the Harvester's Vase can thus be regarded as a means of further differentiating the figures in terms of their role in the parade, and possibly in terms of their social function and rank.

Similar, but more condensed, representations of different groups of people gathered in parade also appear in glyptic, and the torso orientation and posture conventions play the same role as above. While *CMS* II 6, no. 11 from Agia Triada, and *CMS* II 7, no. 16 and *CMS* II 7, no. 17 from Kato Zakros (Figs. 7 b–d) have also been considered as representing a 'special procession' (Blakolmer 2018), these scenes showing a frontally depicted figure accompanied by a cloaked figure impart a similar impression of accomplishment and harmony to that conveyed by the figures on the Harvesters Vase. It is nevertheless likely that the nature of these parades differs from that shown on the vessel.

The torso convention in scenes depicting processions
While representations of processions flourish in the LM II period, a few depictions do nevertheless appear in LM I iconography. Scenes of procession are here distinguished from parade on account of the figures' poised attitude. Typical of this activity is the profile orientation of the

figures' torsos. As is shown in the painting of a cupbearer situated in the corridor of the apartment west of the lustral basin in Xeste 3 (Fig. 7e) (for photograph see Doumas 1992, 147, fig. 111) and on a rhyton fragment from Knossos (Fig. 7f) (for photograph see Warren 1969, P474), the figures also maintain a slightly arched posture which, despite their handling of utilitarian paraphernalia, serves to clearly demarcate them from the hunched or slightly forwards-leaning figures in scenes of service discussed earlier in this paper. In fact, the posture of the figures in procession is reminiscent of that of some of the profile positioned figures in scenes of 'formal exchange' in which Coupling 1 occurs, which was associated with a form of respect-paying. Thus, might the bodily comportment of the Knossian and Theran cupbearers help characterise them as performing a higher function – or as being of a higher status – to figures engaged in service while nonetheless implying an attitude of deference to the non-depicted receiver(s) of their offerings?

It is here important to make brief mention of the male figure with the hydria from Xeste 3 (Fig. 7g) (for photograph see Doumas 1992, 146, fig. 110), placed on the wall perpendicular to the cupbearer, towards whom the latter and the two object-bearing youths arranged in Coupling 1 appear to be advancing. His upper torso positioning is complex, and differs substantially to that of the other figures surrounding him. However, because his right shoulder shields his chest, he is here regarded as represented in profile. His hunched posture, moreover, is reminiscent of that of figures in service, and while it may serve to emphasize the weight of the hydria, it may also serve to differentiate him from the cupbearer. Might the torso convention indicate that the figure – who is older than all the boys surrounding him (Doumas 1992, 130; Chapin 2007, 245–246) – performs a different function or possesses a different status to the latter?[13] On the basis of the figures' torso orientations, the three painted panels of the corridor can be considered as representing three separate narrative instances despite their overarching thematic unity. Indeed, the man with the hydria and the cupbearer are not arranged in one of the two identified couplings, and their two profile torsos may imply that they are not interacting. Moreover, the frontal torso of the youth with the cloth (Fig. 2b) ought to be considered as relevant to his interaction with the small boy towards whom he looks, rather than relating to the man with the hydria who is depicted as turned away from him.

Albeit in fewer instances, LM I iconography also includes scenes of procession in which figures are rendered with frontally depicted torsos. The women in the mural arrangement in the corridor on the first floor of Xeste 3 consist of the best example (Fig. 7h) (for photographs and reconstructions see Doumas 1992, 168–170, figs. 131, 133; Vlachopoulos 2008, 501, figs. 41.33, 41.34). Their attitude is less tense than that of the male figures in procession discussed above, and their torsos are slightly covered by a garment although their breasts are emphasized and both their shoulders are shown frontally. Owing to the figures' developed breasts, their clothing and their bunched hair which clearly point to their maturity (see Chapin 2012, 298; Vlachopoulos 2008, 493), the frontal rendering of their torso here probably serves to designate their function or status, rather than to indicate that they have completed their training. It is nonetheless likely that their standing position also serves to differentiate them from the seated woman facing the monkey and the saffron bearer represented in the adjacent room (Fig. 2d) whose torso is depicted in the same way. It is consequently conceivable that the young lady with the necklace rendered in the lustral basin (for photograph see Doumas 1992, 136, fig. 100), whose torso is also positioned frontally is a younger version of the mature ladies.

Overall, in scenes of procession, the orientation and the posture of the torso appear to principally define the type of activity – in this case, the form of object bearing – that the figures are engaged in. It serves to clearly demarcate these figures from those in service while nonetheless indicating that they are placed within a hierarchy, and not on the top rung. It is noticeable that no clear age or status differentiations appear among the figures participating in a given procession. It is additionally worth noting that, as in the case of the other service scenes discussed earlier,

---

13 See also Rehak 1996, 47 and Morgan 2000, 935 for discussions on this figure's inferior status.

although both female and male figures are engaged in procession, they are never depicted together in the LM I renditions.

The torso convention in scenes depicting jogging and running figures

Figures positioned in a linear fashion, but engaged in a form of movement different to that shown in the scenes discussed above, can be seen as jogging or running. It is principally the open and slightly bent positioning of the men's legs on four sealings from Kastelli Chania and Kato Zakros (Figs. 8 a, b) (Table 3) which differentiate them from the parading figures on the Harvesters Vase. While more reminiscent of a sprint than a jog (see Lebessi *et al.* 2004, 13), the position of the legs of the central figure on the Kato Syme gold ring (Fig. 8c) is also different to those of the men on the Harvesters Vase: the rear leg is raised high. Although these glyptic scenes – except for the Kato Syme ring – have been described as processions (see Wedde 2004, 167; Blakolmer and Hein 2018, 196), and despite the fact that the figures' torsos are depicted in profile, and are for the most part shown with a slightly arched posture, the figures' arm gesture and the absence of carried vessels here places them in a different category of activity.

In the light of the observations made so far in this paper, the torso orientation of the leading figure on *CMS* V, Suppl. 1A, no. 133 (Fig. 8a) is surprising. If he is indeed guiding captives, why is he not depicted with a frontal torso, like the victorious warriors discussed earlier in this paper? It is conceivable that the profile orientation of the torso here serves to indicate a particular function or activity, as it does for the male figures in procession. In the absence of any details suggesting a training context, it is also possible that the convention indicates that the figure is part of a hierarchy but does not belong to the upper rungs. A similar suggestion can be advanced for the figures on *CMS* II 7, no. 13 and *CMS* II 7, no. 14 (Fig. 8b) who wear hide skirts – a garb usually considered as associated with hierarchically elevated figures. Might the hunched posture of the figures on *CMS* II 7, no. 15 (Fig. 8d) thus be interpreted as a marker of a slightly different type of jogging (see Lebessi *et al.* 2004, 13), or as a marker of a different social function and maybe even status as it does for the hunched man with a hydria from Xeste 3? Finally, the frontally oriented torso of the Kato Syme runner may indeed serve to point to a different type of sport, to his more elevated status, but it may also serve to show that he is a victorious athlete (Lebessi *et al.* 2004, 15) like the frontally depicted bull leapers.

The torso convention in scenes depicting 'cultic events'

The last type of scene in which Coupling 1 occurs depicts figures engaged in a range of activities here gathered under the 'cultic events' umbrella. While usually considered as bearing religious and ritualistic connotations, the exact nature of the actions performed by the figures have been widely debated and have been varyingly described as dances, tree-pulling, baetyl-hugging, ecstatic performances or as the summoning of epiphanies (see *e.g.* Nilsson 1951; Warren 1981, 1988; Marinatos 1993; German 1999; Rehak 2000; Cain 2001; Tully 2022). Some scenes in which these actions are rendered show groups of figures moving in a seemingly synchronous and choreographed way while others show figures acting independently from each other. The very brief and superficial analysis presented below does not do justice to the richness and complexity of these scenes, yet it is conspicuous that they do also present similar adoptions of the torso conventions to the other scenes containing groups of figures discussed in this paper.

Groups of female figures moving in an apparently choreographed way appear on a number of rings, seals and sealings (Table 3) (Figs. 8 e, g, h) and in the Knossos Sacred Grove and Dance wall painting (Fig. 8 f) (for photographs and reconstructions see Morgan ed. 2005, pl. 10). In most cases, the figures' torsos are positioned frontally, but in the wall painting and on *CMS* II 3, no. 51 from Isopata (Fig. 8 e), some figures are shown in profile. The latter's clothing is also slightly different to that of the frontally depicted women (Rehak 2000, 272–274). It is thus conceivable that, as in the case of other scenes which contain groups of figures, the convention serves to show a difference in role or status among the performers, alongside possibly represent-
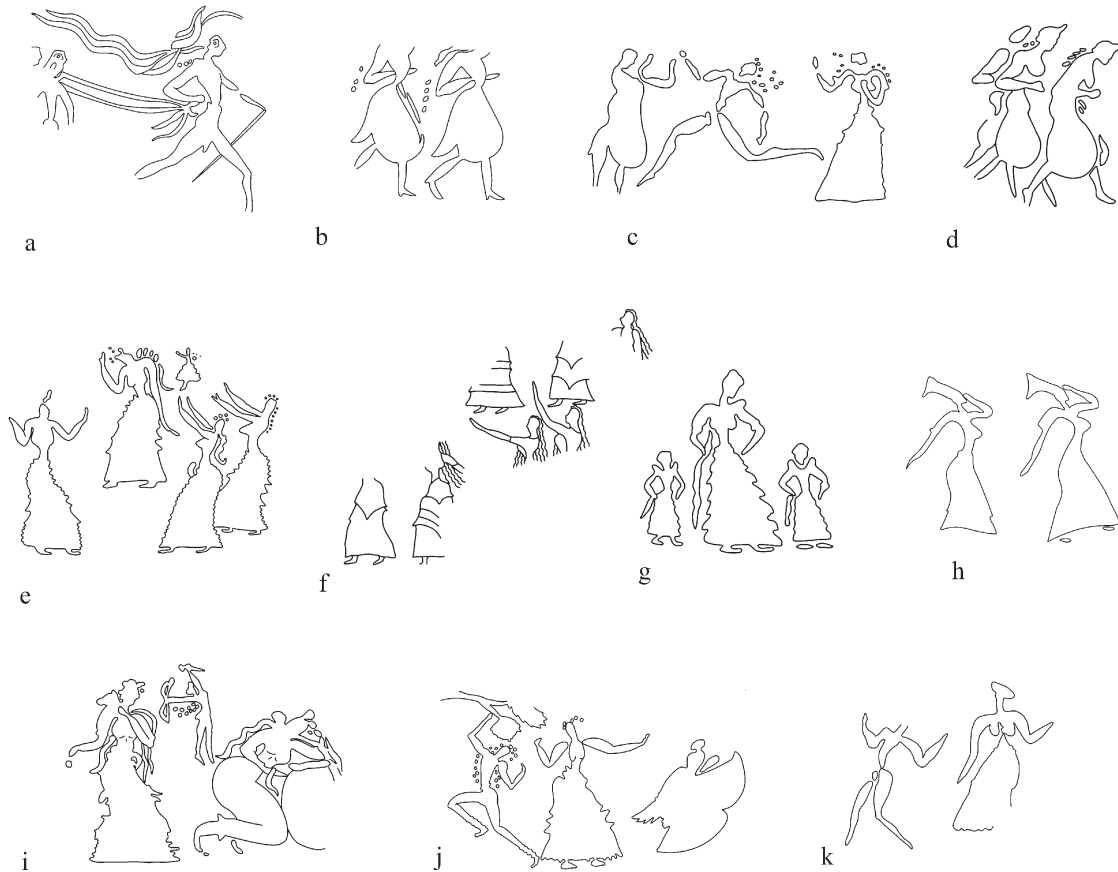
Fig. 8 a: CMS *V, Suppl. 1A, no. 133; b.* CMS *II 7, no. 14; c. Kato Syme ring; d.* CMS *II 7, no. 15; e.* CMS *II 3, no. 51; f. Wall painting, Knossos; g.* CMS *II 6, no. 1; h.* CMS *II 6, no. 13; i.* CMS *VI, no. 278; j.* CMS *I, no. 219; k.* CMS *V, Suppl. 1B, no. 194. Images not to scale. Sketches by the author.*

ing different dance moves. Scenes representing groups of figures behaving in apparently autonomous ways show the latter as more self-absorbed than the figures in the scenes discussed so far in this paper. The bodily comportment of the women and men engaged in these types of 'cultic events' do not suggest that they are attentive to the movements of the other figures depicted next to them. These scenes are for the most part reserved to glyptic (Table 3) – including *CMS* XI, no. 29 held in Berlin (Fig. 4g) and the Poros ring (Fig. 5f) examined above – but the Agia Triada Room 14 wall painting (for image see Morgan ed. 2005, pl. 2) can also be tentatively included here despite its fragmentary state. The majority of the figures are rendered with a frontally positioned torso, but those hanging from trees are rendered with a profile positioned torso (Figs. 8 i–k). Similarly, to the above, the torso orientation may here also serve to differentiate the figures in terms of role in the event, in terms of function, but possibly also in terms of status.

Overview: torso orientation and posture as a convention in scenes not showing direct interaction
The analysis conducted above demonstrates that torso orientation and posture also clearly function as a convention in scenes in which lone human figures with animals, or multiple figures who do not directly interact, are depicted. It therefore clearly allows for the 'reading' of composite scenes. The convention certainly serves to differentiate the figures from each other yet in significantly different ways to Coupling 1. In fact, except in bull leaping scenes, the convention principally marks out the figures – or groups of figures – in terms of function rather than ability or degree of experience (except in the case of the tripping incident depicted on the Harvesters Vase). Indeed, all the examined figures are adults, or very close to adulthood, and the scenes depict the

159

Figures not engaged in direct interaction			
Activity	Media	Sources	Gender/species
Bull leaping	Glyptic	*CMS* II 7, no. 35 (Kato Zakros)	Male-Bull-Male
		CMS II 8, no. 221 (Kato Zakros)	Male-Bull-Male
		CMS II 6, no. 44 (Agia Triada)	Male-Bull
		CMS II 7, no. 34 (Kato Zakros)	Male-Bull
		CMS II 7, no. 36 (Kato Zakros)	Male-Bull
		CMS II 7, no. 37 (Kato Zakros)	Male-Bull
		CMS II 6, no. 43 (Agia Triada)	Male-Bull
		CMS II 6, no. 161 (Gournia)	Male-Bull
		CMS II 8, no. 228 (Knossos)	Male-Bull
		CMS V, Suppl. 3, no. 395 (Akrotiri)	Male-Bull
	Vessels	Boxer Rhyton register 2 (Agia Triada)	Male-Bull
Parading	Glyptic	*CMS* II 6, no. 11 (Agia Triada)	Male-Male
		CMS II 7, no. 16 (Kato Zakros)	Female-Male
		CMS II 7, no. 17 (Kato Zakros)	Female-Male
		CMS II 7, no. 12 (Kato Zakros)	Male-Male
	Vessels	Harvesters Vase (Agia Triada)	Male
Procession	Wall paintings	Xeste 3, corridor west of lustral basin (Thera)	Male
		Xeste 3, corridor on the first floor (Thera)	Female-Female
	Vessels	Rhyton (Knossos) (Warren 1969, P474)	Male
Running and jogging	Glyptic	*CMS* V, Suppl. 1A, no. 133 (Kastelli Chania)	Male-Male
		CMS II 7, no. 13 (Kato Zakros)	Male-Male
		CMS II 7, no. 14 (Kato Zakros)	Male-Male
		CMS II 7, no. 15 (Kato Zakros)	Male-Male
		Kato Syme Ring (Lebessi *et al.* 2004, table 1)	Female-Male
Cultic events	Wall paintings	Sacred Grove and Dance (Knossos)	Female-Female
		Room 14 (Agia Triada)	Female-Female
	Glyptic	*CMS* II 3, no. 51 (Isopata) *choreographed movement*	Female-Female
		CMS II 3, no. 17 (Knossos) *choreographed movement*	Female-Female
		CMS II 8, no. 266 (Knossos) *choreographed movement*	Female-Female
		CMS II 6, no. 13 (Agia Triada) *choreographed movement*	Female-Female
		CMS II 6, no. 1 (Agia Triada) *choreographed movement*	Female-Female
		CMS II 3, no. 236 (Gournia) *choreographed movement*	Female-Female
		CMS V, Suppl. 1A, no. 178 (Kastelli Chania)	Female-Female
		CMS VI, no. 278 (Chania)	Female
		CMS II 6, no. 4 (Agia Triada)	Female
		CMS II 3, no. 114 (Kalyvia)	Female
		CMS II 7, no. 10 (Kato Zakros)	Female-Male
		CMS V, Suppl. 1B, no. 194 (unprovenanced)	Male-Male
		CMS XI, no. 29 (unprov. Berlin ring)	Female-Male
		Archanes Ring (Sakellarakis and Sakellarakis 1997, fig. 722)	Female-Male
		Poros Ring (Dimopoulou and Rethemiotakis 2000, fig 4)	Female-Male

Table 3. Instances of torso orientation and posture for figures not engaged in direct interaction.

actual performance of an activity rather than training. The fluid synchronicity of the majority of the figures' movements and actions suggests that the represented activities have been mastered through repetitive practice. Finally, it is significant that, except for some of the 'cultic event' representations, these scenes present an emphasis on the group and collaboration and thus indirectly highlight the power of collective action.

Neopalatial Iconographic Conventions and an Interest in Marking Social Differentiation

The examination of the torso orientation and posture convention undertaken in this paper shows that many subtleties are involved in the rendering of the human body in LM I and LC I iconography, and thus in the rendering of the activities that the figures engage in and of the relationships they maintain with each other. It appears that these subtleties were employed by the images' producers to clearly mark out the existence of distinct groups of people and of hierarchies both among and within these groups. Moreover, except for combat scenes, the majority of the studied scenes – especially those depicting direct interaction between figures, but also

images such as the Harvesters Vase or the Knossos miniature wall paintings – also demonstrate a clear interest in showing peaceful coexistence and engagement, but also reciprocity and possibly dependence, between these different groups. Indeed, scenes (again, except for combat) in which Coupling 1 appears, and thus in which asymmetries are most pronounced, suggest that these groups need each other: youths must be educated, the hierarchically superior must be served and respected, and the hierarchically inferior must be guided. Depictions of groups with the same torso orientation and posture, which imply symmetry rather than asymmetry, however also celebrate the power of collaboration and reliance between co-participants in an activity, be they peers or on a different hierarchical standing. Thus, in showing, on the one hand, the existence of different groups, and on the other hand, their need for collaboration, the studied iconography creates an overall impression of equilibrium. As follows, the imagery evokes a set of values most clearly shown by the figures' body language: a disposition to teaching and learning, an ability to command and defer, and an ability to cooperate.

Like the use of the torso convention, the demarcation of groups alongside the representation of collaboration in LM I and LC I iconography is however not an iconographic trend existing in a vacuum. Alongside possibly referring to a series of commonly known stories or 'myths', the imagery also indirectly betrays certain contemporary socio-political concerns. The images were produced during a period of significant societal change manifested through the construction of the second generation of palaces and by the further fragmentation of communities into a number of differently advantaged groups, likely stratified into a hierarchy over which the upper tiers exercised extensive control. It has been argued that, in order to preserve this control while simultaneously maintaining order, the upper tiers of the hierarchy propagandistically celebrated notions of a generally shared communal interest, collective identity and cohesion, despite the existence of increasingly marked differences within the population (see *e.g.* Letesson and Driessen 2020; Driessen and Letesson 2023). Might the concurrent iconographic emphasis on legitimised social differentiation among groups, and even among individuals circulating within the higher spheres of society, as well as the depiction of interaction between different social groups have therefore been a part of this programme?

Finally, the analysis presented in this paper has shown that while the torso's orientation and comportment are subtle features, they are significant and consist of enlightening cues. The torso, a part of the body which is usually regarded as a backdrop against which hands are placed in a number of gestural formulas, is a visual trove of information allowing for the characterisation of the depicted figures and of the type of relationship they maintain. In simultaneously functioning on different levels while maintaining an overarching meaning, the convention ultimately demonstrates how complex yet standardised LM I and LC I iconography is.

References
Alexiou, S. 1959. "Νέα παράστασις λατρείας έπι Μινωικού αναγλύφου άγγείου." *ΚρητΧρον* 13: 346–353.

Betancourt, P. and Davaras, C. 1998. Pseira II: Building AC (the "Shrine") and other buildings in Area A. University Museum Monograph 94. Philadelphia: INSTAP Academic Press.

Blakolmer, F. 2007. "Die 'Schnittervase' von Agia Triada. Zu Narrativität, Mimik und Prototypen in der minoischen Bildkunst." *Creta Antica* 8: 201–242.

Blakolmer, F. 2018. "A 'special procession' in Minoan seal images: observations on ritual dress in Minoan Crete." In *Ευ-δαίμων: Studies in honour of Jan Bouzek,* edited by P. Pavúk, V. Klontza-Jaklovà, and A. Harding, 29–50. *Opera Facultatis philosophicae Universitatis Carolinae Pragensis XVIII.* Prague and Brno: Charles University and Masaryk University.

Blakolmer, F. and Hein, I. 2018. "A 'special procession' in Minoan Crete as a ritual of rulership? A view from Egypt." In *Transformation & migration; archaeology of religion & ritual; images in context: agency, audiences & perception; Islamic Archaeology. Proceedings of the 10th International Congress on the Archaeology of the Ancient Near East, 25–29 April 2016, Vienna,* edited by B. Horejs *et al.,* 195–208. Wiesbaden: Otto Harrassowitz Verlag.

Boulotis, C. 2011, "Στρέφοντας πίσω το κεφάλι. Το ταξίδι ενός αφηγηματικού μοτίβου από το 'Αγγείο των Θεριστών' μέχρι μία σαρκοφάγο από την Τανάγρα." In *Κρήτης Μινωιδός: Tradizione e Identità Minoica tra Produzione Artigianale, Pratiche Cerimoniali e Memoria del Passato. Studi Offerti a Vincenzo La Rosa per il suo 70° Compleanno,* edited by F. Carinci, N. Cucuzza, P. Militello, and O. Palio, 259–284. *Studi di Archeologia Cretese* 10. Padova: Bottega d'Erasmo.

Cain, C. 2001. "Dancing in the dark: deconstructing a narrative of epiphany on the Isopata Ring." *AJA* 105.1: 27–49.

Chapin, A. 2007. "Boys will be boys: youth and gender identity in the Theran frescoes." In *Constructions of childhood in ancient Greece and Italy,* edited by A. Cohen and J. Rutter, 229–255. *Hesperia Suppl.* 41. Princeton: The American School of Classical Studies at Athens.

Chapin, A. 2009. "Constructions of male youth and gender in Aegean art: the evidence from Late Bronze Age Crete and Thera." In *Fylo: Engendering prehistoric 'stratigraphies' in the Aegean and the Mediterranean. Proceedings of an International Conference, 2–5 June 2005,* edited by K. Kopaka, 175–182. *Aegaeum* 30. Liège and Austin: Peeters.

Chapin, A. 2011. "Gender and coalitional power in the miniature frescoes of Crete and the Cycladic Islands." In *Πεπραγμένα Ι′ Διεθνούς Κρητολογικού Συνεδρίου, Χανιά, 1–8 Οκτωβρίου 2006,* edited by M. Andreadaki-Vlasaki and E. Papadopoulou, 507–522. Chania: Φιλολογικός Σύλλογος Ο Χρυσόστομος.

Chapin, A. 2012. "Do clothes make the man (or woman?): sex, gender, costume, and the Aegean color convention." In *Kosmos. Jewellery, adornment and textiles in the Aegean Bronze Age. Proceedings of the 13th International Aegean Conference, 21–26 April 2010,* edited by M.-L. Nosch and R. Laffineur, 297–304. *Aegaeum* 33. Leuven and Liège: Peeters.

Coulomb, J. 1981. "Les boxeurs minoens." *BCH* 105.1: 27–40.

Coulomb, J. 1985. "Le Boxeur de Knossos aux Fleurs de Lis." in *Πεπραγμένα τον Ε´ Διεθνούς Κρητολογικού Συνεδρίου, Άγιος Νικόλαος, 25 Σεπτεμβρίου–1 Οκτωβρίου 1981,* edited by T. Detorakis, 67–76. Heraklion: Εταιρία Κρητικών Ιστορικών Μελετών.

Coulomb, J. 1989. "Η υπερτροφία των γυναικείων μαστών στην κρητο-μυκηναϊκή τέχνη." Αρχαιολογία 30: 42–46.

Coulomb, J. 1990. "Quartier sud de Knossos: divinité ou athlète?" *Cretan Studies* 2: 99–110.

Davis, E. 1986. "Youth and age in the Thera frescoes." *AJA* 90.4: 399–406.

Dimopoulou, N., and G. Rethemiotakis. 2000. "The 'Sacred Conversation' Ring from Poros." In *Minoisch-mykenische Glyptik: Stil, Ikonographie, Funktion. V. Internationales Siegel-Symposium Marburg, 23.–25. September 1999,* edited by W. Müller, 39–56. Berlin: Gebr. Mann Verlag.

Dimopoulou-Rethemiotaki, N. 2005. Το Αρχαιολογικό Μουσείο Ηρακλείου. Athens: Eurobank/Latsis Foundation.

Doumas, C. 1992. *The wall paintings of Thera.* Athens: The Thera Foundation.

Driessen, J., and Q. Letesson. 2023. "The gathering: collectivity and the development of Bronze Age Cretan society." *Journal of Archaeological Research* 31.1.

Evans, A. 1930. *The Palace of Minos at Knossos.* Vol. 3. London: Macmillan.

Forsdyke, J. 1954. "The 'Harvester' Vase of Hagia Triada." *JWarb* 17:1–9.

German, S. 1999. "The politics of dancing: a reconsideration of the motif of dancing in Bronze Age Greece." In *Meletemata. Studies in Aegean Archaeology presented to Malcolm H. Wiener as he enters his 65th year,* edited by P. Betancourt, V. Karageorghis, R. Laffineur, and W.-D. Niemeier, 279–282. *Aegaeum* 20. Liège and Austin: Peeters.

Hägg, R. 1983. "Epiphany in Minoan ritual." *BICS* 30: 184–185.

Hood, S. 1978. *The arts in prehistoric Greece.* London: Penguin Books.

Jones, B. R. 2014. "A new discovery and interpretation of the fragmentary figure from the House of the Ladies, Thera." *JPR* 24: 51–73.

Koehl, R. 1986. "The Chieftain Cup and a Minoan rite of passage." *JHS* 106: 99–110.

Koehl, R. 2006. *Bronze Age rhyta.* Philadelphia: INSTAP Academic Press.

Koehl, R. 2016. "The ambiguity of the Minoan mind." In *Metaphysis. Ritual, myth and symbolism in the Aegean Bronze Age. Proceedings of the 15th International Aegean Conference, Vienna, Institute for Oriental and European Archaeology, Aegean and Anatolia Department, Austrian Academy of Sciences and Institute of Classical Archaeology, University of Vienna, 22–25 April 2014,* edited by E. Alram-Stern, F. Blakolmer, S. Deger-Jalkotzy, R. Laffineur and J. Weilhartner, 469–478. *Aegaeum* 39. Leuven and Liège: Peeters.

Krattenmaker, K. 1995. "Palace, peak and sceptre: the iconography of legitimacy." In *The role of the ruler in the prehistoric Aegean. Proceedings of a panel discussion presented at the Annual Meeting of the Archaeological Institute of America, New Orleans, Louisiana, 28 December 1992,* edited by P. Rehak, 49–62. *Aegaeum* 11. Liège and Austin: Peeters.

Lebessi, A.; Muhly, P. and Papasavvas, G. 2004. "The Runner's Ring, a Minoan Athlete's dedication at the Syme sanctuary, Crete." *AM* 119: 1–31.

Letesson, Q., and J. Driessen. 2020. "'On the house': a diachronic look on the configuration of Minoan social relationships." In *Oikos. Archaeological approaches to House Societies in the Bronze Age Aegean,* edited by M. Relaki and J. Driessen, 7–24. *Aegis* 19. Louvain-la-Neuve: Presses universitaires de Louvain.

Marinatos, N. 1984. *Art and religion in Thera. Reconstructing a Bronze Age society.* Athens: D. and I. Mathioulakis.

Marinatos, N. 1993. *Minoan religion. Ritual, image, and symbol.* Columbia: University of South Carolina Press.

Marinatos, N. 1995. "Formalism and gender roles: a comparison of Minoan and Egyptian art." In *Politeia. Society and state in the Aegean Bronze Age. Proceedings of the 5th International Aegean Conference, 10–13 April 1994,* edited by R. Laffineur and W.-D. Niemeier, 577–585. *Aegaeum* 12. Liège and Austin: Peeters.

Marinatos, N. 2005. "The ideals of manhood in Minoan Crete." In Morgan ed. 2005, 149–158.

Morgan, L. 1990, "Island iconography: Thera, Kea, Milos." In *Thera and the Aegean World III. Volume 1: Archaeology. Proceedings of the Third International Congress, Santorini, Greece, 3–9 September 1998,* edited by D. Hardy, C. Doumas, J. Sakellarakis, and P. Warren, 252–266. London: The Thera Foundation.

Morgan, L. 2000. "Form and meaning in figurative painting." In *The wall paintings of Thera. Proceedings of the First International Symposium, Petros M. Nomikos Conference Centre, Thera, Hellas, 30 August–4 September 1997,* edited by S. Sherratt, 925–946. Athens: The Thera Foundation.

Morgan, L., ed. 2005. *Aegean wall painting: a tribute to Mark Cameron. BSA Studies* 13. London: The British School at Athens.

Morgan, L. 2007. "Paintings, harbors, and intercultural relations." In *Krinoi kai limenes: studies in honor of Joseph and Maria Shaw,* edited by P. Betancourt, M. Nelson and H. Williams, 117–129. *Prehistory Monographs* 22. Philadelphia: INSTAP Academic Press.

Morris, C. 2001. "The language of gesture in Minoan religion." In *Potnia. Deities and religion in the Aegean Bronze Age. Proceedings of the 8th International Aegean Conference, 12–15 April 2000,* edited by R. Laffineur and R. Hägg, 245–251. *Aegaeum* 22. Liège: Université de Liège.

Morris, C. 2009. "The iconography of the bared breast in Aegean Bronze Age art." In *Fylo. Engendering prehistoric 'stratigraphies' in the Aegean and the Mediterranean. Proceedings of an International Conference, 2–5 June 2005,* edited by K. Kopaka, 243–249. *Aegaeum* 30. Liège and Austin: Peeters.

Murphy, C. 2015. "Choreographed frenzy: a sequence of steps towards understanding movement and dance in Aegean Bronze Age iconography." In *Minoan archaeology: perspectives for the 21st century,* edited by S. Cappel, U. Günkel-Maschek, and D. Panagiotopoulos, 311–318. *Aegis* 19. Louvain-la-Neuve: Presses universitaires de Louvain.

Niemeier, W-D. 1987. "Das Stuckrelief des 'Prinzen mit der Federkrone' aus Knossos und minoische Götterdarstellungen." *AM* 102: 65–98.

Nilsson, M. 1951. *The Minoan-Mycenaean religion and its survival in Greek religion.* New York: Biblo and Tannen.

Peterson Murray, S. 2004. "Reconsidering the Room of the Ladies at Akrotiri." In *Χάρις: Essays in honor of Sara A. Immerwahr,* edited by A. Chapin, 101–130. *Hesperia Suppl.* 33. Princeton: The American School of Classical Studies at Athens.

Rutkowski, B. 1986. *The cult places of the Aegean.* New Haven: Yale University Press.

Rehak, P 1996. "Aegean breechcloths, kilts, and the Keftiu paintings." *AJA* 100: 35–51.

Rehak, P. 1999. "The monkey frieze from Xeste 3, Room 4: reconstruction and interpretation." In *Meletemata. Studies in Aegean Archaeology presented to Malcolm H. Wiener as he enters his 65th year,* edited by P. Betancourt, V. Karageorghis, R. Laffineur and W.-D. Niemeier, 705–709. *Aegaeum* 20. Liège and Austin: Peeters.

Rehak, P. 2000. "The Isopata Ring and the question of narrative in Neopalatial glyptic." In *Minoisch-mykenische Glyptik: Stil, Ikonographie, Funktion. Internationales Siegel-Symposium Marburg, 23.–25. September 1999,* edited by W. Müller and I. Pini, 269–276. *CMS Beiheft* 3. Berlin: Gebr. Mann Verlag.

Sakellarakis, Y., and E. Sapouna-Sakellaraki. 1997. *Archanes. Minoan Crete in a new light.* Vol. II. Athens: Ammos Publications.

Soles, J. 2019. "The creation of social memory in Minoan Mochlos". In *Μνήμη/Mneme. Past and memory in the Aegean Bronze Age. Proceedings of the 17th International Aegean Conference, 17–21 April 2018,* edited by E. Borgna, I. Caloi, F. Carinci, and R. Laffineur, 35–40. *Aegaeum* 43. Leuven and Liège: Peeters.

Tully, C. 2022. "Understanding the language of trees: ecstatic experience and interspecies communication in Late Bronze Age Crete." In *The Routledge companion to ecstatic experience in the ancient world,* edited by D. Stein, S. Kielt Costello, and K. Polinger Foster, 469–488. London and New York: Routledge.

Tzachili, I. 2005. "*Anthodokoi talaroi:* the baskets of the crocus-gatherers from Xeste 3, Akrotiri, Thera." In *Aegean Wall Painting: A Tribute to Mark Cameron,* edited by L. Morgan, 113–117. *BSA Studies* 13. London: British School at Athens.

van Effenterre, H., and M. van Effenterre. 1999. A propos du 'Vase des Moissonneurs'." In *Meletemata. Studies in Aegean Archaeology presented to Malcolm H. Wiener as he enters his 65th year,* edited by P. Betancourt, V. Karageorghis, R. Laffineur, and W.-D. Niemeier, 883–885. *Aegaeum* 20. Liège and Austin: Peeters.

Vlachopoulos, A. 2008. "The wall paintings from the Xeste 3 building at Akrotiri: towards an interpretation of the iconographic programme." In *Horizon. Ορίζων: A colloquium on the prehistory of the Cyclades,* edited by N. Brodie, J. Doole, G. Gavalas, and C. Renfrew, 493–528. *McDonald Institute Monographs.* Cambridge: McDonald Institute for Archaeological Research.

Vlachopoulos, A. 2021. "Divine acolytes: the animals and their symbolism in the Xeste 3 wall-paintings." In *ZOIA. Animal-human interactions in the Aegean Middle and Late Bronze Age. Proceedings of the 18th International Aegean Conference, May 28–31 2021,* edited by R. Laffineur and T. Palaima, 249–280. *Aegaeum* 45. Liège and Austin: Peeters.

Warren, P. 1969. *Minoan stone vases.* Cambridge: Cambridge University Press.

Warren, P. 1981. "Minoan Crete and ecstatic religion. Preliminary observations on the 1979 excavations at Knossos and postscript on the 1980 excavations at Knossos." In *Sanctuaries and cults in the Aegean Bronze Age. Proceedings of the First International Symposium at the Swedish Institute in Athens, 12–13 May* 1980, edited by R. Hägg and N. Marinatos, 155–166. *ActaAth* 4.27. Stockholm: Svenska Institutet i Athen.

Warren, P. 1988. *Minoan religion as ritual action.* Gothenburg: Gothenburg University Press.

Wedde, M. 1999. "Talking hands: a study of Minoan and Mycenaean ritual gesture – some preliminary notes." In *Meletemata: Studies in Aegean Archaeology presented to Malcolm H. Wiener as he enters his 65th year,* edited by Ph. P. Betancourt, V. Karageorghis, R. Laffineur, and W.-D. Niemeier, 911–920. *Aegaeum* 20. Liège and Austin: Peeters.

Wedde, M. 2004. "On the road to the godhead: Aegean Bronze Age glyptic procession scenes." In *Celebrations: selected papers and discussions from the Tenth Anniversary Symposion of the Norwegian Institute at Athens, 12–16 May 1999,* edited by M. Wedde. *Papers from the Norwegian Institute at Athens* 6. Bergen: The Norwegian Institute at Athens.

Weingarten, J. 2000. "Reading the Minoan body: proportions and the Palaikastro Kouros." In *The Palaikastro Kouros. A Minoan chryselephantine statuette and its Aegean Bronze Age context,* edited by J. A. MacGillivray, J. Driessen, and L. H. Sackett, 103–111. *BSA Studies* 6. London: The British School at Athens.

Younger, J. 1976. "Bronze Age representations of Aegean bull-leaping." *AJA* 80.2: 125–137.

"Ariadne's Dance" – Staging Female Gesture in Neopalatial Soft-Stone Glyptic

Diana Wolf

Abstract   *This paper discusses three closely related iconographic groups of Neopalatial soft-stone seals, an object type often skirted for its technological and material simplicity. While hard-stone seals and metal signet-rings clearly belonged to the sphere of high-ranking social groups, the status conferred to the owners of soft-stone seals has remained rather obscure.*

The soft-stone seals discussed here depict female figures performing a selection of discrete gestures. Due to the high cultural specificity of bodily communicative practices, the gestures on these seals have been interpreted as adoration, part of a procession, or dance. They are here classified and re-evaluated based on evidence available from Neopalatial soft-stone glyptic and, on a second level, appearances on other image-bearing objects. Corresponding gestures found in elite media such as signet-rings and frescoes suggest that these expressed ideologies of high-ranking social units.

Combined with insights from the contexts in which the seals were found – commonly related to palatial and urban centers – this contribution aims at a more careful differentiation of the persisting basic assumption that these objects belonged to very low-ranking individuals in Minoan society. Since the seals appear within the tenure of higher-ranking Neopalatial socio-political units, the selected gestures are analyzed as a possible device of a palatially instigated communication policy that reinforced social status and relations through the choreographed movement of the female body in the context of Minoan ritual.

Introduction

Seals are small, mobile artifacts manufactured in stone, bone, metal, artificial pastes, or glass, engraved with motifs on one or several of their faces and which were worn usually by means of suspension or in the shape of rings (Anastasiadou 2021). Used as sphragistic instruments, tools for identification, jewelry, and, on a secondary level, as amulets and status symbols, they were an indispensable part of life in the Late Minoan Period (Krzyszkowska 2012, 739). These manifold functions made the seals potent carriers of messages that contributed to forming, maintaining, and changing social relations.

Engraved using simpler techniques and easily abraded, seals cut in soft materials (Mohs 1–3/4) were less impressive in appearance than their hard-stone (Mohs 4+) and metal counterparts (Fig. 1; Krzyszkowska 2005, 16, 20, 124).[1] Nevertheless, this type of seal occupies a markedly prominent position in Late Minoan Crete, indicated by their large number, longevity of production, and wide diffusion over the island of Crete and to the Greek mainland (Pini 1995b, 189; Pini 2010, 325). Previous scholarship has often attributed the Late Minoan soft-stone seals to generally low-ranking social groups due to their less impressive features and common appearance all over the island (Younger 1983, 117–118; Pini 2010, 338). This paper aims to confront this basic assumption by offering an in-depth discussion of three closely related iconographic groups of Neopalatial (ca. 1650/40–1440/30 BCE; dates after Warren 2010, 393, fig. 3) soft-stone seals which depict female anthropomorphic figures performing a selection of discrete gestures. By considering the social as well as the archaeological contexts of these seals and their imagery, it ad-

---

1   For the materials used in Aegean glyptic, see Krzyszkowska 2005, 16, 20, 124; Müller 2007.
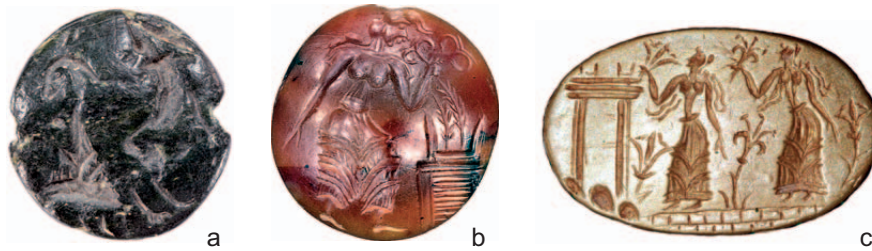
Fig. 1: Comparison of a soft stone, a hard stone, and a metal seal: (a) CMS XI, no. 256, serpentine; (b) CMS I, 279, carnelian; (c) CMS V Suppl. 1B, 113, gold, not to scale (© Antikensammlung, Staatliche Museen zu Berlin – Preussischer Kulturbesitz, photo: Johannes Kramer, Inv. No. FG 4; b, c courtesy of the CMS Heidelberg).

vances the thesis that these particular seals were not products and possessions of low-ranking individuals, but in fact expressed the ideology of high-ranking social units that aimed to reinforce status and transform social relations through bodily practices.

Late Minoan Soft-stone Seals

The large number of Late Minoan soft-stone seals known today (over 1500)[2] and their continuing appearance in excavations on Crete is at odds with the scientific appraisal of this ubiquitous material group, which has rarely been discussed discretely.[3] Soft-stone seals are typically hand-engraved and made from local materials such as serpentine, chlorite, schist, and steatite. They appear undistinguished compared to glyptic materials cut in elaborate techniques made of rarer and more valuable semi-precious stones or gold and other metals. Therefore, seals made from soft materials were very often neglected in archaeological publications or generally considered to be modest objects owned by "common folk" (Younger 1983, 118). It should be noted that the totality of the Late Minoan glyptic material made from soft stones does not constitute a homogeneous artifact group. In fact, the corpus of Late Minoan soft-stone seals is very heterogeneous as regards the quality of artisanship and range of designs. This indicates a more diverse social background of the engravers and owners of soft-stone seals than previously taken into account.

To approach the sizeable corpus of soft-stone seals from a fresh perspective, it is necessary to divide it into smaller, meaningful units. The exact materials of the seals are difficult to define due to the different admixtures that Cretan soft stones are composed of (*cf.* Becker 1976, 364; Grammatikakis et al. 2017, 317; Krzyszkowska 2005, 16), and the style which may vary considerably even within a phase. Therefore, these two parameters are not ideal for arranging the material into representative groups. Instead, iconographic clusters consisting of a core group, one or more groups displaying closely related imagery, and, finally, more loosely correlated specimens – or canonical, variant, and marginal types, following the terminology of Michael Wedde (1999, 911–912; 2004, 155–157) – are more convenient points of departure.

The topic of this conference – gestures, stance, and movement – has incited closer scrutiny of three interrelated clusters of Neopalatial soft-stone seals (Fig. 2). The female figures depicted on these perform a selection of gestures which have, due to the cultural specificity of corporal communicative practices, in the past been variously explained as adoration, salute, part of a procession, or dance (German 1999; Krzyszkowska 2020, 259–260; Murphy 2015, 311–312; Niemeier 1989, 167–169, 170–171, 183; Pini 2010, 332–336; Sakellarakis 1972). These interpretations rely on iconographical studies that usually cover different image-bearing artifacts and features and

---

2 This includes seals with ornamental designs (ca. 400) and representational motifs (>1100).

3 The main contributions to this material group are two articles by Younger (1983, 1986). A critique and

future pathways have been drafted by Pini (1995b, 2010). Case studies for individual motif groups were published by Müller (1995) and Pini (1995a, 2010).

have resulted in an enhanced understanding of female attire, ritual behavior, and the chronological development of these. However, the specific role of the soft-stone seals within Minoan society and their possible connection with the usually more elaborate, plausibly elite, media with related imagery remains enigmatic. This paper is therefore a first attempt at approaching the question of the social specificity of the seals by analyzing three aspects: 1. The materiality of the seals and its ramifications for the engraved imagery; 2. The gestures and possible corporal practices attested in the seal imagery; 3. Evidence from known archaeological contexts and comparisons to other visual media.

Bronze Age images depicting corporal communicative practices have most often been treated in top-down approaches, referencing modern concepts of dance, prayer, or adoration. While one difficulty in this lies in consolidating modern ontologies with prehistoric realities, another lies in the heuristic value of identifying distinct activities from arrested images. As has been pointed out by Céline Murphy in the case of dance, these static images can only be "read as an index for the dance, as a reference to a whole, as a mere fragment, but not as a representation" (Murphy 2015, 316). Following her line of argument, it appears reasonable to question the epistemological value of a reconstruction or even re-enactment of a sequence of movements with the aim of reproducing real-world corporal practices, such as a certain kind of dance, from glyptic images.

Fig. 2: Examples of Neopalatial seals with gesturing females; (a) CMS III, no. 351, single female figure performing a gesture next to a star-shaped element; (b) CMS II 4, no. 111, female figure carrying a quadruped, likely a caprid; (c) CMS III, no. 359, female figure performing a gesture next to a deer, not to scale (courtesy of the CMS Heidelberg).

Rather than tying together the gestures and stances represented on the seals into what may or may not have been a coherent and empirically observable sequence of movement practiced in the prehistoric Aegean, the material is here confronted in a bottom-up approach that focuses first on the object group of seals and theoretical implications connected with the material.[4] An in-depth consideration of the corpus of Late Minoan soft-stone seals depicting gesturing female figures follows. This enables a broader perspective on the social specificities of the seals which will be the subject of the second half of this paper.

The materiality of the seals and impacts on iconography

Glyptic imagery is produced through subtraction, which could be achieved with hand-held tools like burins, points, and knives or more elaborate techniques involving fast-rotating tools operated on a spindle. As a rule, soft-stone seals were engraved with hand-held tools after the surface of the seal had been prepared through cutting, chafing, and smoothing (Anastasiadou 2011, 38–40; Evely 1993, 146–169). The small size of the seals, regularly under 2 cm in diameter, left little to no margin for committing errors on the carefully prepared image ground, which was convex in Late Minoan glyptic. This could have prompted a preliminary planning of the design prior to the execution of the intaglio or may have been achieved using a template, which in turn would have left less opportunity for creative impulses and contributed to a conservative nature of the craft.

---

4 A comprehensive bottom-up study of the ensemble of Late Minoan representational soft stone seals is currently under preparation by the author and scheduled to appear at the Presses Universitaires de Louvain, 2024.

The small size of the seals affords the miniaturization of representational elements. Human and animal figures are not designed to precisely reproduce naturally occurring forms in an anatomically correct way but to emphasize idiosyncratic physical features while schematizing basic traits. Images rendered on seals are therefore characterized by reduction, compression, and abstraction of a (real or imagined) prototype motif.

Despite the regularly appearing, near-exclusive scrutiny of seals based solely on their imagery for iconographic studies, which is reflected in publications by the abundant depiction of the drawings and lack of images of the objects or their impressions, the seal-stone – the object itself – has a great impact on its imagery and perception. The shape and edges of a seal dictate the boundaries and frame the engraved image. This acts as a window to the engraved design, or, in the words of Meyer Shapiro (1972–73, 11), "it is a finding and focussing device placed between the observer and the image". This frame, moreover, may even impact the form of the image it encloses. In Late Bronze Age glyptic, the geometric shape, most often a circle, either prompts a centralization of the main object or its orientation along the frame of the seal face (Fig. 3).

Centralized main motifs are predominant on Neopalatial seals that display human figures, among which females performing gestures form the largest group. Such centralized figures often appear isolated and deprived of context. Past studies have brought forth plausible arguments that these images are detached from an extended scene such as a procession, an animal sacrifice, or a dance which is reduced to a single, synoptic snapshot (Blakolmer 2010, 100–101, 108; Sakellarakis 1972; Wedde 1999, 917–918; 2004, 167, 180–182). Such seals can consequently be defined as representing condensed, focused, and framed depictions. These characteristics provide ideal grounds for visualizing more complex existing ideas through abridged designs (*cf.* Günkel-Maschek 2020, 110–111).

Seals with Gesturing Females

In the following, three closely related, synchronic groups of seals will be discussed. They depict female human figures composed in recognizable stances and performing asymmetrical gestures. Different gesture groups can be identified on the seals which are classified based on the iconography of the gesture, on a first level, and the style of the engraving, on a second.

The first iconographic group comprises seals that depict a single female figure, dressed in a long elaborate skirt and belt or girdle (Fig. 4). The body is shown either in profile, which appears to be the case most often, or frontally, which can only be identified with certainty in a few instances (*e.g.* Fig. 2a: *CMS* III, no. 351). The figures are shown in an upright stance with the head inclined or raised, and arms raised or extended in gesture. Fillers in the shape of a sun- or

Fig 3: Imagery fit to Late Minoan standard seal shapes: (a) cushion seal, CMS *III, no. 370, orientation along frame; (b) amygdaloid seal,* CMS *V Suppl. 1A, no. 55, orientation along frame; (c–d) lentoid seals,* CMS *VIII, no. 144, orientation along frame, and* CMS *II 3, no. 218, centralized orientation. All examples are cut in soft stones, not to scale (courtesy of the* CMS *Heidelberg).*
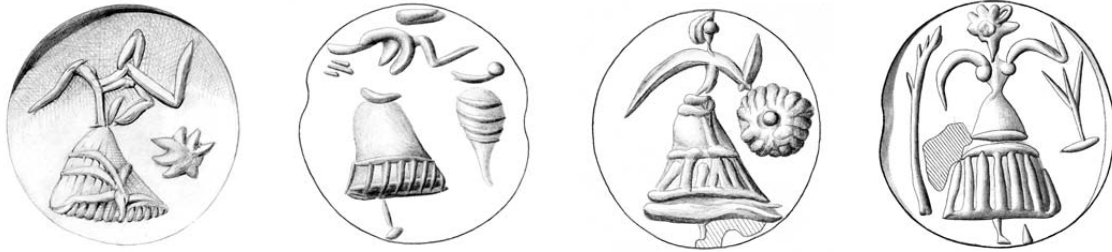
Fig. 4: Examples of the first iconographic group, depicting single figures: CMS II 3, no. 304; III, nos. 350, 352; XI, no. 347 (courtesy of the CMS Heidelberg).

Fig. 5: Examples of the first iconographic group, subgroup depicting pairs of figures: CMS II 3, nos. 17, 169; IX, no. 164; XII, no. 168 (courtesy of the CMS Heidelberg).

flower-like disc, schematic branches or plant elements occur on several seals, and in two cases, a water bird is depicted. Thirty-seven seals are in this group. They are stylistically diverse, but close style clusters can be made out.

A subtype of group one comprises seals that display two female figures performing the same range of gestures (Fig. 5). The figures are arranged symmetrically and, in most cases, face the same direction. Fillers are rare, which is likely related to space limitations on the seal face. There are some variations of the details including a few examples with mixed genders and differences in attire. Variants included, the sub-group comprises eighteen seals.

The second iconographic group consists of seals depicting a female figure in elaborate attire carrying a quadruped over one shoulder (Fig. 6). The stance, habitus, and rear-arm gesture of these figures correspond mostly to those in the previous group, but the front arm is typically not represented or only indicated due to the overlapping quadruped, usually a caprid. Seventeen soft-stone seals display this arrangement.

The third iconographic group shows again a female figure with a quadruped, but the animal is not being carried. Instead, the female figure touches it with her hand on or near its head. This leads to some differentiation in gesture when compared to the previous seals, which is why the type is here treated as distinct from group 2. The quadruped is positioned vertically framing the circular edge of the seal with its back toward the human figure (Fig. 7a–c). Unlike the animals carried over the shoulder, which appear to consist mostly or even entirely of caprids, there is a preference for deer and dogs here. In only one instance, a quadruped (goat) appears standing and facing the woman (Fig. 7d). This composition is otherwise unusual in Neopalatial soft-stone glyptic, but known from contemporary signet-rings (e.g. CMS II 6, no. 30; V Suppl. 1A, no. 175), and possibly frescoes (Hiller 2001, 295), where the female figure is clearly seated and appears to be feeding a goat. The motif with the standing female appears in soft-stone glyptic again much later and slightly more dominant, during LM III A1–2 (ca. 1390–1340/30, dates after Warren 2010, 393, fig. 3; e.g. CMS VI, nos. 328, 331; V Suppl. 1B, no. 261). It has been convincingly argued that imagery of the female figure feeding a goat belongs to the iconographic cycle of the 'potnia theron' (Mistress of animals; see Hiller 2001, and indicated references), which is an exhaustive subject in its own right and has therefore been excluded from this study.

Fig. 6: Examples of the second iconographic group showing a female figure carrying a quadruped over one shoulder: CMS II 4, no. 111; V Suppl. 3, no. 38; VI, no. 322; XII, no. 239 (courtesy of the CMS Heidelberg).

Fig. 7: (a–c) Examples of the third iconographic group showing a female figure with a quadruped: CMS XI, no. 256; III, no. 359; HMS 2993; (d) Female figure touching/feeding a goat: CMS X, no. 160 (courtesy of the CMS Heidelberg).

Style and provenance

Minoan soft-stone glyptic comes in a great variety of styles, much more so than hard-stone glyptic. Nevertheless, it is possible to identify a rather large Neopalatial style group. This is characterized by deep contour lines that partly delineate the bodies of animals or the clothing of human figures (Fig. 8). Arms and legs are often executed in a very linear manner, and details such as the rib cage of quadrupeds or patterns of textiles likewise. Ingo Pini and Walter Müller first recognized these lines as distinctive for a group of LM I–II bulls and goats and termed the feature "Leistenstil" (Pini 1985, XLVII, XLIX; Müller 1995, 153–154). The idiosyncratic tool marks found on these bull and goat seals can also be recognized in the depictions of other animals, like deer and lions, as well as humans.

Seals cut in the delineated style ("Leistenstil") cluster heavily around the area of Knossos and close subordinate centers such as Tylissos and Archanes, but single instances can be found at sites throughout north and central Crete. Apart from this style, soft-stone seals in the Neopalatial period *cannot* easily be placed in distinct, larger style groups. A large amount of the seals discussed here belong to the delineated style, while some show variations of or complete departures from the core style group.

Interestingly, the Neopalatial seals featuring gesturing women, no matter which style, follow very similar distribution patterns as seals belonging to the delineated style. The overwhelming majority come from Knossos, including find spots in the Unexplored Mansion (Catling 1986–87, 53, fig. 92) and the House of the Frescoes (CMS II 3, no. 17; II 4, no. 112) as well as the Royal Road North (Krzyszkowska 2012, 743, n. 30). Unfortunately, most individual contexts have not been well-documented (*cf.* Platon and Pini 1984, 147, 269 for Tylissos and Gournia) or (yet) published (*e.g.* two to three possible seals from the Stratigraphical Museum excavations mentioned by Warren 1982–83, 63, 69). The picture is further obscured by stray finds (*e.g.* from the Unexplored Mansion; Mylonas 1987, 138) and disturbed contexts. We are merely informed of the seals having been found in large-scale urban houses at Knossos, Tylissos (CMS II 3, no. 124), Gournia (*CMS* II 3, no. 236), Malia Quartier E (*CMS* II 4, no. 165), and the villa of Agia Triada (*CMS* II 3, no. 117). A seal from Archanes was found at Tourkogeitonia,

Fig. 8: Examples of soft-stone seals engraved in the delineated style ("Leistenstil"). The modern impressions reveal the characteristic deep contour lines and linear details such as the ribs and nuchal folds on the bull (a), the dapples on the deer (b), as well as the folds or patterns on human attire (c–d). Large, rounded eyes and linear arms and legs are further traits of the delineated style. CMS II 4, no. 199; XI, no. 246; III, no. 351; VI, no. 286 (courtesy of the CMS Heidelberg).

Area 17, which the excavators identify as a sanctuary (Sakellarakis and Sapouna-Sakellaraki 1997, 696). One seal was recovered from tomb B at Poros-Katsambas (Dimopoulou-Rethemiotaki 2004, 368, 373, fig. 31: 20). Neopalatial seals from dated contexts are in general very rare, which is partly due to the lack of undisturbed or closely dated grave contexts and an overall scarcity of grave goods in this period, as well as a scarcity of sealed LM I A deposits (Driessen and Macdonald 1997, 13; Krzyszkowska 2005, 120). Hopefully, forthcoming excavation reports and publications will shed more light on the contexts of newly found seals. Until then, we can only refer to general observations, such as the predominance of settlement contexts associated with upper-tier urban buildings that are connected with higher-ranking social units.

The gestures: definitions and groups

What differentiates gestures on the seals of all these groups most significantly is the positioning of the arms, which also affects the posture of the figures. In this study, four general types of arm positioning are defined: introversion, extroversion, intensification, and extension (Fig. 9). The first two apply to the front/dominant arm, while the latter characterize the rear arm. The front arm is here considered dominant because it transfers communicative or emotive meaning from the body outwards. When raised, it communicates in conjunction with the head. Depending on its positioning, it invites an upright or inclined posture of the head and neck. When raised close to or even touching the forehead, the head is usually inclined toward the hand, leading to a posture of introversion. When the arm is held nearly vertically upright or at an obtuse angle, the head is usually rendered in a more upright posture, sometimes even slightly looking up. An open space is clearly visible on the seal face between the head and lower arm. This is classified as a posture of extroversion.

In discussions of female gestures on seals, the rear arm has been mostly disregarded as it was not considered to impact the meaning of the gesture (Wedde 1999, 913), which resulted in an over-emphasis of the dominant front arm. It could be argued, however, that in the case of the gesture compounds depicted in glyptic, the rear arm is likewise significant as it is never displayed in a position of rest and has a distinct effect on the body posture. Stretched out behind or to the side of the body, the rear arm affords conscious muscle tension. This tension affects the posture of the body, leading to a very straight or even hollow back. This is especially the case when the arm is, beginning from the shoulder, extended behind the back and curved down toward the hips. This leads to an intensification of muscle tension and can result in a curvature of the spine, bringing about an exaggerated, artificial posture. The second characteristic positioning of the rear arm is that of extension, whereby it reaches out back- and downwards, sometimes with a slight upward proclivity of the lower arm. This results in a posture where the upper body occupies additional space beyond its usual boundaries in positions of rest.

These characteristic arrangements of the front and rear arms can be combined in different ways. For example, depictions of females uniting introversion and extension are not unusual, as
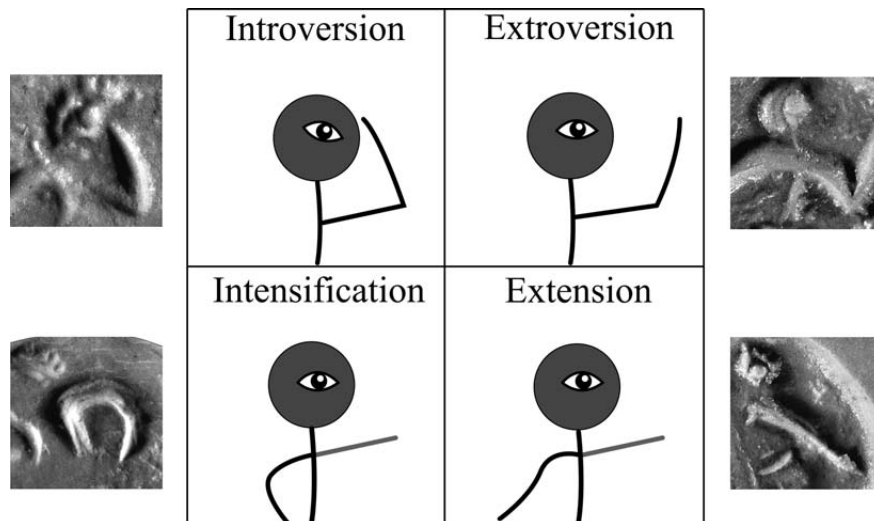
Fig. 9: Arm positioning types encountered on Neopalatial soft-stone seals. Top: front-arm positions of introversion and extroversion. Bottom: rear-arm positions of intensification and extension. Modern impressions of seals CMS *III, nos. 351, 352; II 4, no. 125; III, no. 359 (line art by author; impressions courtesy of the* CMS *Heidelberg).*

exemplified by a seal from the Giamalakis collection (Fig. 8c). The importance of respecting both arms in the study of gestures on seals becomes clear in the apparent dichotomy of an introversion of the upper and front part of the body and simultaneous extension of the rear and lower part of the body. On a communicative level, the expansive gesture of the rear arm and the withdrawal of the front arm create a paradox between the physical outreach of the less communicative part of the body, since the figure is facing away in the other direction, and a simultaneous barring of the emotive transmissive potential of the outward-facing part of the body. It may be possible to resolve this paradox by hypothesizing that the resulting artificial postures were not held for a long time but formed part of a compound of movements that have been arrested in time and space on the seal face.

In the following, I would like to discuss what could be considered as gesture groups, rather than a typology, since the gestures on the seals appear to follow somewhat loose compositional rules rather than canonical instances.

A possible compound of movements could be recognized in the case of Gesture Group A. It is characterized by an upraised front arm and a rear arm extended backward (Fig. 10). Both an extroversion and introversion of the front upper body and an extension or intensification of the lower rear body occur. Examples in this group are generally iconographically coherent, although the engraving style may vary. Compositions can include a single figure or a pair of figures. Head, torso, and arms appearing at different degrees of inclination possibly indicate that we are not seeing a stance that was held, but one that was part of choreographed movement. Gesture Group B could be connected to such a compound of gesture and movement (Fig. 11). Here, the front arm is mostly extroverted or only very gradually introverted while the rear arm is held back at an angle. The upper body can be upright or inclined toward the front arm. Seals in this group are few, which may indicate that the gesture may not have been understood in its isolated, frozen manner, but rather as part of a sequence of movement, perhaps in conjunction with Group A gestures.

Gesture Group C, on the other hand, clearly belongs to a different compound of human gesture (Fig. 12). It appears solely in combination with quadrupeds that are either carried or interacted with by the female figure whose rear arm is bent at an acute angle toward her chest or torso, and whose front arm is either hidden, covered by the quadruped that is being carried, or bent and extended, palm outward, toward the animal. Overall, the quality and style of the engravings appear to differ more strongly than in the other iconographic groups. It is not always possi-
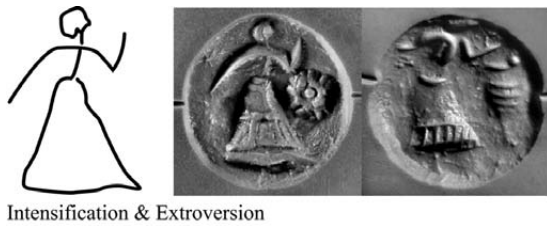
Intensification & Extroversion
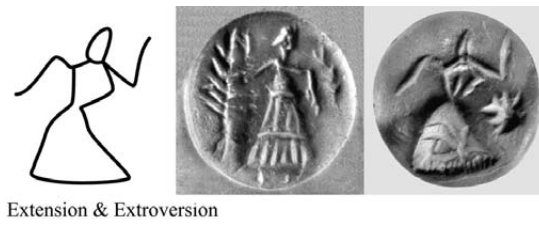
Extension & Extroversion

Extension & Introversion

Intensification & (gradual) introversion

Fig. 10: Gesture Group A: Front arm raised toward the head, rear arm held back- and downward; variant a: intensification of hind arm, extroversion of front arm; variant b: extension of hind arm, introversion of front arm. CMS III, nos. 352, 350; II 3, no. 17; XI, no. 282 (line art by author; impressions courtesy of the CMS Heidelberg).

Fig. 11: Gesture Group B: Front arm bent up, rear arm bent down at a nearly 90° angle; variant a: extension of hind arm, extroversion of front arm; variant b: intensification of hind arm; gradual introversion of front arm. CMS XII, no. D12; II 3, no. 304; VIII, no. 128; II 3, no. 171 (line art by author; impressions courtesy of the CMS Heidelberg).

Fig. 12: Gesture Group C: Front arm bent up and forward or hidden behind quadruped, rear arm bent at an acute angle toward the torso. CMS XI, no. 256; V Suppl. 3, no. 38; II 3, no. 213 (line art by author; impressions courtesy of the CMS Heidelberg).

Fig. 13: Gesture Group D: Both arms raised, usually bent at the elbows. Posture of extroversion with an upward orientation: (a–b) Gesturing females group: CMS IX, no. 164; IV, no. D55; (c) Potnia Theron: CMS II 3, no. 327 (line art by author; impressions courtesy of the CMS Heidelberg).

ble to identify the quadruped, but we can differentiate goats and rams (*e.g. CMS* VI, no. 322; V Suppl. 3, no. 38). Dogs are also shown, but are not carried over the shoulder (*CMS* XI, no. 256; HMS 2993, *cf.* Thomas 1995, 242, fig. 2).

Gesture Group D is different from the aforementioned in that both arms are extended upward. The females' bodies are thus extroverted in an upward direction. There is only sketchy evidence for this gesture from Neopalatial soft-stone seals with female figures (Fig. 13). Most commonly, it is associated with depictions of the 'potnia theron' (Mistress of Animals) (Fig. 13c).

Comparisons to other media

The iconography of female figures performing gestures is a typical feature of Neopalatial soft-stone glyptic, but not unique to this medium. An individual female appears on the side of an amethyst scaraboid seal from Aidonia (Fig. 14a; *CMS* V Suppl. 3, no. 245b), and another on a carnelian amygdaloid from Vapheio (*CMS* I, no. 226), albeit in an unusual dress and holding stick-like elements in her hands. Pairs of females occur on two further pieces, a carnelian lentoid from Modi (Fig. 14b; *CMS* V Suppl. 3, no. 80) and a second one without provenance (Krzyszkowska 2020). The motif of a female carrying a quadruped appears on a hematite seal from Epidauros (*CMS* V Suppl. 1A, no. 369), and on three hard-stone seals from Vapheio made of chalcedony, carnelian, and agate (Fig. 14c–d; *CMS* I, nos. 220–222), with the chalcedony specimen depicting two females of which the front one carries a goat. Finally, the motif is represented on another carnelian lentoid reportedly from Ilia (*CMS* XI, no. 27). Intriguingly, all instances of hard-stone seals with a secure or reported provenance come from the mainland and were, therefore, most likely consumed by Mainland individuals.

Metal, usually gold, signet-rings also regularly display females performing the gestures observed on the soft-stone seals (Fig. 15). Examples are a gold signet-ring from Mycenae (*CMS* I, no. 86), the figures to the right on another specimen from the Griffin Warrior tomb at Pylos (Stocker and Davis 2016, 640–643, fig. 10), and the females impressed by a signet on a string-end nodule from Agia Triada (*CMS* II 6, no. 13).[5] A lead bezel from Malia configures three gesturing female figures performing Gesture A (*CMS* V Suppl. 1A, no. 58). Due to their larger size and finer intaglios, signet-ring images contain more information, such as anatomical and decorative details. Often, the gesture is performed in the context of architectural elements, repeatedly a built rectangular structure such as a shrine, an altar, or possible building façades as can be seen on an impression made by a metal signet-ring at Pylos (*CMS* I, no. 313) and on a mold for metal signet-rings which was found at Eleusis (*CMS* V, no. 422b). In general, this action seems to take place outdoors, as indicated by the frequent representation of trees or other plants.

What can we learn from these hard-stone and metal seal examples? First, it is important to understand the connection between Neopalatial Minoan soft-stone glyptic, hard-stone seals found exclusively on the mainland, and signet-rings found predominantly on the mainland and in later contexts up to LH III C. The hard-stone seals, for once, appear to be an instance of a Cretan product adapted to mainland needs, *i.e.* images from the Minoan world were cut in the preferred materials of mainland glyptic, which had a strong predilection for hard-stone seals and no obvious interest in seals made out of soft stones (Krzyszkowska 2005, 236). This consumption pattern makes it difficult to draw conclusions regarding the Minoan soft-stone seals and their potential role in society since we are dealing with a possibly different artisanal background, different material properties, and lastly a distinct, mainland society that was using the seals. For instance, it may be tempting to regard the chalcedony lentoid from Vapheio (*CMS* I, no. 220) as providing additional information on the images of females carrying a quadruped over their shoulders as being part of a sacrificial procession (Sakellarakis 1972, 251). This presupposes that the mainland hard-stone seals drew directly from an unknown Minoan prototype. However, it appears more plausible that the mainland seals did not attempt at making exact copies of existing Minoan motifs, but rather selectively picked out elements from the existing pictorial repertoire and combined or reworked them to suit Mainland tastes. It could be suggested, for instance, that the chalcedony lentoid from Vapheio does not represent a procession in the context of animal sacrifice, but, possibly, rather combines the motif of a woman carrying a quadruped with that of two gesticulating female figures (*e.g.* as seen on Figs. 5–6). Such a re-combination of existing Minoan motifs can also be gleaned from the elaborate gold signet-ring from the Griffin Warrior tomb at Pylos (Stocker and

---

5   Further examples can be gleaned from a lead bezel from Malia (*CMS* V Suppl. 1A, no. 58), a steatite mold for metal signet-rings recovered at Eleusis (*CMS* V, no. 422b), and a seal impression on a string nodule from Pylos (*CMS* I, no. 313).
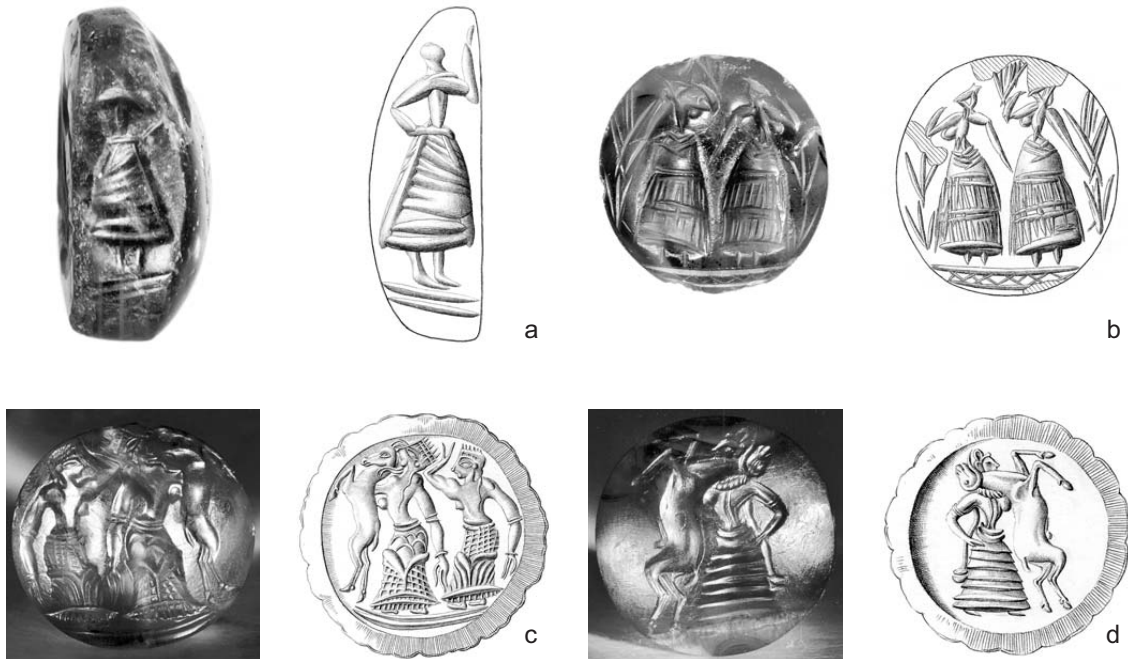
Fig. 14: Hard-stone seal examples: (a) amethyst scaraboid seal from Aidonia; (b) carnelian lentoid from Modi; (c) chalcedony lentoid from Vapheio; (d) carnelian lentoid from Vapheio. CMS V Suppl. 3, nos. 245 b, 80; I, nos. 220, 221 (courtesy of the CMS Heidelberg).

Fig. 15: Metal signet-rings and related objects: (a) gold signet-ring from Mycenae; (b) seal impression on a string nodule from Pylos; (c) lead bezel from Malia; (d) steatite mold for metal signet-rings from Eleusis. CMS I, nos. 86, 313; V Suppl. 1A, no. 58; V, no. 422 b (courtesy of the CMS Heidelberg).

Davis 2016, 640–643, fig. 10) that combines several motifs known individually from Minoan glyptic,[6] but that do not appear together in such an arrangement elsewhere.

It is worth noting two examples of possible Cretan prototypes for the motif of the gesturing female(s) (Fig. 16 a–b). A metal, likely gold, signet-ring was used to stamp a small number of string nodules at the Neopalatial villa of Agia Triada (CMS II 6, no. 13). A packet nodule from the same site (CMS II 6, no. 25) preserves part of a metal ring impression showing a single woman performing gesture A. There is a rather coherent group of soft-stone seals featuring pairs of gesturing women (i.a. CMS II 3, no. 236; VI, nos. 287–288; XI, no. 282; XII, no. 168) and it has been suggested, among others, by Fritz Blakolmer (2010, 2018) and Olga Krzyszkowska

---

6   For the heraldic trio of women on the right (impression) cf. CMS II 3, no. 218; for the gesturing pair on the left, cf. CMS XII, no. 168. For the built structure (altar?) with a tree in the context of a gesturing female, cf. CMS IX, no. 163. The wave pattern in the lower part can be seen on a metal ring impression on a string nodule from Knossos: CMS II 8, no. 264.
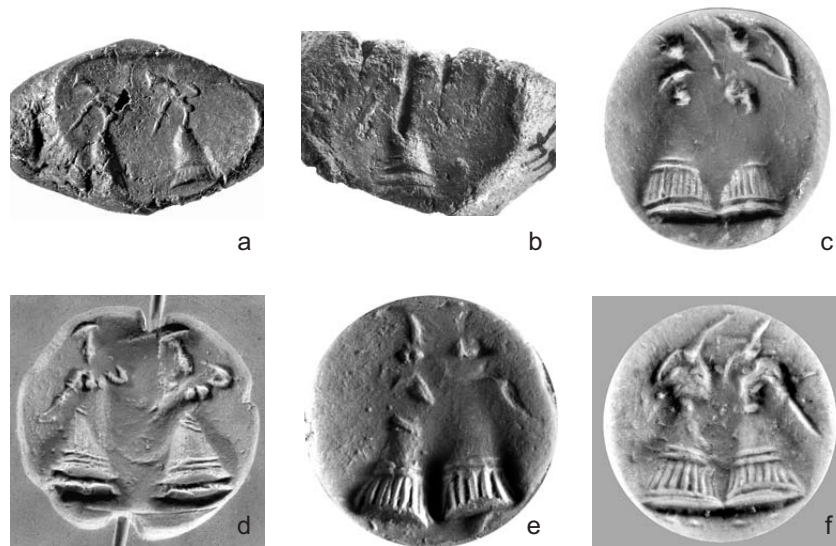
Fig. 16: (a–b) Clay sealings impressed by metal signet-rings from the site of Agia Triada showing a pair and a single gesturing female figure, respectively; (c–f) Modern impressions of soft-stone seals iconographically closely related to the signet-rings. CMS *II 6, nos. 13, 25; II 3, no. 236; VI, nos. 287, 288; XII, no. 168 (courtesy of the* CMS *Heidelberg).*

(2012, 745; 2020, 260) that these copied the motif from more elaborate media, such as gold rings or possibly unpreserved larger-scale media.

The Sacred Grove and Dance Fresco from Knossos (Fig. 17) is a tempting point of departure when relating the images on the seals with larger-scale media. The fragments of the fresco do not preserve the full gestures of the so-called dancers. Moreover, the preserved gestures differ somewhat from those seen on the soft-stone seals, although they can also be found in glyptic, especially in the case of gold signet-rings. Nevertheless, the fresco informs us of larger-scale public events in which women wearing a range of elaborate dresses – which are also in evidence in the soft-stone glyptic – perform gestures in front of a crowd. If we hypothesize that there is a meaningful link of contiguity between what we see on the seals and on the Sacred Grove and Dance Fresco, could the images on the seals represent snapshots of a larger-scale social performance?

There are several pieces of evidence for this. The array of gestures on the fresco, as well as the range and variation of those on the seals, as argued, perhaps exemplify gestures that were not held. Instead, they could have been performed through continuous movement that may be characterized as a 'dance', at least from a modern perspective. Others, especially when quadrupeds are involved in the gesture, are more ambiguous, but plausibly related to sacrificial offerings.

The art historian Ernst Gombrich (1966, 395) pointed out the difficulties in gaining information on gestures through art as a primary source: since movement is necessarily frozen in (graphic) art, the range of gestures that can be depicted is restricted, which causes ambiguity. Gombrich identifies a "manipulation of a vocabulary" (Gombrich 1966, 395), that occurs in the process of transforming observable gestures from the empirical world into art. A conceivable strategy for representing the flow and range of performed gestures would therefore be to feature idiosyncratic positions of the arms without necessarily canonizing these. The variation in arm position that we encounter on the seals would then be a result of the flow and movement of a performed gesture.

On the Social Role of the Seals with Gesturing Female Figures

Late Minoan soft-stone seals, conventionally referred to as the "Cretan Popular Group", have commonly been regarded as objects which were not engraved with much care and are found in
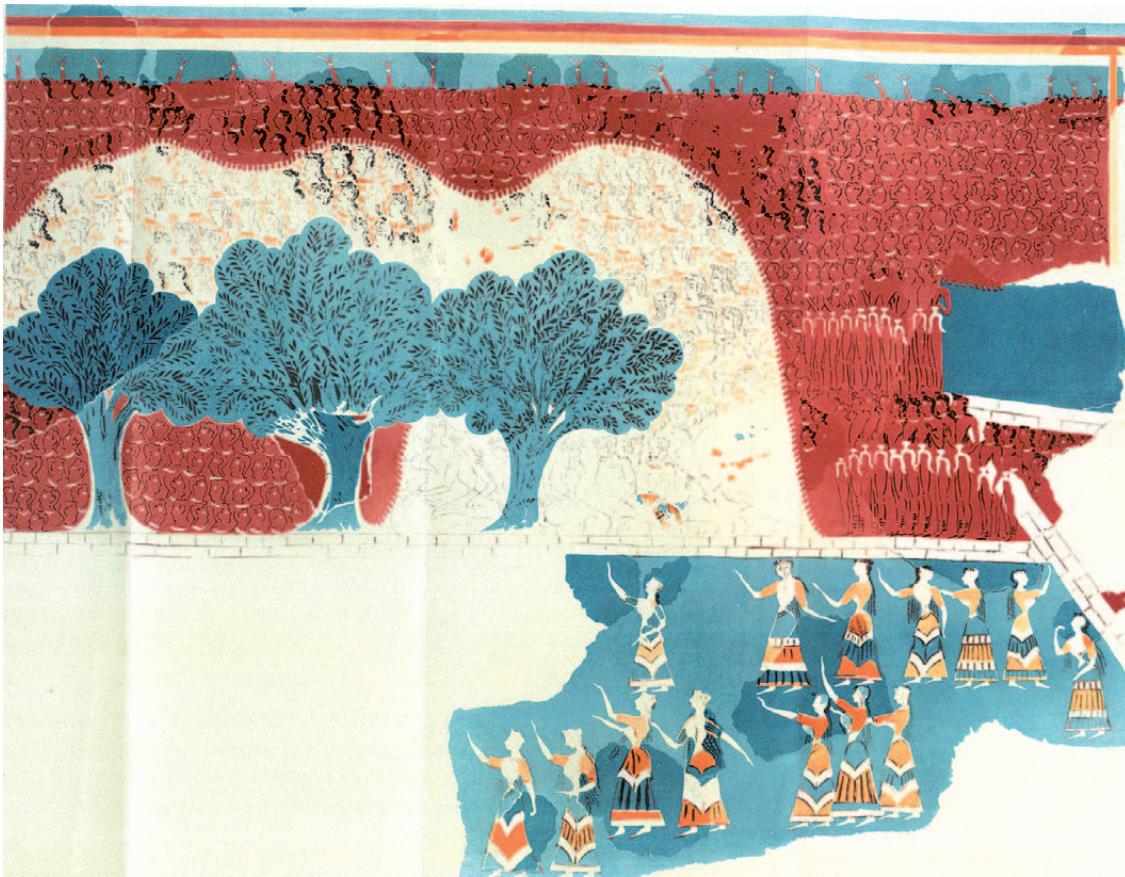
Fig. 17: 'Sacred Grove and Dance Fresco' from Knossos (Evans 1930, pl. XVIII, Universitätsbibliothek Heidelberg / https://digi.ub.uni-heidelberg.de/diglit/evans1930/0100).

generally modest contexts, indicating that they would have belonged to members of low-ranking social units (Younger 1983, 118, 123). However, ongoing research suggests that it is necessary to differentiate between different typological groups of Late Minoan soft-stone seals, of which the Neopalatial group of seals discussed here is a case in point. Several factors speak for a higher social status of the users and owners of these objects:

1. The (known) find spots of the soft-stone seals examined here are concentrated heavily around elite centers, most importantly the palace of Knossos and its upper-tier buildings, but also the villa of Agia Triada, the palatial building at Archanes, and wealthy urban houses at Tylissos and Gournia. It therefore appears that the users or owners of these seals stood in direct or indirect contact with the core of political, religious, and administrative authority that operated at these significant power hubs.

2. The female figures on the seals wear elaborate dresses, variants of the Minoan flounced skirt and plissé skirt (Stephani 2013, 86–96). Some also display an unwieldy, long and pointed headgear that appears to be connected to ritual actions such as processions and that we know from prestige media such as gold signet-rings (Blakolmer 2018, 32). The iconography featured on these soft-stone seals evidently belongs to the world of high-ranking social units. Whoever was using this imagery would have certainly been allowed to do so, but was permission granted explicitly or was it an implicit privilege?

3. Seals were worn on the body, and this can be seen clearly from wear traces on the soft-stone seals such as worn-out and chipped string holes created by the continuous rub and strain of the string against the perforation (Fig. 18). These objects were intimately connected to the body and mind of the wearer. How does this potentially stimulate connections between individuals who owned seals with the same imagery? Unlike other soft-stone seals, those featuring the

gesturing female figures were seldomly used to create impressions in clay for administrative purposes.[7] Their prime function, therefore, appears to have been other than sphragistic. The corporal action of the females depicted on the seals as well as their correspondence with bodily actions in the empirical world could be seen both as a reflection of the social group's ideological foundations and as a medium for developing and promoting these (Hoenes del Pinal 2011, 604).

4. The group of seals engraved in the delineated style (Fig. 8), which comprises specimens that are stylistically very close to each other, incorporates a range of motifs such as the females discussed above, single quadrupeds, griffins, and animal attack scenes. The style potentially instigated a connection between seal owners that went beyond imagery. It was probably related to a larger social group that may have been active at different locales, but usually in connection with sites that played significant political, administrative, and religious roles. Leaving aside the mainland seals cut in semi-precious stones, which were most likely inspired by the Minoan soft-stone seals, it is noteworthy that the isolated motifs discussed here occur predominantly (in the case of the single or pairs of gesturing women), even exclusively (in the case of the women carrying a quadruped), on Neopalatial soft-stone seals. Specific kinds of motifs can be found on specific types of object groups as, for example, so-called epiphany scenes are common on gold signet-rings, or resting bovines on hard-stone seals (Niemeier 1989, 169–170; Pini 2000, 251). Accordingly, the Neopalatial soft-stone seals with gesturing females clearly follow a culturally specific convention that dictated the material for this kind of seal motif (*cf.* Günkel-Maschek 2020, 113). The synchronic creation and distribution of seals of a closely related motif group, many in a coherent style, and the use of a distinct material type at different sites point toward a more organized and controlled production mode than would be expected of single objects created and used by very low-ranking and mutually un-connected individuals.

Conclusion

Approaching the question of the function of the seals is perhaps best done by considering their iconography one final time. What do the seals represent? On a primary, formal level, the seals display female human figures clad in elaborate garments and shown in a state of bodily action. This state is evoked by the different observable modes of arm positioning and head posture. The figures appear alone, in pairs of two, or alone in association with a quadruped. On a secondary, perceptive, level, the state of bodily action is identified as a performance of gesture that involves different somatic expressions, here referred to as introversion and extroversion of the front arm and intensification or extension performed by the rear arm. On a tertiary, interpretive, level, the gestures performed by the figures are construed as belonging to a sequence of movement that is indicated by the observed variety in arm positioning and is suggested to manifest different states of gestural motion. Moreover, the attire of the female figures consisting of patterned textiles and elaborate designs implies access to a certain wealth economy that would have been reserved for representatives of higher-ranking social groups. These three levels of observation may now be taken to develop a hypothesis that considers the possible social role of the seals in Late Minoan Crete.

Fig. 18: Signs of wear: string hole abrasion and chipping caused by the rubbing of the cord used to wear the seal on the body. CMS XI, no. 256 (© Antikensammlung, Staatliche Museen zu Berlin – Preussischer Kulturbesitz, photo: Johannes Kramer, Inv. No. FG 4).

---

7 One exception is the impression of a soft-stone seal showing a female figure bearing a quadruped over her shoulder that was used to impress four string-end nodules at Kato Zakros, found among the sealings in House A (*CMS* II 7, no. 23).

I suggest that these seals display scenes of ordered social action, which is choreographed and staged, institutionalized, and repeated (Moore and Myerhoff 1977, 7–8). This social action served to constitute and express the identity of a group or community through a stylization of the body (Butler 1988, 520; Turner 1988, 81). The elaborately dressed female body was employed as a vehicle of communication, a reflection and simultaneous cultivation of the ideological foundation of the social group that regimented and monitored select bodily communicative practices (Hoenes del Pinal 2011, 598; Moore and Myerhoff 1977, 3–5). This could serve, in the case of a (semi-) public performance, as a means of internal consolidation among a group of peers as well as a mode of external differentiation from other social groups or parts of the community who may not have had access, or only restricted access, to the elite world.

The soft-stone seals depicting female figures performing gestures may, in fact, have been tokens distributed among an intermediate social unit. This could have ranged between higher-ranking elites who would have possessed and used seals of more valuable and vibrant materials, such as semi-precious stones or gold, and individuals from the lower rungs of the social ladder, such as agricultural and horticultural workforces. Conceivably, the seals were given to or carried by individuals in service of higher-ranking social entities. This could have contributed, to a certain extent, to giving members of this intermediate social group a sense of inclusion in the world of the elites, a sense of privilege, intended at securing their loyalty.

If we accept that seal imagery was intentionally created to communicate more comprehensive meanings and ideas – while taking a step back from identifying these – it quickly becomes evident why human gesture, stance, and movement accommodate this objective. Codified bodily comportment expressed through these three categories serves to generate socially distinct meaning (Butler 1988, 519–520). Gestures, stance, and movement express discrete behavioral norms and patterns. The visual perception of these, even when movement is frozen in the image, may require such behavioral norms and patterns of the knowledgeable observer.

As modern viewers, we are confronted with the analytical gap that lies between material artifacts and past social structures. Carl Knappett (2002, 168) succinctly pointed out that "material culture and social structures […] are mediated by activities". Moreover, meaning has been recognized to emerge from a compound of gesture – target – and response (Wedde 1999, 913). Since the seal depictions discussed here lack a target and, consequentially, the target's response to a given gesture, we are in want of context, including the sequence of movement in which a gesture was integrated, its target, and the target's reaction. Nevertheless, for the Minoan observer who was able to re-contextualize the isolated gesture on a seal face, the image, and by extension the seal, could function as a medium that transferred ideas, identity, or ideology and that could thus potentially instigate desired modes of behavior or action.

References

Anastasiadou, M. 2011. *The Middle Minoan three-sided soft stone prism. A study of style and iconography. CMS* Beiheft 9. Darmstadt and Mainz: von Zabern.

Anastasiadou, M. 2021. *About. Whats and whys.* https://www.aegeansealsstarters.com/about.

Blakolmer, F. 2010. "Small is beautiful. The significance of Aegean glyptic for the study of wall paintings, relief frescoes and minor relief arts." In *Die Bedeutung der minoischen und mykenischen Glyptik. VI. Internationales Siegel-Symposium aus Anlass des 50jährigen Bestehens des CMS Marburg, 9.–12. Oktober 2008,* edited by W. Müller, 91–108. *CMS* Beiheft 8. Mainz: von Zabern.

Blakolmer, F. 2018. "A 'special procession' in Minoan seal images: observations on ritual dress in Minoan Crete." In *Εὐδαίμων. Studies in honour of Jan Bouzek,* edited by P. Pavúk, V. Klontza-Jaklová, and A. Harding, 29–50. *Opera Facultatis philosophicae Universitatis Carolinae Pragensis* 18. Prague: Faculty of Arts Charles University, Masaryk University.

Butler, J. 1988. "Performative acts and gender constitution: an essay in phenomenology and feminist theory." *Theatre Journal* 40.4: 519–531.

Catling, H. W. 1986–87. "Archaeology in Greece, 1986–87." *AR* 33: 3–61.

Dimopoulou-Rethemiotaki, N. 2004. "Το επίνειο της Κνωσού στον Πόρο-Κατσαμπά." In *Knossos: palace, city, state. Proceedings of the conference in Herakleion organised by the British School at Athens and the 23rd Ephoreia of Prehistoric and Classical Antiquities of Herakleion, in November 2000, for the Centenary of Sir Arthur Evans's Excavations at Knossos,* edited by G. Cadogan, 363–380. *BSA Studies* 12. London: British School at Athens.

Driessen, J., and C. F. Macdonald. 1997. *The troubled island. Minoan Crete before and after the Santorini eruption. Aegaeum* 17. Liège and Austin: Université de Liège, Histoire de l'art et archéologie de la Grèce antique, University of Texas at Austin, Program in Aegean Scripts and Prehistory.

Evans, A. J. 1930. *The Palace of Minos at Knossos.* Vol. 3. London: Macmillan.

Evely, D. 1993. *Minoan crafts. Tools and techniques. An introduction. SIMA* 92.1. Göteborg: Åström.

German, S. C. 1999. "The politics of dancing: a reconsideration of the motif of dancing in Bronze Age Greece." In *Meletemata. Studies in Aegean Archaeology presented to Malcolm H. Wiener as he enters his 65th year,* edited by Ph. P. Betancourt, V. Karageorghis, R. Laffineur, and W.-D. Niemeier, 279–282. Liège – Austin: Université de Liège, Histoire de l'art et archéologie de la Grèce antique, University of Texas at Austin Programs in Aegean Scripts and Prehistory.

Gombrich, E. 1966. "Ritualized gesture and expression in art." *Philosophical Transactions of the Royal Society of London* 251 (772): 393–401.

Günkel-Maschek, U. 2020. *Minoische Bild-Räume. Neue Untersuchungen zu den Wandbildern des spätbronzezeitlichen Palastes von Knossos.* Heidelberg: Heidelberg University Publishing.

Hiller, S. 2001. "Potnia/Potnios Aigon. On the religious aspects of goats in the Aegean Late Bronze Age." In *Potnia. Deities and religion in the Aegean Bronze Age. Proceedings of the 8th International Aegean Conference, Göteborg, Göteborg University, 12–15 April 2000,* edited by R. Laffineur and R. Hägg, 293–304. *Aegaeum* 22. Liège: Université de Liège.

Hoenes del Pinal, E. 2011. "Towards an ideology of gesture: gesture, body movement, and language ideology among Q'eqchi'-Maya Catholics." *Anthropological Quarterly* 84.3: 595–630.

Knappett, C. 2002. "Mind the gap: between pots and politics in Minoan studies." In *Labyrinth revisited. Rethinking 'Minoan' archaeology,* edited by Y. Hamilakis, 167–188. Oxford: Oxbow Books.

Krzyszkowska, O. 2005. *Aegean seals. An introduction. BICS* Supplement 85. London: Institute of Classical Studies, University of London.

Krzyszkowska, O. 2012. "Worn to impress? Symbol and status in Aegean glyptic." In *Kosmos. Jewellery, adornment and textiles in the Aegean Bronze Age. Proceedings of the 13th International Aegean Conference, University of Copenhagen, Danish National Research Foundation's Centre for Textile Research, 21–26 April 2010,* edited by M.-L. Nosch, and R. Laffineur, 739–747. *Aegaeum* 33. Leuven: Peeters.

Krzyszkowska, O. 2020. "Changing views of style and iconography in Aegean glyptic: a case study from the Cabinet des Médailles in Paris." In *Current approaches and new perspectives in Aegean iconography,* edited by F. Blakolmer, 253–271. *Aegis* 18. Louvain-la-Neuve: Presses universitaires de Louvain.

Moore, S. F., and B. G. Myerhoff. 1977. "Introduction: secular ritual: forms and meanings." In *Secular ritual,* edited by S. F. Moore and B. G. Myerhoff, 3–24. Assen: van Gorcum.

Müller, W. 1995. "Bildthemen mit Rind und Ziege auf den Weichsteinsiegeln Kretas. Überlegungen zur Chronologie der spätminoischen Glyptik." In *Sceaux minoens et mycéniens. IVe symposium international, 10–12 septembre 1992, Clermont-Ferrand,* edited by W. Müller, 152–167. *CMS* Beiheft 5. Berlin: Mann.

Müller, W. 2007. "Zur Bestimmung des Materials der Siegel." In *Iraklion, Archäologisches Museum. Sammlung Giamalakis,* edited by A. Sakellariou, W. Müller, and I. Pini, 11–22. *CMS* III, Vol. 1. Mainz: von Zabern.

Murphy, C. 2015. "(A) choreographed frenzy: a sequence of steps towards understanding movement and dance in Aegean Bronze Age iconography." In *Minoan archaeology. Perspectives for the 21st century,* edited by S. Cappel, U. Günkel-Maschek, and D. Panagiotopoulos, 311–318. *Aegis* 8. Louvain-la-Neuve: Presses universitaires de Louvain.

Mylonas, ed. 1987. "Ἀρχάνες." *Ergon* 1986: 132–138.

Niemeier, W.-D. 1989. "Zur Ikonographie von Gottheiten und Adoranten in den Kultszenen auf minoischen und mykenischen Siegeln." In *Fragen und Probleme der bronzezeitlichen ägäischen Glyptik. Beiträge zum 3. Internationalen Marburger Siegel-Symposium, 5.–7. September 1985,* edited by W. Müller, 163–186. *CMS* Beiheft 3. Berlin: Mann.

Pini, I. 1985. "Zu einigen Aspekten des hier vorgelegten Materials." In *Iraklion, Archäologisches Museum. Die Siegel der Nachpalastzeit,* edited by N. Platon, and I. Pini, XIX–LXII. *CMS* Vol. II.4. Berlin: Mann.

Pini, I. 1995a. "Bemerkungen zur Datierung von Löwendarstellungen der spätminoischen Weichsteinglyptik." In *Sceaux minoens et mycéniens. IVe symposium international, 10–12 septembre 1992, Clermont-Ferrand,* edited by W. Müller, 193–207. *CMS* Beiheft 5. Berlin: Mann.

Pini, I. 1995b. "Die Spätminoische Weichsteinglyptik." In *Sceaux minoens et mycéniens. IVe symposium international, 10 - 12 septembre 1992, Clermont-Ferrand,* edited by W. Müller, 189–191. *CMS* Beiheft 5. Berlin: Mann.

Pini, I. 2000. "Das Bildthema der zwei gelagerten Rinder." In *Minoisch-mykenische Glyptik. Stil, Ikonographie, Funktion,* edited by I. Pini, 245–255. *CMS* Beiheft 6. Berlin: Mann.

Pini, I. 2010. "Soft stone versus hard stone seals in Aegean glyptic: some observations on style and iconography." In *Die Bedeutung der minoischen und mykenischen Glyptik. VI. Internationales Siegel-Symposium aus Anlass des 50jährigen Bestehens des CMS Marburg, 9.–12. Oktober 2008,* edited by W. Müller, 325–339. *CMS* Beiheft 8. Mainz: von Zabern.

Platon, N., and I. Pini, eds. 1984. *Iraklion, Archäologisches Museum. Die Siegel der Neupalastzeit. CMS* II 3. Berlin: Mann.

Sakellarakis, G. A. 1972. "Τὸ Θέμα τῆς φερούσης ζῷον γυναικὸς εἰς τὴν Κρητομυκηναϊκὴν σφραγιδογλυφίαν." *ArchEph:* 245–258.

Sakellarakis, G. A., and E. Sapouna-Sakellaraki. 1997. *Αρχάνες. Μία νέα ματιά στη μινωική Κρήτη.* Athens: Ammos.

Shapiro, M. 1972–73. "On some problems in the semiotics of visual art: field and vehicle in image-signs." *Simiolus: Netherlands Quarterly for the History of Art* 6.1: 9–19.

Stephani, E. 2013. *Η γυναικεία ενδυμασία στην ανακτορική Κρήτη. Πρόταση ανάγνωσης ενός κώδικα επικοινωνίας.* Thessaloniki: Αρχαιολογικό Ινστιτούτο Μακεδονικών και Θρακικών Σπουδών.

Stocker, S. R., and J. L. Davis. 2016. "The Lord of the Gold Rings: the Griffin Warrior of Pylos." *Hesperia* 85.4: 627–655.

Thomas, E. 1995. "Zur Glyptik der zweiten Phase der spätminoischen Periode." In *Sceaux minoens et mycéniens. IVe symposium international, 10–12 septembre 1992, Clermont-Ferrand,* edited by W. Müller, 241–250. *CMS* Beiheft 5. Berlin: Mann.

Turner, V. 1988. *The anthropology of performance. Performance Studies Series* 4. New York: PAJ Publications.

Warren, P. 1982–83. "Knossos: Stratigraphical Museum excavations, 1978–82. Part II." *AR* 29: 63–87.

Warren, P. 2010. "The absolute chronology of the Aegean circa 2000 B.C.–1400 B.C. A summary." In *Die Bedeutung der minoischen und mykenischen Glyptik. VI. Internationales Siegel-Symposium aus Anlass des 50jährigen Bestehens des CMS Marburg, 9.–12. Oktober 2008,* edited by W. Müller, 383–394. *CMS* Beiheft 8. Mainz: von Zabern.

Wedde, M. 1999. "Talking hands: a study of Minoan and Mycenaean ritual gesture – some preliminary notes." In *Meletemata. Studies in Aegean Archaeology presented to Malcolm H. Wiener as he enters his 65th year,* edited by Ph. P. Betancourt, V. Karageorghis, R. Laffineur, and W.-D. Niemeier, 911–920. Liège: Université de Liège, Histoire de l'Art et Archéologie de la Grèce Antique.

Wedde, M. 2004. "On the road to the godhead: Aegean Bronze Age glyptic procession scenes." In *Celebrations. Sanctuaries and the vestiges of cult activity. Selected papers and discussions from the Tenth Anniversary Symposion of the Norwegian Institute at Athens, 12–16 May 1999,* edited by M. Wedde, 151–186. *Papers from the Norwegian Institute at Athens* 6. Bergen: Norwegian Institute at Athens.

Younger, J. G. 1983. "Aegean seals of the Late Bronze Age: masters and workshops: II. The first-generation Minoan masters." *Kadmos* 22.2: 109–136.

Younger, J. G. 1986. "Aegean seals of the Late Bronze Age: stylistic groups V. Minoan groups contemporary with LM III A1." *Kadmos* 25.2: 119–140.

A Golden Embrace: Early Bronze Age Connection between Eastern Crete and Uruk?

Susan C. Ferrence, Philip P. Betancourt, Alessandra Giumlia-Mair,
James D. Muhly, Metaxia Tsipopoulou, and David W. Rupp

Abstract *The excavation of the Early and Middle Minoan necropolis of Petras in eastern Crete continues to reveal new and interesting information about the people who were buried there before the foundation of the palace at the same site. In 2018, an EM II A primary female burial was excavated in a lower level beneath House Tomb 2, founded in Middle Minoan I B. The woman wore a necklace of various types of jewels including a very small cast gold pendant. The iconography of the piece depicts two male bearded figures in an embrace with specific hand and arm gestures as they kneel and face each other. The imagery of the figures, which measure only 1.75 cm in height and show a level of naturalism not normally seen at this time, is quite unique for Early Minoan Crete and for the Aegean region during the Early Bronze Age. The kneeling embrace of two men is an enigmatic motif among the cultures around the eastern Mediterranean during the Early and Middle Bronze Age. Nevertheless, iconographic features and metallurgical technology among other indicators point farther afield to Uruk or the Sumerian region of Mesopotamia as the origin of the gold pendant. The meaning of the pendant is explored, and it sheds light on the customs and beliefs of an elite or noble woman from Petras before the palace was built.*

Introduction to Petras

The excavation of the Early and Middle Minoan necropolis of Petras in eastern Crete has shown that the people who used the sacred precinct had knowledge of novel metallurgical techniques, which, in turn, have revolutionized our understanding of the culture and burial practices on the island before the foundation of the palaces (Brogan and Giumlia-Mair 2017; Giumlia-Mair et al. 2017, 2020, 2021; Giumlia-Mair, Betancourt, and Ferrence 2018). The necropolis is one part of a complex multi-phased site of three settlements – Final Neolithic and EM I A, EM II A to LM I B, and LM III A–III C – a palace (which housed a hieroglyphic archive), and a cemetery of the 12th to 13th centuries AD (Papadatos 2007; Rupp 2017; Tsipopoulou and Hallager 2010; Tsipopoulou 2016, 2021; Tsipopoulou, ed., 2012; Rupp and Tsipopoulou, forthcoming). The necropolis, which dates to EM I B to MM II B, contains many different structures: twenty-seven house tombs, eleven burial structures, twenty-five non-burial architectural features, and a burial rock shelter. They represent seven phases of stratigraphy (for a series of preliminary reports about the necropolis, see Tsipopoulou, ed., 2017; see also Tsipopoulou and Rupp 2019).

The necropolis was unlooted, and the modern methods of excavation allowed for the collection of practically 100 % of the material culture in burial contexts: the water-sieving programme has retrieved a vast assemblage of metal burial objects, including the tiniest beads down to the size of one millimetre in diameter (Giumlia-Mair et al. 2017, 2020). This unprecedented level of recovery has expanded our knowledge of Cretan society before the palaces and during the Protopalatial period. The number of Bronze Age silver objects on the island has greatly increased due to the excavation of this one necropolis since Antonis Vasilakis updated his work on the subject (Vasilakis 2008; Brogan and Giumlia-Mair 2017; Giumlia-Mair et al. 2017, 2020). One of the silver items, a signet-ring from House Tomb 9 dating to MM II made of a special polymetallic al-

loy, depicts an eight-pointed star and a Minoan hieroglyphic sign, and it demonstrates a strong connection with the ancient Near East (Ferrence, Betancourt, and Muhly 2020). Now we present another unique and very early metal piece of jewellery that was discovered in a stratified Early Bronze Age context.

A primary female burial (PTSK18-1407) was excavated in 2017 and 2018 in a lower level under House Tomb 2, founded in MM I B. A roughly rectangular pit, Burial Structure 25, had been dug into the colluvium of a ravine during the EM II A period (during the early to middle part of the 3rd millennium BC). A young adult female was laid in a cist-like pit with a bench and small offering pit (for more details about the context, see Rupp and Tsipopoulou, forthcoming; see also Tsipopoulou and Rupp 2019). The body was laid on the back in a semi-extended position with the legs folded. Her right forearm and hand were placed on the chest, and her left arm extended down her side. The skeletal remains of the woman were articulated (Tsipopoulou and Rupp 2019, 82; Dierckx, forthcoming, fig. 8; Rupp and Tsipopoulou, forthcoming, fig. 3. A). She was buried with items placed in the offering pit next to her: an EM II A collar-neck spouted jar (PTSK17-1862+1922) with a shallow bowl (PTSK17-1877) as a lid and containing an obsidian blade (PTSK17-1953) in the style of those found at the nearby EM I B – II A cemetery of Agia Photia (Tsipopoulou and Rupp 2019, 82, pls. XXIX, XXX:a; see also Rupp and Tsipopoulou, forthcoming). The body was completely covered with a layer of sediment and small stones. Then, approximately in the area between her legs, a large veined travertine bowl with a ring base (PTSK17-1797) was set vertically on its rim and held in place with some small stones, perhaps as an internal grave marker (Tsipopoulou and Rupp 2019, 82, pl. XXX:a; see also Rupp and Tsipopoulou, forthcoming). Next, the pit was filled with another layer of sediment and small stones to its uppermost level. Lastly, a quadrangular structure of large unworked stones was laid in three rough courses on top of the burial cist as a monument to her memory (Tsipopoulou and Rupp 2019, 82; Rupp and Tsipopoulou, forthcoming). The primary interment of this woman in a cist-like pit and the construction of a substantial monument over it were innovative developments at Petras in light of the prevalent contemporary mortuary practices of secondary burials in communal house tombs.

Cast Gold and Silver Pendant and Beads

The young woman buried in Burial Structure 25 wore jewellery consisting of one or more necklaces of various types of beads, gold bands, and disks. Her necklaces included different ornaments, and in particular a very small gold pendant (Fig. 1): cast, finished with fine chisels, and finally polished. Autoptic analysis under magnification (*e.g.* 50 ×, 100 ×) identified ancient manufacturing practices via traces of metalworking. The piece is a superbly detailed three-dimensional image of two bearded men embracing each other as they kneel together. We explore here the meaning of the tiny enigmatic pendant that some might call an amulet.

The young woman was also buried with stone beads of steatite and calcite and many other metal jewellery items, including a distinctive tiny gold bead shaped like a feline head (Fig. 1), twelve incised cylindrical beads of gold sheet, fifteen tiny gold annular beads, a cross-hatched band of gold sheet, many strips and fragments of gold foil including a few pieces with incised linear decoration, and a cast silver biconical bead (Fig. 1).

The silver bead is decorated with three bands of rope pattern. It was cleaned of the thicker layers of corrosion, which allowed for improved results from analysis by X-ray fluorescence to detect the metallurgical composition (for scientific methodology, see Giumlia-Mair et al. 2017, 204). An interesting silver alloy containing a very high percentage of gold was identified (Table 1; see also Ferrence et al., forthcoming). Due to the corrosion with presence of bromine, precise assessment of the composition was not possible, and the amounts of 85 % silver, 10 % gold, and 0.5 % copper are indicative only. The original amount of copper when the piece was manufactured was probably higher. The presence of these metals in the silver alloy made the bead easier to work and more resistant to corrosion. The XRF results of the pendant with two embracing men identified a

Fig. 1: Gold pendant of two embracing men (PTSK18–1437A, three views at left), gold feline bead (PTSK18–855; three views at upper right), and silver biconical bead (PTSK18–1437B; lower right) all worn by the female in EM II A Burial Structure 25 at Petras in eastern Crete (photos S. Ferrence, C. Papanikolopoulos, and A. Giumlia-Mair).

gold alloy containing around 6 % silver. Possibly the silver content was originally higher, but part of it corroded away (see Table 1). The addition of silver to gold makes this alloy harder and therefore less easily damaged, and it lowers the melting point of gold thus facilitating the casting.

Most of the metal and stone jewellery pieces buried with the woman appear to be Cretan in origin and typical of Prepalatial burial accoutrements, as parallels exist from the house tombs of Mochlos and other Early Minoan tombs such as Lebena (Seager 1912, fig. 8; Alexiou and Warren 2004, pl. 115; see also Evely 2000, vol. 2, 418–421). The gold figural pendant, gold feline bead, and silver biconical bead, however, stand out from the rest of the woman's jewellery because they are cast objects, which were a rare occurrence in Crete at that early time (Branigan 1983, 15). Only about a dozen cast metal jewellery pieces have been identified from Prepalatial burial sites (Hickman 2008): Tholos Tomb Gamma at Archanes (Papadatos 2005, 36, 41, figs. 23, 25, pl. 20), Agios Onouphrios (Branigan 1974, 192), Maronia Cave (Platon 1954, 511, EM II B or EM III date), Tomb 2 at Mochlos (Seager 1912, fig. 10, II.22; Soles 1992, 49, EM II A date), Agia Photia (Davaras and Betancourt 2004, 181–182, EM I B), Koumasa (Xanthoudides 1924, 29, pl. 4: 386), and Krasi (Marinatos 1929, 120–121, figs. 14: 38, 16). Early examples of objects cast in precious metals come from sites very far from the Aegean region (Hickman 2008, 104), such as a silver bull's head from the Royal Cemetery at Ur in Sumer, Mesopotamia (ca. 2600 BC; Hansen 1998, 52, no. 2), and gold and silver bulls from a chieftain's tomb at Maikop in what is now southern Russia (ca. late 4th–early 3rd millennium BC; Artamonov 1974, 156, pl. 21; Hunt 1980, 66; Aruz, ed., 2003, 291, no. 191). For Crete and the Aegean, a detailed account of early metallurgy situates the Final Neolithic to EM III copper-smelting site of Chrysokamino in eastern Crete chronologically and regionally among Balkan, Anatolian, and Near Eastern developments over the course of several millennia (Muhly 2006).

The iconography of the three cast jewellery pieces worn by the young woman in Burial Structure 25 is detailed and naturalistic, especially considering the tiny size of the figural pendant and feline bead. The pendant depicts in miniature two men with their heads positioned cheek to cheek and their faces in profile as they kneel on both knees with their bodies facing each other and wrap their arms around each other in a close embrace. They mirror each other as if they were twin brothers. They both wear kilts or skirts distinctively depicted with a crosshatched motif and a hatched hemline, which could be perhaps a fringed embellishment. Their
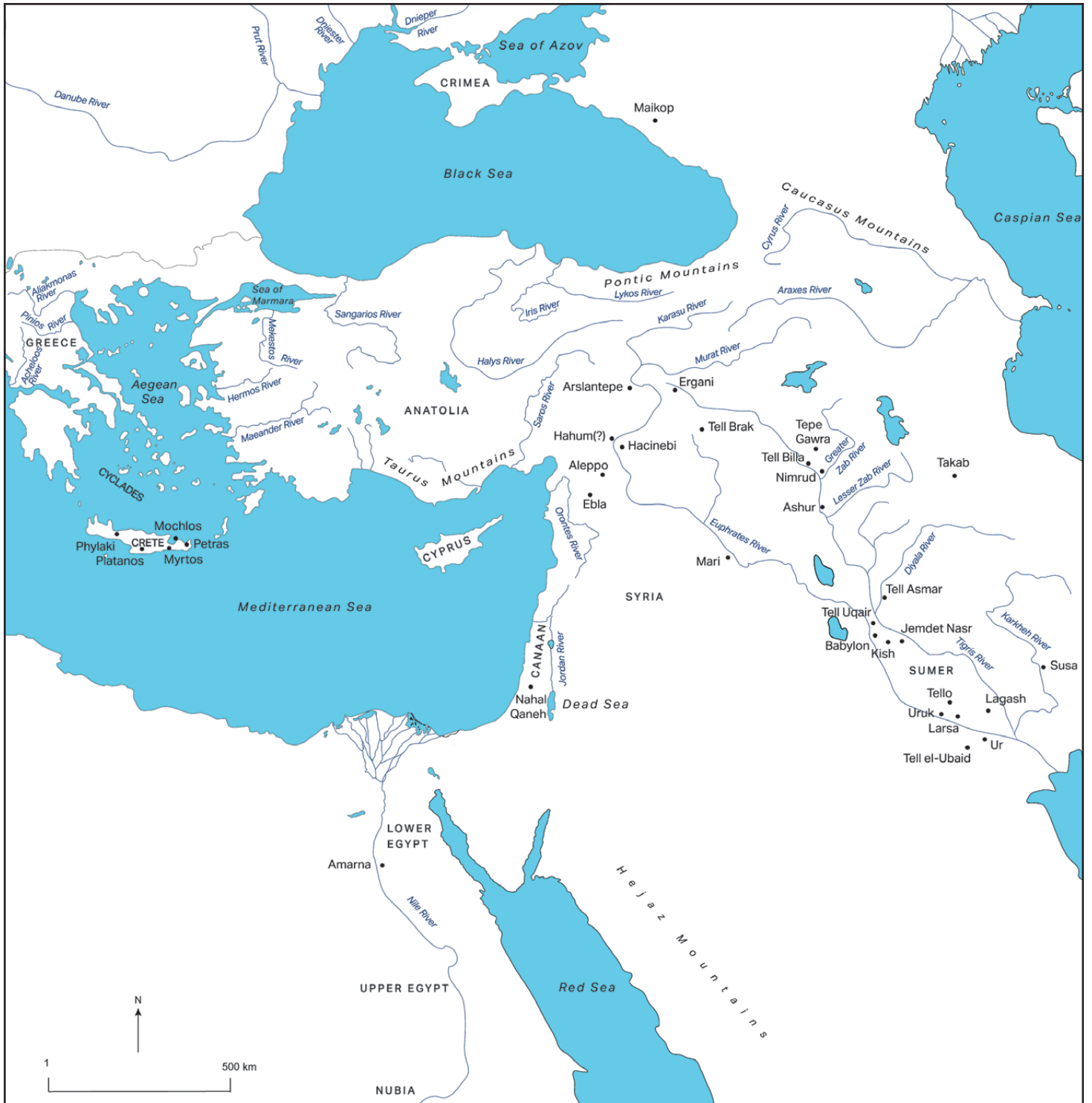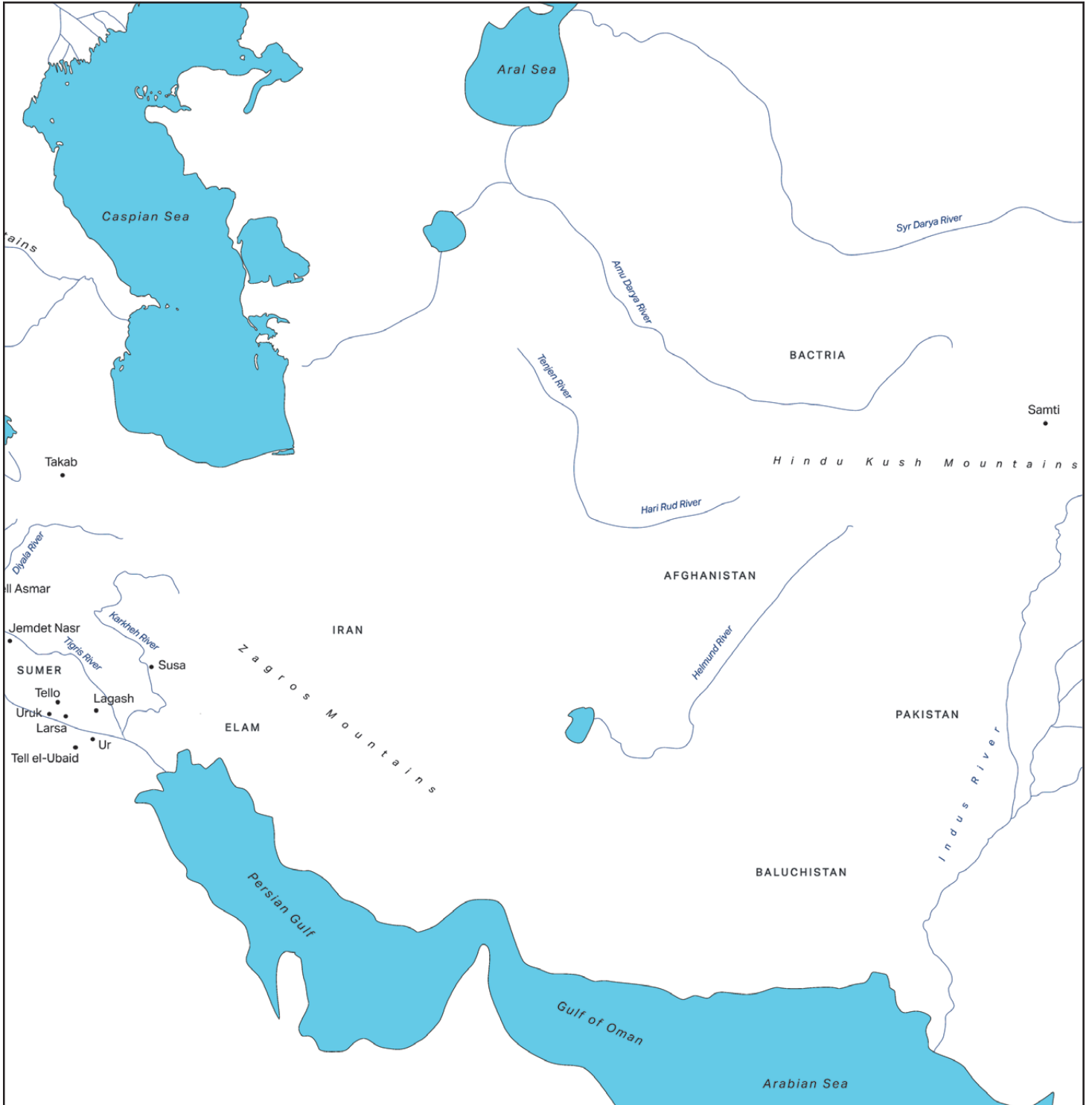
Fig. 2: Map of selected sites and regions around the eastern Mediterranean and in southwestern Asia mentioned in the text (image J. Papit, H. Sperling, and D. Evitts).

idiosyncratic embrace consists of each man's right arm wrapped around the waist of his partner and their left arms angled upward at the elbow such that their left fists rest on the back of the other's right shoulder. Evidence of worn surfaces on the fist of one man and the kilt of the other man suggests that the pendant had been in use for quite a while. Both men are depicted with detailed hairlines, beards, and eyes. Despite the intricate and generally exemplary rendition of the figures, their right legs face the wrong direction, making them anatomically incorrect. The cylindrical gold bead shaped like a feline head is a masterwork of craftsmanship because it was actually cast as *two* heads of a feline with different sets of incised facial details of eyes, ears, whiskers, and collar. The two heads face opposite directions, and as the cylinder turns on its string or chain, one can always see the animal correctly. The bead also has tiny areas of silver visible on the surface that clearly imitate the pattern of a leopard's or panther's fur coat (XRF results show a gold alloy with 2.6 % silver [see Table 1], but the silver percentage increases noticeably when the small silvery spots are measured; their tiny size however makes it impossible to obtain precise measurement by XRF [SEM-EDS would be the optimal method of analysis]).

The three cast jewellery items not only stand out in Prepalatial Crete for their advanced level of manufacture, but they also are unique in the execution of their iconography. The two men and the feline head are very naturalistically rendered, which is the opposite of figural representations in the Aegean during the Early Bronze Age because they tend to have abstracted forms, *i.e.* EC II folded-arm figurines and the EM II Goddess of Myrtos (for surveys of Prepalatial figural art, see Immerwahr 1990, 21–34, figs. 6–11 and Cosmopoulos 1992; see also Ferrence 2017). Kneeling figures are very rare in Minoan iconography. The few examples come from later time periods where they are usually depicted as worshipping at a baetyl (Warren 1990; see also a LM III A ivory plaque showing two embracing men, Godart and Tzedakis 1992, 59–60, pl. LVI: 1, 2). In Minoan iconography there is no contemporary iconographic parallel yet discovered for the gold pendant from Petras.

Iconographic Connections with Uruk and Elsewhere in Western Asia

The naturalistic rendering of human and animal iconography occurs at early time periods in Mesopotamia. Hence, the quest for iconographic parallels took us to the Near East where the advanced metallurgical technology and artistic execution of the human form favorably compare to that of the gold pendant from Petras. As an obvious starting point, the famous Royal Cemetery of Ur (mid 3rd millennium BC) was filled with precious burial goods – many of them gold and silver – and many of them also naturalistically depict people and animals (see Hansen 1998, esp. 51–53, 58, 61, 64, nos. 1–4, 8, 10). The Standard of Ur is a box from tomb PG 779 covered in shell mosaic with one panel that depicts a battle and another panel illustrates a banquet, and both scenes include the ruler in their top registers (Hansen 1998, 45–46, fig. 36 a–b). The soldiers and banqueters wear wooly fleece skirts, and the ruler's garment is flounced and layered; none of these clothing styles, however, are the type depicted on the Petras pendant.

The net skirt that each man of the golden pendant is wearing is the key to unlocking its origin in the Near East, especially when discussing the art of Uruk in Sumer (we thank Bernice Jones for pointing us in this direction; Moortgat 1967, 13; Schmandt-Besserat 1993, 204, 206–208; Collon 1995, 48; Algaze 2001, 34; Bahrani 2002, 18; Hansen 2003, 23, 39, 40, nos. 10 a–b; Green 2019, 184–186, fig. 8.2), a major urban city near the Euphrates River, which flourished in the fourth and third millennia BC (Fig. 2), well before the time of the Royal Cemetery of Ur. Uruk was one of the first cities in the world and initiated state formation during the Late Uruk period (ca. 3400–3000 BC; Rothman 2001, 7, table 1.1; Nissen 2003; Liverani 2006, 2, 13; Ataç 2019, 514; Potts 2019, 2). During this time, the territory of Uruk was enlarged with the foundation of possible colonies, which helped to spread the influence and material culture of Uruk from eastern Anatolia to eastern Iran (Pittman 1992 a, 1992 b; Collon 1995, 48; Schwartz 2001, 248; Algaze 2013, 82–86; Butterlin 2019, 185, fig. 34.2; Potts 2019, 4). Economic factors drove the expansion: Uruk needed goods such as timber, copper, silver, gold, and decorative

and semiprecious stones to build, embellish, and defend its temples and cities (Stech and Pigott 1986, 41; Algaze 1993; Pollock 1999, 9; Butterlin 2019, 186; Potts 2019, 4) and presumably traded primarily its textiles (Pollock 1999, 9; Potts 2019, 4; Völling 2019, 242). Some scholars dispute the theory of colonialization because the influx of Uruk styles into northern Mesopotamian sites "may have occurred over a much longer period of time than previously thought …" (Pollock 1999, 114, with bibliography; see also Rothman 2002, 18, 150, with bibliography).

The net skirts on the gold pendant from Petras stylistically date to the Jemdet Nasr period (3100–2900 BC; Pollock 1999, 2, table 1.1), which overlaps with the end of the Late Uruk period. During this time, "considerable change and reorganization" meant an increase in regionalism, yet "widespread contacts with areas as distant as Egypt, Iran, and Afghanistan were maintained" (Pollock 1999, 6). A cylinder seal dated to ca. 3000 BC depicts the Great Man of Uruk (also called a priest-king or Dumuzi, the shepherd god, in the scholarship; Hansen 2003, 40; Collins 2019, 265) wearing a longer net skirt and accompanied by an attendant wearing the exact same skirt as that shown on the pendant from Petras (Fig. 3a; Moortgat 1967, pl. A: 6; Orthmann 1975, 224, no. 126b; Vogel 2019, 124, fig. 20.5; see also other examples noted by Moortgat 1967, pl. A: 5; Schmandt-Besserat 1993, 204–207, 213, 216, fig. 15; Hansen 2003, 39–40, nos. 10a–b). The Great Man is an archetype ruler who embodied strength, power, and virility among other impressive qualities (in Sumerian *lugal* means king, literally "big man"; Vogel 2019). In this scene, they are bringing offerings to the goddess Inanna whose cult is represented by the two reed bundles at right (see also Blocher 2019, 63–64; Zgoll 2019, 51–52). Sometimes the Great Man is depicted in a shorter net skirt like on a cylinder seal from the end of the 4th millennium BC (Fig. 3b; Orthmann 1975, 224, no. 126a; Feller 2019, 138, fig. 24.1), which is quite like the skirts worn by the men of the Petras pendant. The latter men, however, do not wear the same style of distinctive hat, hair, and beard that set the Great Man of Uruk apart from other male figures (Collon 1995, 48; Vogel 2019, 119, 121). Another cylinder seal from Tell Billa, however, does depict exactly like the Petras pendant the head and net skirt of one of the three men in attendance at a ceremony outside a temple (Fig. 3c; Speiser 1933, pl. IV; Frankfort 1954, 15–17, pl. 8D; Orthmann 1975, 224, no. 126d).

When the Great Man is shown wearing the net skirt, he is also occasionally depicted in the same scene with a female who has been interpreted variously as Inanna – she was the supreme goddess of Uruk – or as a priestess of the cult of Inanna. It is possible that she could also represent the Great Man's wife; wives and daughters of male rulers in Mesopotamia in the 3rd millennium BC figured prominently in religious activities (Vogel 2019, 123). The famous Uruk Vase, dated to the Late Uruk period in the second half of the 4th millennium BC (or possibly the Jemdat Nasr period), also depicts a man wearing the same style of skirt as on the Petras pendant, except the skirt does not have the net pattern (Fig. 3d; Pollock 1999, 189; Zgoll 2019, 51–52, fig. 9.9). Here the man is an attendant to another male figure who has been interpreted as a priest-king (he wears a longer net skirt), the ruler of Uruk, or the shepherd god Dumuzi who was the husband of the great goddess Inanna; in the scene the men are presenting gifts to her, and it possibly represents their Sacred Marriage (Moortgat 1967, 11–13, pls. 19–21; Frankfort 1988, 25–27; Bahrani 2002, 18; Green 2019, 184–186, fig. 8.2; Selz 2019, 216; Zgoll 2019, 52, 57, fig. 9.9). Inanna was the most important deity of Uruk (Blocher 2019, 66). By the 3rd millennium BC Inanna/Ishtar was depicted with lions because the animal became one of her symbols (Zgoll 2019, 55; Ataç 2019, 517). Lions and leopards also greatly figured into the iconography of the priest-king, and they were associated with divine worship (Mallowan 1965, 42); the famous Lion Hunt Stele of the Late Uruk (or possibly Jemdet Nasr) period certainly suggests the power of the Great Man to subdue such wild beasts and to symbolically conquer chaos (Frankfort 1988, 33–34, fig. 24; Collon 1995, 50; Pollock 1999, 184–185, fig. 7.6; Hansen 2003, 22–23, fig. 5; Pongratz-Leisten 2019, 289–290, fig. 12.1). On this stele, his garment has been called a net skirt (Pollock 1999, 184). At Uruk, the skeletal remains of a leopard and a lion were found buried in a mudbrick box under one corner of the White Temple, which was built during the Jem-
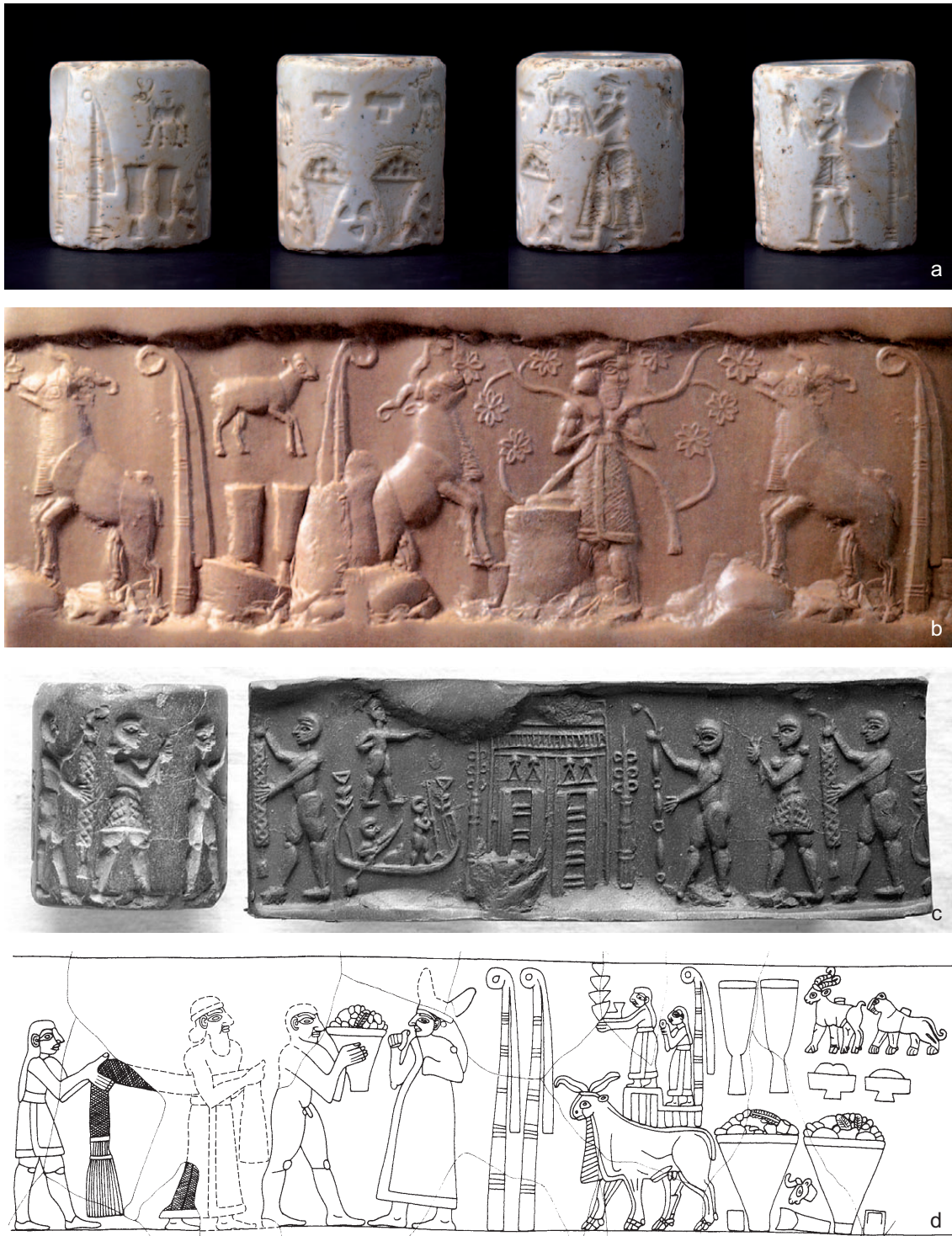
Fig. 3: Images of men wearing the net skirt, ca. 3000 BC: (a) four views in order of a procession scene on a magnesite cylinder seal, h. 4.7 cm, no. ZV 2996 (© Skulpturensammlung, Staatliche Kunstsammlungen Dresden, photo Elke Estel/Hans-Peter Klut); (b) impression of cylinder seal, h. 5.4 cm, no. VA 10537, National Museums in Berlin, Museum of the Near East / Olaf M. Teßmer (CC BY-NC-ND 4.0); (c) impression of cylinder seal from Tell Billa, h. 4.3 cm, Baghdad, Iraq Museum no. IM 11953, exc. no. 2766, image no. 43006 (courtesy of Penn Museum, Philadelphia, PA, USA); (d) reconstruction drawing of the top frieze on the Uruk Vase, h. 92 cm, Baghdad, Iraq Museum no. IM 19606, Zgoll 2019, fig. 9.9, drawing by P. Müller, with additions by H. Kosak (courtesy German Archaeological Institute, Orient Department).

det Nasr period (Mallowan 1965, 42). A leaded bronze statuette of a lion also comes from the Jemdet Nasr period at Uruk (Fig. 4; Pedde 2019, fig. 50.2). Its rendering in cast metal is quite naturalistic, and the head compares well to the rendering of the feline bead from Petras. At Tell Uqair the tripartite temple was decorated with wall paintings, which have been reconstructed with spotted animals, probably leopards (Crawford 1991, 62–63, fig. 4.11).

The priest-king sometimes is depicted with fists clenched and positioned in front of his chest. It is not known exactly what the gesture meant except that it was symbolic and "probably loaded with great significance" (Schmandt-Besserat 1993, 202–203, 212–213, figs. 1, 2). About thirty artefacts depicting the priest-king exist from the Late Uruk

Fig. 4: Leaded bronze lion statuette, h. 3.26 cm, Uruk, ca. 3000 BC, no. VA 11033, National Museums in Berlin, Museum of the Near East / Olaf M. Teßmer (CC BY-NC-ND 4.0).

and Jemdet Nasr periods (Schmandt-Besserat 1993, 201), and none of them show him kneeling and embracing his twin like the two men in the pendant from Petras. From a later context, there is an alabaster statue of a priest or king who is kneeling and seated on his feet as opposed to the upright kneeling stance of the two men in the pendant from Petras; it comes from the "square temple" at Tell Asmar, and it dates to the Early Dynastic II period (ca. 2750 BC; Mallowan 1965, 104, fig. 117 [Institute for the Study of Ancient Cultures, University of Chicago]). It was found in a group of "worshipper" statuettes – the tallest being 30 inches – whose photograph from the University of Chicago is widely known (Mallowan 1965, 45, fig. 33). He has a long beard, and he wears only a large hat and wide belt. During the Jemdet Nasr period, however, there seems to be no doubt that the unique net skirt was a signifier for the powerful leader of Uruk.

Fig. 5: Proto-Elamite iconography: (a) silver bull figurine, h. 16.4 cm, southwestern Iran, ca. 3000 BC, New York, Metropolitan Museum of Art, no. 66.173 (CC0 1.0); (b) chlorite box depicting a mythological scene, h. 11.4 cm, Khafaje, Iraq, ca. 3000 BC, British Museum, no. 128887 (©The Trustees of the British Museum [CC BY-NC-SA 4.0]).

Kneeling male figures are rare in the iconography around the EBA eastern Mediterranean. Farther afield, two glyptic Akkadian examples (ca. 2200 BC) show individuals only half kneeling, not on both legs (Porada 1995, 23, 46, figs. 1 [from Ur], 28). In the discussion of a Proto-Elamite silver figurine (ca. 3000 BC) from northwestern Iran showing a kneeling bull holding a cup in the collection of the Metropolitan Museum of Art (Fig. 5 a), it is said that the kneeling pose is first found in Iran on stamp seals from Susa B, dating to the Uruk period (Hansen, Lefferts, and Alexander 1970, 6, 8, n. 5, fig. 1). During this early time, the kneeling pose was fairly popular in Elamite iconography (Hansen, Lefferts, and Alexander 1970, 8; see also Aruz 2003 b, 330). The Elamites also depicted a mythological scene on a chlorite box (ca. 3000) in which a long-haired man wearing a net skirt strangles snakes and subdues other animals (Fig. 5 b; he has been called a master of animals, and he is possibly related to the 'man in a net skirt' from the Uruk culture as discussed above; Strommenger 1964, 388, pl. 38; Aruz 2003 b, 330–331, no. 227, fig. 85). Another stone box, this time from the Shamash temple at Mari (Proto-dynastic period, ca. 3000 BC), depicts a bald man kneeling next to a plant and trunk of a palm tree (Strommenger 1964, 388, pl. 39). His skirt is diagonally striped, perhaps a variation on the net skirt motif. None of these early examples of kneeling figures is exactly like the golden pair from Petras. There thus are no exact iconographic parallels from the same general time period for the kneeling embracing men of the EM II A gold pendant from Petras.

Gold in the Late Uruk Period

Gold artefacts from the Late Uruk and Jemdet Nasr periods are few and far between, presumably because of the dearth of mortuary data (Algaze 2001, 50) and due to recycling of metals (Pollock 1999, 186–187). Additionally, gold appears together with tin in the archaeological record: "There is very little gold before 3000 B.C., just as there is little or no tin bronze. After 3000 B.C. both gold and tin bronze appear together at a number of sites over a wide geographical area, from the Aegean to southern Mesopotamia" (Muhly 1977, 76). Ore sources in Iran were exploited as early as the 5th millennium BC (Stech and Pigott 1986, 42). Afghanistan has been suggested as a likely source for many raw minerals (Stech and Pigott 1986, 40, 44).

During the late 4th millennium BC, settlements in northern Syria and southeastern Anatolia were more advanced metallurgically due to their locations closer to ore deposits and longer history of manufacture (Stech and Pigott 1986, 42; Algaze 2001, 52; Wright 2001, 134; Saltzmann 2019, 29, 32, figs. 5.1, 6.1). Arslantepe is a prime example because it had easy access to copper (at Ergani; Fig. 2), lead, and silver deposits during its period VII (Late Chalcolithic) before the Uruk expansion (Burney 1993, 314; Palmieri, Sertok, and Chernykh 1993; Stein 2001, 267; Saltzmann 2019, 29, 32, figs. 5.1, 6.1). In period VI A (late 4th millennium BC; Early Bronze I A), a hoard of swords and spears and a metal workshop were discovered (Burney 1993, 314; Palmieri, Sertok, and Chernykh 1993, 574). A royal tomb at Arslantepe (ca. 3000 BC) yielded some gold jewellery, but no pieces resemble the pendant from Petras (Frangipane et al. 2001, 117, figs. 19, 25).

Metals were imported to Uruk according to the Archaic Texts (Nissen 2001, 173). Smiths worked with arsenical copper, gold, silver, lead, tin, and iron and made advances in smelting, casting, and finishing technology (Charvát 2002, 125; Moorey 1982, 22; Müller-Karpe 1991, 110). By the time of the burials in the famous Early Dynastic cemetery of Ur, bronze was in regular use (Müller-Karpe 1991, 111; Müller-Karpe, Pászthory, and Pernicka 1993, 269–270; Charvát 2002, 172, 188; Hauptmann and Pernicka, eds., 2004, xi).

During the Late Uruk period, only Tepe Gawra (near Mosul, Iraq) is known for gold artefacts (including rosettes and studs), which come from burials (Tobler 1950, 90–92, pls. LV–LIX; Maxwell-Hyslop 1971, 1; Charvát 2002, 125). One piece in particular is a tour de force of craftsmanship on a minute scale: an electrum wolf's head (Fig. 6), only 3 cm in length and dated to ca. 3200 BC (tomb 114 in level X), would have been attached to a small sceptre made of a now decomposed material (Tobler 1950, 92, pl. LIX:b; Mallowan 1965, 79–81, fig. 85;

Rothman 2002, 285). The open mouth displays teeth of gold wire; the jaw and ears were attached with copper and electrum pins; bitumen remains where the eyes would have been depicted with stones (Tobler 1950, 92, pl. LIX:b; Mallowan 1965, 79, fig. 85).

Despite the rich tombs at Tepe Gawra, gold finds from the Late Uruk time are relatively rare. According to Lloyd Weeks (2012, 297): "The earliest evidence for gold/electrum use in the Near East comes from late Ubaid Mesopotamia, at Ur and Tepe Gawra, where a handful of small artefacts (wire and beads) has been recovered. Tepe Gawra shows continued use of gold/electrum up to the Early Dynastic period (early/mid 3rd millennium BC), and the later prehistoric levels from Uruk have also

Fig. 6: Electrum wolf head from tomb 114 in level X at Tepe Gawra, length 3.0 cm, ca. 3200 BC; Tobler 1950, pl. LIX:b; image no. 44567 (courtesy of the Penn Museum, Philadelphia, PA, USA).

produced rare gold artefacts (Moorey 1994: 221–2)." The gold and electrum artefacts found in Israel in the early 4th millennium BC cave site of Nahal Qaneh may have been imported from Egypt (Gopher et al. 1990; Gopher and Tsuk 1996; Genz and Hauptmann 2002: 151). Few examples of gold come from Iran in the late 4th millennium BC, notably from Susa (Tallon 1987; Benoit 2004). "Even in later periods, the relatively limited amount of gold in circulation and its continual recycling mean that it is rare in the archaeological record of the ancient Near East" (Weeks 2012, 297).

Nevertheless, gold supposedly was used prodigiously, for example, especially for religious purposes as described in the ancient texts that say wooden cult statues of temple deities were covered with gold (Pollock 1999, 187). The interpretation of ancient Near Eastern texts is debatable because covering a wooden statue with gold could perhaps mean simply using foil, *i.e.* a small amount of metal, much like it seems the Minoans did by the Late Bronze Age. Gold was apparently in short supply in Crete because the metallurgists used what they had in very economical ways, quite unlike the Mycenaeans on the mainland of Greece (Davis 2015, 457).

Scientific Analyses of Metal Artefacts

Regarding the scientific analyses of metal artefacts from the ancient Near East, a group of researchers from the Penn Museum in Philadelphia undertook the Mesopotamian Metals Project in the 1980s (Stech and Pigott 1986). They strongly suggested Afghanistan was a likely source of tin for 3rd millennium BC Sumer because of its rich geology that also includes gold, silver, and lapis lazuli, precious materials found in great quantities in the Royal Cemetery at Ur (Stech and Pigott 1986, 47–48, 56). They also considered southern Anatolia as a good source of silver in the Taurus Mountains for Sumer (Stech and Pigott 1986, 50). Recent analyses now show that ore sources in the Taurus Mountains and also in Uzbekistan and Tajikistan provided the tin for the ingots on the LBA Uluburun shipwreck "after extensive exploitation in the Early Bronze Age" (Powell et al. 2022).

In the 1990s, a very large systematic program was undertaken by a German team from the University of Heidelberg and the Max Plank Institute (Hauptmann and Pernicka, eds., 2004). They carried out almost 3000 analyses (the vast majority being X-ray fluorescence) on 2615 objects dated from the 5th to the 2nd millennium BC from 68 archaeological sites housed in the collections of several European museums and most importantly the Iraq Museum in Baghdad (Hauptmann and Pernicka, eds. 2004, xii). The vast majority of the objects were made of copper or copper alloys. The Royal Cemetery of Ur is well represented in the study, which includes a small number of gold and electrum objects from four sites: Ubaid (2 artefacts), Ur (36 artefacts),

Context	ID Number	Object Type	Cu %	Ag %	Au %	Pb %	Fe %	Co %	Ni %	Zn %	As %	Sn %	Sb %	Remarks
Petras necropolis, Burial Structure 25 (EM IIA)	PTSK18-1437A	Pendant, two men	Tr.	5.6	94		0.2							
	PTSK18-1437B	Biconical bead	0.5	85	10									High Br, Ca
	PTSK18-0855	Feline head bead	2.6	97		0.2								
			2.7	97										
			8.9	91										
Ur	1480b	Fitting on dagger	0.58	3.6	95		0.08				0.06	0.21	0.03	Metallic surface
Ur, Royal Cem., tomb PG.580 (Early Dyn. IIIa)	1525	Lance tip	4.5	58	38	0.20						0.04		Metallic surface
Ur, Royal Cem., tomb PG.626	1909	Earring	6.7	85	7.1	1.05		0.04	0.04	0.03		0.06	0.03	Mixture of metal (drilling chips) and corroded material (patina powder)

Table 1. XRF analyses of metal jewellery pieces from the cemeteries of Petras and Ur. Results from Ur by Lutz 2004, 132–133, 139. Italicized data means the object is corroded, and the results must be considered indicative only. Tr. = trace amount identified. Empty cells mean the element was not identified.

Larsa (4 artefacts), and Mari (3 artefacts) (Lutz 2004, 123–130, 132, 134, 136, 138, 141, 144, 149). Unfortunately, no gold objects from Tepe Gawra were analyzed among the 66 copper and copper-alloy pieces selected from the site (Lutz 2004, 113–114, pls. 16–19). A total of 169 silver items were analyzed in the XRF program, and they come from nine sites: Tell Asmar (2 artefacts), Ashur (2 artefacts), Tell Billa (1 artefact), Hafagi (1 artifact), Kish (2 artefacts), Tell as-Sulaima (1 artefact), Ur (157 artefacts), Larsa (1 artifact), Tello (1 artefact), and one unprovenanced piece. Of the silver objects, only two analyzed pieces – a lance tip and an earring, both from the Royal Cemetery of Ur – have XRF results that are somewhat close to the silver alloy of the biconical bead from the Petras burial (Table 1; Lutz 2004, 133, 139, no. 1525 [lance tip: 58 % Ag, 38 % Au, 4.5 % Cu], no. 1909 [earring: 85 % Ag, 7.1% Au, 6.7 % Cu]). Of the gold analyzed objects, only one piece – the gold fitting on a bronze dagger from Ur – has XRF results that are close to the gold alloys of the Petras pendant (5.6 % silver) and bead in the shape of a feline head (2.6 % silver) (Lutz 2004, 132, no. 1480b [95 % Au, 3.6 % Ag, 0.58 % Cu]).

Recent analytical studies of Early Bronze copper, silver, and gold artefacts from Ur shed much needed light on the composition of the metal and possible sources for it (Jansen, Hauptmann, and Klein 2016; Jansen et al. 2016; Hauptmann et al. 2018; Jansen 2019; Salzmann 2019). Previously, it had been known that gold deposits are located on the periphery of the Near Eastern heartland: Egypt, Nubia, Anatolia, Iran, and Bactria (Maxwell-Hyslop 1971, lxiv; Moorey 1994, 219–221; Weeks 2012, 297). The recent studies use various types of analyses and isotopes to geochemically define the gold used to make the artefacts and then draw correlations with possible ore sources (Jansen, Hauptmann, and Klein 2016, 98; see also Saltzmann 2019, 29, fig. 5.1). For the gold artefacts from Ur (dating to Early Dynastic III and Akkadian/Ur III), through an impressive process of elimination and correlation regarding results of the analyses of the artefacts and known characteristics of ore sources from Egypt to Afghanistan, the source of the gold was narrowed down to "two locations that are potential candidates: the placer deposits found at Takab in Iran and at Samti in Afghanistan" (Jansen, Hauptmann, and Klein 2016, 105; see also Jansen et al. 2016, 20–21, fig. 6). Considering the gold artefacts from the Royal Cemetery of Ur were excavated together with innumerable lapis lazuli and carnelian beads, gems known to come from Afghanistan and farther east, it would be common sense to trade all three precious materials from the same general region. Furthermore, Hauptmann and colleagues (2018) analyzed gold and silver objects from the Royal Cemetery of Ur in the collection of the Penn Museum. Their detailed study also includes textual evidence for Sumerian sourcing of gold in the later 3rd millennium BC (Hauptmann et al. 2018, 118, with additional references): "The Statue B of Gudea [of Lagaš from the 22nd century BC] registers 'gold in its dust came down

from the Ḫaḫum mountain (…) Gold in its dust came down from the land Meluḫḫa'. Meluḫḫa is located within the region of the Indus civilization, *e.g.* from the seacoast of western Baluchistan and Gujarat to northeastern Afghanistan and Pakistan's northwestern Frontier Province. [Heimpel 1993; Laursen/Steinkeller 2017, 84 and *passim*] From this region, gold and many precious stones found their way to Mesopotamia. The Ḫaḫum mountain on the other hand is identified as the Ḫaḫum city/region, which Barjamovic (2011, 87–107) localizes in the mountain region on the northwest bend of the Euphrates (on the border between modern Syria and Turkey) according to the Old Assyrian texts. According to Hauptmann (2011) and Jansen et al. (2016) the Sumerian 'gold in its dust' of Gudea and the administrative records from the 21st century BC from Ur represent a significant indication of the trading of fine-grained placer gold … The Sumerian textual sources – even though younger than the metal objects from the Royal Tombs – are well in agreement with analytical and mineralogical observations when dealing with gold dust."

Discussion

Correlating the analyses of gold and silver artefacts from Ur dated to the mid to late 3rd millennium BC and Sumerian textual evidence with the three gold and silver cast jewellery pieces from the Petras burial in Crete, dated to the early to mid 3rd millennium BC, might at first seem hazardous, but considering the existence and quality of 4th millennium BC gold artefacts from Tepe Gawra, the metallurgy of sites like Arslantepe, the geology of western and central Asia (see Salzmann 2019, 110, fig. 15.1; Powell et al. 2022), the iconography of the Great Man of Uruk, and the early kneeling iconography from as far afield as Elam, we must conclude that the three precious items from Petras originated from a very distant land to the east of Crete and probably somewhere in Mesopotamia that had relations with Elam. "…[A]rt produced in Elam during the Proto-Elamite or Jamdat Nasr period was closely related to the classic Sumerian art of southern Mesopotamia proper … the Jamdat Nasr period in Elam and probably also in Mesopotamia was an era of great artistic creativity, a continuation of the achievements of the preceding Uruk period" (Hansen, Lefferts, and Alexander 1970, 14).

Furthermore, the woman who was buried with the foreign jewellery in Burial Structure 25 at Petras was interred in such an unusual manner compared to other Early Minoan burials that one wonders if she herself could have traveled such a long distance as well, and her loved ones in Crete knew she required special mortuary dispensation due to her possible foreign identity. Her intriguing jewellery and method of entombment beg many questions about her origin and how she fit into the Early Minoan elite society of Petras. The iconography of the very worn pendant with two men in net skirts from the Jemdat Nasr period of Sumer means that the woman's cast jewellery pieces were heirlooms or antiques by up to a few centuries when they were buried with her.

A few other artefacts of Near Eastern origin have been found in Early and Middle Minoan Cretan contexts, including three cylinder seals from burials at Mochlos and Platanos that testify to the existence of long distance contacts: a silver tubular seal from House Tomb I at Mochlos in an EM II context (Pini 1982; Aruz 1984; 1995, 3; 2008, 40–41), a hematite cylinder seal from Tomb Lambda at Mochlos from a mixed context of EM II–MM I B date (Davaras and Soles 1995), and the famous "Hammurabi" cylinder seal made of hematite from Tholos B at Platanos dated to about 2000 BC (Xanthoudides 1924, 117; found with polychrome pottery dated to MM I–II and Middle Kingdom scarabs [Aruz 2008, 90]). Special methods of burial were not identified in these cases.

There are also two unusual beads from the Early Minoan cemetery at Livari Skiadi in southeastern Crete (Papadatos 2015, 104–105, nos. J71, J72, fig. 47, pl. 35). The silver disk-shaped bead with midribs has parallels at several sites from the Aegean, across Mesopotamia, and over to southeastern Iran and the Indus region (Aruz 2003a, 242, fig. 72). The composite beads made of rolled sheet of arsenical copper with stone discs to close both ends also have parallels in the Near East (Ferrence et al. 2022, 25).

Fig. 7: Limestone basin from Temple N at Ebla, Syria, length 1.38 m, ca. 1850–1750 BC; Matthiae 2018, 130, fig. 7, no. TM.72.N.468 (© Missione Archeologica Italiana in Siria).

Regarding the iconography of the kneeling embrace of two men, it is an enigmatic motif among all the cultures around the eastern Mediterranean and Near East during the Early and Middle Bronze Age. No text from the early time of the Petras burial has been found to explain the meaning. A later piece of cult furniture does help to elucidate matters. Dating between the end of Middle Bronze I B and the beginning of Middle Bronze II A (late 19th to early 18th century BC), a limestone basin found at Ebla in Syria depicts embracing men (Fig. 7; Matthiae 2013, 101–102, fig. 6; 2018; 2019). It was excavated in Temple N of the Lower Town. The relief carving on the back side shows two pairs of men standing and embracing in the center and at right and another pair at left grasping a sacred tree between them (Matthiae 2018, 130, fig. 7; 2019, fig. 3). There are lesser goddesses on either side of the basin. The excavator said, "the ritual acts of the officials are interpreted as a commemoration of an important political alliance, where the goddesses represent the guarantee of the divine approval of the alliance" (Matthiae 2018, 109). Iconographic details point to Aleppo as the partner of Ebla in the alliance, probably during the reign of Yarim-Lim I of Aleppo (Matthiae 2018, 109, 113). The men's garments with a fringe at the bottom resemble the kilts from the gold pendant. Their hair and beards are delineated, which is also the case on the jewel. Unfortunately, they are not kneeling, and the date is much later than our piece from Petras. Frances Pinnock, an expert on Ebla, mentioned that the "gesture of embracing each other is really rare in the third millennium" (pers. comm., Dec. 1, 2019; see also Matthiae 2018, 115–116). And she cautioned that the embracing figures on the basin from Ebla actually display a peculiar stance whereby one man in each couple brings a hand to the throat of the other man, indicating a political meaning (F. Pinnock, pers. comm., Dec. 1, 2019; see also Matthiae 2018, 112, 116). Matthiae calls them kings who enter into a political alliance by taking an oath symbolized in the iconography by "touching the throat," which is a precise term loaded with meaning in Old Babylonian texts (Matthiae 2018, 116).

Furthermore, from the Late Bronze Age (14th century BC) in Egypt, a great deal of textual evidence describes alliances among kings. Letters found at Amarna were written to the pharaoh from his 'brothers', or allies or vassals. Many times, they write with flattery when asking for gold or complaining of the low quality of their shipment (Moran 1992, 19; Marinatos 2010, 8). They need it to decorate their palaces and increase their status. The 'brothers' or allies state how plentiful gold is in Egypt, so it should be easy to share it (Moran 1992, 39). An Amarna letter from Burna-Buriaš, the king of Babylon, to Amenhotep IV demonstrates that gold was sometimes sealed to verify its weight and purity. The king of Babylon says to the Pharaoh: "*My brother* should make a [personal] check, then *my brother* should seal and send it to me. Certainly *my brother* did not check the earlier (shipment of) gold that *my brother* sent to me. It was only a deputy of *my brother* who sealed it and sent it to me. When I pu[t] the 40 minas of gold that were brought to me in a kiln [or cupel], not [even] [10, I sw]ear, appear[ed]" (EA 7: 63–72).

Conclusion

Perhaps the pendant from the Prepalatial primary female burial at Petras signifies an agreement or some sort of a royal relationship, perhaps between 'brother-kings' from somewhere in Mesopotamia from a time long before the woman was interred in Burial Structure 25. Or did the antique pieces of jewellery take on a new meaning to signify an agreement between a king in the East and a big man at Petras? As the iconography of the pendant shows the two men identically,

they must be equals. And what was the relationship of the woman in Burial Structure 25 to the elite men who perhaps undertook the agreement? Was she a wife or daughter or descendent of one of them? Was she a priestess of Inanna/Ishtar? Perhaps she was a younger daughter of a king in the East who was sent off with the precious heirlooms to marry a Minoan ruler in order to seal an alliance between her father and her new husband. We will never know the full story. Of course, strontium isotope analyses of the woman's bones could be very useful in defining whether she was local to Crete or was born and raised in another region.

Or, as Costis Davaras and Jeffrey Soles noted about seals from the Near East that have been found in Crete, "they were surely valued as objects of art, souvenirs, or powerful amulets. Their tiny pictures of the glyptic world would have impressed their foreign beholders deeply, and to a certain degree they would have influenced the glyptic and iconography of the country of arrival" (Davaras and Soles 1995, 45). In the case of the three jewellery pieces from Petras discussed here, however, they do not seem to have influenced the art of Early Minoan Crete. The woman was fairly young when she died, and the pieces were buried with her. It is possible that they were present in Crete for only a few years before their deposition in the ground. The tiny size of the pendant and feline bead also would have inhibited others from noticing the importance of the iconography, especially if the jewellery was not worn on a regular basis. Nevertheless, the woman from Petras who was elaborately buried under a monument and who wore the gold pendant and other impressive jewels was assuredly a person of elite, noble, or even royal status during the Prepalatial period.

Acknowledgments

References

Alexiou, S., and P. M. Warren. 2004. *The Early Minoan tombs of Lebena, southern Crete. SIMA* 30. Sävedalen: Paul Åströms Förlag.

Algaze, G. 1993. *The Uruk world system: the dynamics of expansion of Early Mesopotamian civilization.* Chicago: University of Chicago Press.

Algaze, G. 2001. "The prehistory of imperialism: the case of Uruk Period Mesopotamia." In Rothman, ed., 2001, 27–83.

Algaze, G. 2013. "The end of prehistory and the Uruk period." In *The Sumerian World,* edited by H. Crawford, 68–95. London: Routledge.

Artamonov, M., ed. 1974. *The dawn of art: Palaeolithic, Neolithic, Bronze Age, and Iron Age remains found in the territory of the Soviet Union: the Hermitage Collection.* Leningrad: Aurora Art Publishers.

Aruz, J. 1984. "The silver cylinder seal from Mochlos." *Kadmos* 23: 186–88.

Aruz, J. 1995. "Syrian seals and the evidence for cultural interaction between the Levant and Crete." In *Sceaux Minoens et Mycéniens. IVe symposium international 10–12 septembre 1992, Clermont-Ferrand,* edited by W. Müller, 1–21. *CMS* Beiheft 5. Berlin: Gebr. Mann.

Aruz, J. 2003a. "Art and interconnections in the third millennium B.C." In Aruz, ed., 2003, 239–250.

Aruz, J. 2003b. "Cylindrical vessel with heroes and animals." In Aruz, ed., 2003, 330–332.

Aruz, J. 2008. *Marks of distinction: seals and cultural exchange between the Aegean and the Orient (ca. 2600–1360 B.C.). CMS* Beiheft 7. Mainz: Philipp von Zabern.

Aruz, J., ed. 2003. *Art of the First Cities: the third millennium B.C. from the Mediterranean to the Indus.* New York: Metropolitan Museum of Art; New Haven: Yale University Press.

Ataç, M.-A. 2019. "Reconstructing artistic environments." In Gunter, ed., 2019, 507–529.

Bahrani, Z. 2002. "Performativity and the image: narrative, representation, and the Uruk Vase." In *Leaving no stones unturned. Essays on the Ancient Near and Egypt in honor of Donald P. Hansen,* edited by E. Ehrenberg, 15–22. Winona Lake: Eisenbrauns.

Barjamovic, G. 2011. *A historical geography of Anatolia in the Old Assyrian Colony Period.* Copenhagen: Carsten Niebuhr Institute of Near Eastern Studies, Museum Tusculanum.

Benoit, A. 2004. "Susa." In *Persiens antike Pracht: Bergbau, Handwerk, Archäologie,* edited by T. Stöllner, R. Slotta, and A. Vatandoust, 178–193. Bochum: Deutsches Bergbau-Museum.

Blocher, F. 2019. "Inanna/Ishtar's iconography in the Ancient Near East." In Potts, ed., 2019, 63–71.

Branigan, K. 1974. *Aegean metalwork of the Early and Middle Bronze Age.* Oxford: Clarendon Press.

Branigan, K. 1983. "Gold and goldworking in Early Bronze Age Crete." *TUAS* 8:15–20.

Brogan, T. M., and A. Giumlia-Mair. 2017. "An intriguing set of discs from the Protopalatial tombs at Petras." In Tsipopoulou, ed., 2017, 215–221.

Burney, C. 1993. "Arslantepe as a gateway to the highlands." In *Between the rivers and over the mountains: Archaeologica Anatolica et Mesopotamica Alba Palmieri dedicata,* edited by M. Frangipane, H. Hauptmann, M. Liverani, P. Matthiae, and M. Mellink, 311–317. Rome: Dipartimento di scienze storiche, archeologiche e antropologiche dell'antichità, Università di Roma "La Sapienza."

Butterlin, P. 2019. "The expansion of Uruk culture." In Potts, ed., 2019, 185–191.

Charvát, P. 2002. *Mesopotamia before history.* London and New York: Routledge.

Collins, P. 2019. "Narrative." In Gunter, ed., 2019, 285–307.

Collon, D. 1995. *Ancient Near Eastern art.* Berkeley: University of California Press.

Cosmopoulos, M. B. 1992. "The development of iconography in the Early Bronze 2 Aegean." In *ΕΙΚΩΝ. Aegean Bronze Age Iconography: shaping a methodology. Proceedings of the 4ᵗʰ International Aegean Conference, University of Tasmania, Hobart, Australia, 6–9 April 1992,* edited by R. Laffineur and J. L. Crowley, 87–96. *Aegaeum* 8. Liège: Université de Liège, Histoire de l'art et archéologie de la Grèce antique.

Crawford, H. 1991. *Sumer and the Sumerians.* Cambridge and New York: Cambridge University Press.

Davaras, C., and Ph. P. Betancourt. 2004. *The Hagia Photia cemetery* I: *the tomb groups and architecture. Prehistory Monographs* 14. Philadelphia: INSTAP Academic Press.

Davaras, C., and J. S. Soles. 1995. "A new oriental cylinder seal from Mochlos." *ArchEph* 134 [1997]: 29–66.

Davis, E. 2015. "The gold of the shaft graves: the Transylvanian connection." In *Temple University Aegean Symposium: A Compendium,* edited by Ph. P. Betancourt, 457–463. Philadelphia: INSTAP Academic Press.

Dierckx, H. M. C. Forthcoming. "A spectrum of colours: stone beads and pendants from Petras cemetery." In *Αρχαιολογικό Έργο Κρήτης 5: Πρακτικά 5ης Συνάντησης Ρέθυμνο, 21–24 Νοεμβρίον 2019,* vol. A', Rethymnon: University of Crete. http://www.history-archaeology.uoc.gr/en/activities-and-research/conferences-and-symposia/pan cretian-conference-archaeological-research-in-crete/.

Evely, D. 2000. *Minoan crafts: tools and techniques. An introduction,* Volume Two. *SIMA* 92, 2. Jonsered: Paul Åströms Förlag.

Feller, B. 2019. "The beginnings of bureaucracy: the function and use of seals in the fourth and third millennia B.C." In Potts, ed., 2019, 139–145.

Ferrence, S. C. 2017. "The development of clothed figurines in Bronze Age Crete as demonstrated by the small idols from Hagios Charalambos." In *Cycladica in Crete: Cycladic and Cycladicizing figurines within their archaeological context. Proceedings of the International Symposium, Museum of Cycladic Art, Athens, 1–2 October 2015,* edited by N. C. Stampolidis and P. Sotirakopoulou, 537–550. Athens: Museum of Cycladic Art; Rethymnon: University of Crete.

Ferrence, S. C., Ph. P. Betancourt, and J. D. Muhly. 2020. "A stellar seal ring from the Pre- and Protopalatial cemetery of Petras: iconographic connection with the Near East?" In *Αρχαιολογικό Έργο Κρήτης 4: Πρακτικά 4ης Συνάντησης Ρέθυμνο, 24–27 Νοεμβρίον 2016,* vol. A', edited by P. Karanastasi, A. Tzigounaki, and C. Tsigonaki, 443–453. Rethymnon: University of Crete.

Ferrence, S. C., A. Giumlia-Mair, Ph. P. Betancourt, and J. D. Muhly. Forthcoming. "Embracing figures: an enigmatic gold pendant from the cemetery of Petras." In *Αρχαιολογικό Έργο Κρήτης 5: Πρακτικά 5ης Συνάντησης Ρέθυμνο, 21–24 Νοεμβρίον 2019,* vol. A', Rethymnon: University of Crete.

Ferrence, S. C., A. Giumlia-Mair, Ph. P. Betancourt, and Y. Papadatos. 2022. "Silvery weapons and precious jewelry: Early Minoan I B metallurgy of East Crete." In *Kleronomia: Legacy and Inheritance. Studies on the Aegean Bronze Age in honor of Jeffrey S. Soles,* edited by J. Murphy and J. Morrison, 11–31. *Prehistory Monographs* 61. Philadelphia: INSTAP Academic Press.

Frankfort, H. 1954. *The art and architecture of the Ancient Orient. Pelican History of Art* Z7. Harmondsworth: Penguin Books Ltd.

Frankfort, H. 1988. *The art and architecture of the Ancient Orient.* 4th ed. Harmondsworth: Penguin Books.

Frangipane, M., G. M. Di Nocera, A. Hauptmann, P. Morbidelli, A. M. Palmieri, L. Sadori, M. Schultz, and T. Schmidt-Schultz. 2001. "New symbols of a new power in a 'royal' tomb from 3,000 BC Arslantepe, Malatya (Turkey)." *Paléorient* 27, 2: 105–139.

Genz, H., and A. Hauptmann. 2002. "Chalcolithic and EBA metallurgy in the southern Levant." In *Anatolian Metal* II, edited by Ü. Yalçin, 149–158. *Der Anschnitt* Beiheft 15; *Veröffentlichungen aus dem Deutschen Bergbau-Museum Bochum* 109. Bochum: Deutsches Bergbau-Museum.

Giumlia-Mair, A., Ph. P. Betancourt, and S. C. Ferrence. 2018. "Arsenic in the network: arsenical copper in Minoan Crete." In *Bronze Age metallurgy on Mediterranean Islands. In honor of Robert Maddin and Vassos Karageorgis,* edited by A. Giumlia-Mair and F. Lo Schiavo, 520–541. *Monographies Instrumentum* 56. Drémil-Lafage: Éditions Mergoil.

Giumlia-Mair, A., Ph. P. Betancourt, S. C. Ferrence, and J. D. Muhly. 2017. "Special silver alloys from the Pre- and Proto-palatial cemetery of Petras, Crete." In Tsipopoulou, ed., 2017, 203–211.

Giumlia-Mair, A., S. C. Ferrence, Ph. P. Betancourt, and J. D. Muhly. 2020. "Silver and silvery alloys in Early Minoan I B Crete." *Materials and manufacturing processes* 35. Special Issue 13: *Archaeometry of prehistoric and protohistoric stone, metal, ceramics, and glass,* edited by A. Giumlia-Mair and B. Török. https://doi.org/10.1080/10426914.2020.1729989.

Giumlia-Mair, A. R., S. C. Ferrence, J. D. Muhly, and Ph. P. Betancourt. 2021. "New evidence for sophisticated gold-working techniques from Middle Minoan Crete." In *Proceedings of the 5th International Conference "Archaeometallurgy in Europe," 19–21 June 2019, Miskolc, Hungary,* edited by B. Török and A. Giumlia-Mair, 405–416. *Monographies Instrumentum* 73. Drémil-Lafage: Éditions Mergoil.

Godart, L., and Y. Tzedakis. 1992. *Témoignages archéologiques et epigraphiques en Crete occidentale du Néolithique au Minoen Récent III B. Incunabula Graeca* vol. 93. Rome: Gruppo Editoriale Internazionale.

Gopher, A., and T. Tsuk. 1996. *The Nahal Qanah Cave: earliest gold in the southern Levant. Monograph series / Tel Aviv University, Sonia and Marco Nadler Institute of Archaeology* 12. Tel Aviv: Institute of Archaeology of Tel Aviv University Publications Section.

Gopher, A., T. Tsuk, S. Shalev, and R. Gophna. 1990. "Earliest gold artifacts in the Levant." *Current Anthropology* 31, 4: 436–443.

Green, J. D. M. 2019. "Gender and sexuality." In Gunter, ed., 2019, 179–208.

Gunter, A. C., ed. 2019. *A companion to Ancient Near Eastern art.* Hoboken, NJ: Wiley Blackwell.

Hansen, D. 1998. "Art of the Royal Tombs of Ur: a brief interpretation." In *Treasures from the Royal Tombs of Ur,* edited by R. L. Zettler and L. Horne, 43–72. Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.

Hansen, D. 2003. "Art of the early City-States." In Aruz, ed., 2003, 21–42.

Hansen, D., K. C. Lefferts, and S. M. Alexander. 1970. "A Proto-Elamite silver figurine in the Metropolitan Museum of Art." *Metropolitan Museum Journal* 3: 5–14.

Hauptmann, A. 2011. "Gold in Georgia I: scientific investigations into the composition of gold." In *Anatolian Metal* V, edited by U. Yalcin, 173–186. *Der Anschnitt* Beiheft 24; *Veröffentlichungen aus dem Deutschen Bergbau-Museum Bochum* 180. Bochum: Deutsches Bergbau-Museum.

Hauptmann, A., S. Klein, P. Paoletti, R. L. Zettler, and M. Jansen. 2018. "Types of gold, types of silver: the composition of precious metal artifacts found in the Royal Tombs of Ur, Mesopotamia." *Zeitschrift für Assyriologie* 108, 1: 100–131.

Hauptmann, H., and E. Pernicka, eds. 2004. *Die Metallindustrie Mesopotamiens von den Anfängen bis zum 2. Jahrtausend v. Chr. Orient-Archäologie* 3. Rahden/Westf.: VML, Verlag Marie Leidorf.

Heimpel, W. 1993. "Meluḫḫa." In *Reallexikon der Assyriologie und vorderasiatischen Archäologie* 8, 53–55. Berlin and New York: Walter de Gruyter & Co.

Hickman, J. 2008. "Gold before the palaces: crafting jewelry and social identity in Minoan Crete," Ph.D. diss., University of Pennsylvania.

Hunt, L. B. 1980. "The long history of lost wax casting: over five thousand years of art and craftsmanship." *Gold Bulletin* 13: 63–79.

Immerwahr, S. A. 1990. *Aegean painting in the Bronze Age.* University Park, PA: Penn State University Press.

Jansen, M. 2019. "Geochemie und Archäometallurgie des Goldes der Bronzezeit in Vorderasien." Ph.D. diss., Ruhr-Universität Bochum.

Jansen, M., S. Aulbach, A. Hauptmann, H. E. Höfer, S. Klein, M. Krüger, and R. L. Zettler. 2016. "Platinum group placer minerals in ancient gold artifacts – geochemistry and osmium isotopes of inclusions in Early Bronze Age gold from Ur/Mesopotamia." *JAS* 68: 12–23.

Jansen, M., A. Hauptmann, and S. Klein. 2016. "Where does the gold from the cemetery of Ur Come From? – Provenancing gold sources using analytical methods." *Metalla* 22, 1: 98–106.

Laursen, S., and P. Steinkeller. 2017. *Babylonia, the Gulf Region, and the Indus: archaeological and textual evidence for contact in the third and early second millennia B.C. Mesopotamian Civilizations* 21. Winona Lake, IN: Eisenbrauns.

Liverani, M. 2006. *Uruk: the First City,* translated by Z. Bahrani and M. Van De Mieroop. London: Equinox Publishing Ltd.

Lutz, J. 2004. "Röntgenfluoreszenzanalysen." In *Die Metallindustrie Mesopotamiens von den Anfängen bis zum 2. Jahrtausend v. Chr.,* edited by H. Hauptmann and E. Pernicka, 109–149. *Orient-Archäologie* 3. Rahden/Westf.: VML, Verlag Marie Leidorf.

Mallowan, M. E. L. 1965. *Early Mesopotamia and Iran.* London: Thames & Hudson.

Marinatos, N. 2010. *Minoan kingship and the solar goddess: a Near Eastern koine.* Urbana: University of Illinois Press.

Marinatos, S. N. 1929. "Πρωτομινωϊκός Θολωτός Τάφος παρά το χωρίον Κράσι Πεδιάδος." *ArchDelt* 12: 102–141.

Matthiae, P. 2013. "Ebla: recent excavation results and the continuity of Syrian art." In *Cultures in contact: from Mesopotamia to the Mediterranean in the second millennium B.C.,* edited by J. Aruz, S. B. Graff, and Y. Rakic, 96–111. New York: The Metropolitan Museum of Art.

Matthiae, P. 2018. "The Old Syrian Temple N's carved basin and the relation between Aleppo and Ebla." *Studia Eblaitica* 4: 109–138.

Matthiae, P. 2019. "The Middle Bronze palaces at Ebla: architectural spaces and administrative functions." *Studia Eblaitica* 5: 57–90.

Maxwell-Hyslop, K. 1971. *Western Asiatic jewelry c. 3000–612 B.C.* London: Methuen.

Moorey, P. 1982. "The archaeological evidence for metallurgy and related technologies in Mesopotamia, c. 5500–2100 BC." *Iraq* 44: 13–38.

Moorey, P. 1994. *Ancient Mesopotamian materials and industries: the archaeological evidence.* Oxford and New York: Clarendon Press.

Moortgat, A. 1967. *The art of ancient Mesopotamia: the classical art of the Near East.* Phaidon: London.

Moran, W., ed. and trans. 1992. *The Amarna Letters.* Baltimore: Johns Hopkins University Press.

Muhly, J. D. 1977. "The copper ox-hide ingots and the Bronze Age metals trade." *Iraq* 39: 73–82.

Muhly, J. D. 2006. "Chrysokamino in the history of early metallurgy." In *The Chrysokamino metallurgy workshop and its territory,* by Ph. P. Betancourt, 155–177. *Hesperia* Suppl. 36. Princeton: American School of Classical Studies at Athens.

Müller-Karpe, M. 1991. "Aspects of early metallurgy in Mesopotamia." In *Archaeometry* 90, edited by E. Pernicka and G. A. Wagner, 105–116, Basel: Birkhauser Verlag.

Müller-Karpe, M., E. Pászthory, and E. Pernicka. 1993. *Metallgefäße im Iraq I (von den Anfängen bis zur Akkad-Zeit). Prähistorische Bronzefunde* part II, vol. 14. Stuttgart: F. Steiner.

Nissen, H. J. 2001. "Cultural and political networks in the ancient Near East during the fourth and third millennia B.C." In Rothman, ed., 2001, 149–179.

Nissen, H. J. 2003. "Uruk and the formation of the city." In Aruz, ed., 2003, 11–20.

Orthmann, W. 1975. Der Alte Orient. *Propyläen Kunstgeschichte* 14. Berlin: Propyläen Verlag.

Palmieri, A., K. Sertok, and E. Chernykh. 1993. "From Arslantepe metalwork to arsenical copper technology in eastern Anatolia." In *Between the rivers and over the mountains: archaeologica Anatolica et Mesopotamica Alba Palmieri dedicata,* edited by M. Frangipane, H. Hauptmann, M. Liverani, P. Matthiae, and M. Mellink, 573–599. Rome: Dipartimento di scienze storiche, archeologiche e antropoligiche dell'antichità, Università di Roma "La Sapienza."

Papadatos, Y. 2005. *Tholos Tomb Gamma: a prepalatial tholos tomb at Phourni, Archanes. Prehistory Monographs* 17. Philadelphia: INSTAP Academic Press.

Papadatos, Y. 2007. "The beginning of metallurgy in Crete: new evidence from the FN–EM I settlement at Kaphala Petras, Siteia." In *Metallurgy in the Early Bronze Age Aegean,* edited by P. M. Day and R. C. P. Doonan, 154–167. *Sheffield Studies in Archaeology* 7. Oxford: Oxbow Books.

Papadatos, Y. 2015. "Jewelry." In *Livari Skiadi: a Minoan cemetery in southeast Crete* I: *excavation and finds,* by Y. Papadatos and C. Sofianou, 101–106. *Prehistory Monographs* 50. Philadelphia: INSTAP Academic Press.

Pedde, F. 2019. "Metals in Uruk." In Potts, ed., 2019, 270–271.

Pini, I. 1982. "Zu dem silbernen Rollsiegel aus Mochlos." *AA 1982: 599–603.*

Pittman, H. 1992a. "The Late Uruk period." In *The Royal City of Susa: ancient Near Eastern treasures in the Louvre,* edited by P. O. Harper, J. Aruz, and F. Tallon, 48–52. New York: The Metropolitan Museum of Art.

Pittman, H. 1992b. "The Proto-Elamite period." In *The Royal City of Susa: ancient Near Eastern treasures in the Louvre,* edited by P. O. Harper, J. Aruz, and F. Tallon, 68–77. New York: The Metropolitan Museum of Art.

Platon, N. 1954. "Η αρχαιολογική κίνησις εν Κρήτη κατά το έτος 1954." *Κρητικά Χρονικά* 8: 506–517.

Pollock, S. 1999. *Ancient Mesopotamia: the Eden that never was.* Cambridge: Cambridge University Press.

Pongratz-Leisten, B. 2019. "Ideology." In Gunter, ed., 2019, 283–308.

Porada, E. 1995. *Man and images in the ancient Near East.* Wakefield, RI: Moyer Bell.

Potts, T. 2019. "Uruk: The Last 'First City'." In Potts, ed., 2019, 1–5.

Potts, T., ed. 2019. *Uruk: First City of the Ancient World.* Los Angeles: The J. Paul Getty Museum.

Powell, W., M. Frachetti, C. Pulak, H.A. Bankoff, G. Barjamovic, M. Johnson, R. Mathur, V. C. Pigott, M. Price, and K. A. Yener. 2022. "Tin from Uluburun shipwreck shows small-scale commodity exchange fueled continental tin supply across Late Bronze Age Eurasia," *Science Advances* 8. https://doi.org/10.1126/sciadv.abq3766.

Rothman, M. S. 2001. "The Tigris Piedmont, Eastern Jazira, and Highland Western Iran in the fourth millennium B.C." In Rothman, ed., 2001, 349–401.

Rothman, M. S. 2002. *Tepe Gawra: the evolution of a small, prehistoric center in northern Iraq. University Museum Monograph* 112. Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.

Rothman, M. S., ed. 2001. *Uruk Mesopotamia & its neighbors: cross-cultural interactions in the era of state formation.* Santa Fe: School of American Research Press; Oxford: James Currey.

Rupp, D. W. 2017. "Male bonding and remembering the ancestors? The Late Minoan III reoccupation and use of the Kephala-Petras cemetery area." In Tsipopoulou, ed., 2017, 245–264.

Rupp, D., and T. Tsipopoulou. Forthcoming. "Strategies for mortuary differentiation among emergent elites at the Pre- and Protopalatial cemetery of Petras – Kephala." In *Αρχαιολογικό Έργο Κρήτης 5: Πρακτικά 5ης Συνάντησης Ρέθυμνο, 21–24 Νοεμβρίου 2019,* vol. A', Rethymnon: University of Crete.

Salzmann, E. 2019. *Silver, copper, and bronze in Early Dynastic Ur, Mesopotamia: a high-resolution analysis approach.* Bochum: Verlag Marie Leidorf GmbH.

Schmandt-Besserat, D. 1993. "Images of Enship." In *Between the rivers and over the mountains: Archaeologica Anatolica et Mesopotamica Alba Palmieri dedicata,* edited by M. Frangipane, H. Hauptmann, M. Liverani, P. Matthiae, and M. Mellink, 201–219. Rome: Dipartimento di scienze storiche, archeologiche e antropoligiche dell'antichità, Università di Roma "La Sapienza."

Schwartz, G. M. 2001. "Syria and the Uruk expansion." In Rothman, ed., 2001, 233–264.

Seager, R. B. 1912. *Explorations in the island of Mochlos.* Boston and New York: American School of Classical Studies at Athens.

Selz, G. 2019. "Religious practices in the ancient Near East in the early periods." In Potts, ed., 2019, 215–219.

Soles, J. S. 1992. *The Prepalatial cemeteries at Mochlos and Gournia and the house tombs of Bronze Age Crete. Hesperia* Suppl. 24. Princeton: American School of Classical Studies at Athens.

Speiser, E. A. 1933. "A seal from Tell Billa." *Museum Bulletin* IV, no. 2: 40–37. https://www.penn.museum/sites/bulletin/1057/.

Stech, T., and V. C. Pigott. 1986. "The metals trade in southwest Asia in the third millennium B.C." *Iraq* 48: 39–64.

Stein, G. J. 2001. "Indigenous social complexity at Hacınebi (Turkey) and the organization of Uruk colonial contact." In Rothman, ed., 2001, 265–305.

Strommenger, E. 1964. *The art of Mesopotamia.* London: Thames & Hudson.

Tallon, F. 1987. *Métallurgie Susienne* I: *De la fondation de Suse au XVIIIe siècle avant J.-C.,* 2 vols. *Notes et documents des musées de France* 15. Paris: Ministère de la culture et de la communication, Editions de la Réunion des musées nationaux.

Tobler, A. 1950. *Excavations at Tepe Gawra: joint expedition of the Baghdad School and the University Museum to Mesopotamia.* Volume II: *Levels IX–XX.* Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.

Tsipopoulou, M. 2016. *Petras, Siteia* I: *a Minoan palatial settlement in eastern Crete. Excavation of Houses I.1 and I.2. Prehistory Monographs* 53. Philadelphia: INSTAP Academic Press.

Tsipopoulou, M. 2021. *Petras, Siteia* II: *a Minoan palatial settlement in eastern Crete. Excavation of Houses I.1 and I.2: the pottery. Prehistory Monographs* 53. Philadelphia: INSTAP Academic Press.

Tsipopoulou, M., and E. Hallager. 2010. *The Hieroglyphic Archive at Petras, Siteia. Monographs of the Danish Institute at Athens* 9. Aarhus: Aarhus University Press.

Tsipopoulou, T., and D. Rupp. 2019. "The Pre- and Proto-palatial cemetery at Petras-Kephala: a persistent locale as an arena for competing cultural memories." In Μνήμη / Mneme. Past and memory in the Aegean Bronze Age. Proceedings of the 17th International Aegean Conference, University of Udine, Department of Humanities and Cultural Heritage, Ca' Foscari University of Venice, Department of Humanities, 17–21 April 2018, edited by E. Borgna, I. Caloi, F. M. Carinci, and R. Laffineur, 81–94. Aegaeum 43. Leuven: Peeters Publishers.

Tsipopoulou, M., ed. 2012. Petras, Siteia: 25 years of excavations and studies. Monographs of the Danish Institute at Athens 16. Athens: Danish Institute at Athens; Aarhus: Aarhus University Press.

Tsipopoulou, M., ed. 2017. Petras, Siteia: the Pre- and Proto-palatial cemetery in context. Acts of a two-day conference held at the Danish Institute at Athens, 14–15 February 2015. Monographs of the Danish Institute at Athens 21. Athens: Danish Institute at Athens; Aarhus: Aarhus University Press.

Vasilakis, A. 2008. "Silver metalworking in prehistoric Crete: a historical survey." In Aegean metallurgy in the Bronze Age. Proceedings of an International Symposium Held at the University of Crete, Rethymnon, Greece, on November 19–21, 2004, edited by I. Tzachili, 75–85. Athens: Ta Pragmata Publications.

Vogel, H. 2019. "The 'Great Man of Uruk': the art of governance in the late fourth and early third millennia B.C." In Potts, ed., 2019, 119–125.

Völling, E. 2019. "Sheep, wool, and textiles in the Sumerian economy." In Potts, ed., 2019, 242–243.

Warren, P. M. 1990. "Of baetyls." OpAth 18: 193–206.

Weeks, L. 2012. "Metallurgy." In A companion to the archaeology of the ancient Near East, vol. I, edited by D. T. Potts, 295–316. Blackwell Companions to the Ancient World 191. Chichester, UK: Blackwell Publishing Ltd.

Wright, H. T. 2001. "Cultural action in the Uruk world." In Rothman, ed., 2001, 123–147.

Xanthoudides, S. 1924. The vaulted tombs of Mesara: an account of some early cemeteries of southern Crete. Liverpool: University Press of Liverpool Ltd.; London: Hodder & Stoughton Ltd.

Zgoll, A. 2019. "Inanna – City Goddess or Uruk." In Potts, ed., 2019, 51–59.

IV. Of Deities and Humans

'Hands to the Chest': A Gesture of Power for Gods and Humans Alike?

Eleni Drakaki

Abstract   *Within the corpus of Aegean Bronze Age seals, there are only a handful of examples of the so-called 'chest gesture' or 'hands to the chest gesture', where (predominantly) male figures are shown with both hands raised and either held towards the chest or touching the chest. This paper examines the chronological and iconographic development of this gesture in conjunction with the contexts and/or provenances of the seals in question. As a result, the possibility of identifying two distinct Cretan regional variations as well as a unique 'mainland adaptation' of the 'chest gesture' is proposed, while possible interpretations of its religious and/or social significance in the Aegean visual repertoire are also discussed against comparative material from the contemporary cultures of Near East and Egypt.*

Introduction

People from all known cultures and linguistic backgrounds gesture, and gesture is fundamental to communication. Nevertheless, gesture is often seen as secondary to spoken language and reduced to a subcategory of non-verbal communication. However, theoretical approaches in the fields of neurosciences and experimental psychology suggest that speech and gesture arise from the same representational system, while it has also been argued that spoken language and gesture either co-evolved or even that language might have emerged from an earlier gestural communication system (Clough and Duff 2020, 323).

Gesturing is an integral component of the visual language of Aegean iconography; particularly in the Aegean seals corpus, Janice Crowley has identified fifteen different gestures or "movements of the hands or arms (of figures) into specific positions", each carrying a "specific meaning" (Crowley 2013, 187).

One of the rarest is the so-called 'chest gesture' executed with "elbows bent outwards" and "hands towards or touching the chest" (Crowley 2013, 189). In particular, the motif of a male figure executing the chest gesture' is found on: two lentoid seals of LM II–III A1 stylistic date reportedly from Knossos and Pyrgos Psilonero Kydonias (*CMS* V, no. 201 and *CMS* III 361, respectively); a third lentoid seal-stone of LBA III A1–2 stylistic date from Poros Heraklion (*CMS* II 3, no. 193); one amygdaloid seal-stone from Mycenae of LBA II stylistic date (*CMS* I, no. 68); and a clay sealing impressed by a metal signet-ring of LM I stylistic date that was found in the 'Archives Deposit' of the palace of Knossos (*CMS* II 8, no. 248) (Figs. 4–7, 9). Perhaps the same gesture is executed by the female figures which can be seen on the following: a single clay sealing impressed by a rectangular prism-seal of MM II stylistic date from the 'Hieroglyphic Deposit' of the palace of Knossos (*CMS* II 8, no. 39); five clay sealings impressed by a metal signet-ring of LM I stylistic date from Agia Triada (*CMS* II 6, no. 9); and a lentoid seal-stone of LBA I–II stylistic date reportedly from the Aegean region (*CMS* VI, no. 314) (Figs. 1–3). The 'chest gesture' is also witnessed in the representation of a 'bull man'/'minotaur' engraved on a amygdaloid seal-stone of LM II–III A1 stylistic date and reportedly from the tholos tomb of Moni Odigitrias (Fig. 8; *CMS* V Suppl. 3, no. 154).

It appears that the earliest depiction of this gesture in the Aegean seals corpus originates in the MM II period, but it is not executed in its predominant symmetrical – if not static – form: the right hand of the female (?) figure on the sealing from Knossos (Fig. 1; *CMS* II 8, no. 39) ap-

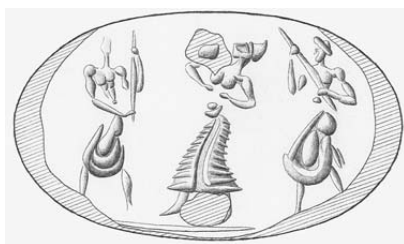Fig. 1: Drawing of sealing from Knossos (CMS *II 8*, no. 39).

Fig. 2: Drawing of sealing from Agia Triada (CMS *II 6*, no. 9).

Fig. 3: Drawing of modern impression of stone seal reportedly from Greece (CMS *VI*, no. 314).
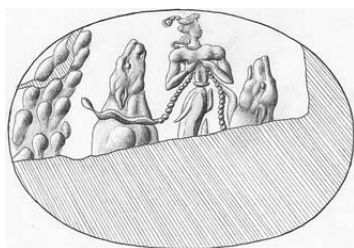

Fig. 4: Drawing of sealing from Knossos (CMS *II 8*, no. 248).

Fig. 5: Drawing of modern impression of stone seal reportedly from Poros (CMS *II 3*, no. 193).

Fig. 6: Drawing of modern impression of stone seal reportedly from Knossos (CMS *III*, no. 361).

Fig. 7: Drawing of modern impression of stone seal reportedly from Pyrgos Psilonero (CMS *V.1*, no. 201).

Fig. 8: Drawing of modern impression of stone seal reportedly from Moni Odigitrias (CMS *V Suppl. 3*, no. 154).

Fig. 9: Drawing of modern impression of stone seal from Mycenae (CMS *I*, no. 68).

pears to be touching, or to be held immediately in front of, the figure's chest, whereas the left hand is shown to the side, as if moving towards the chest, almost seconds before its final positioning next to the right hand. In fact, it seems that is not until LM I, when the form of the 'chest gesture' in the corpus of Aegean seals becomes standardized and perfectly symmetrical: the arms are bent at the elbows and sometimes raised, while the hands are held in front of or touching the chest. It is noteworthy that out of the nine seals/sealing devices in this group, the hands of the figures in the 'chest gesture' are indicated on only four: three are dated early, in MM II (Fig. 1; *CMS* II 8, no. 39) and LM I (Figs. 2 and 4; *CMS* II 6, no. 9; II 8, no. 248) and only one is later,

dated stylistically in LBA II–III A (Fig. 7; *CMS* V, no 201). On the remaining five seals, the figures' hands are not engraved, while on *CMS* III, no. 361 and *CMS* I, no. 68, the forearms of the figures end sharply (Figs. 6 and 9).

The 'hands-to-chest-gesture' appears in a perfectly symmetrically rendered form in the repertoire of gestures of Middle Minoan clay figurines from peak sanctuaries, such as Petsophas (Fig. 10; Sapouna-Sakellarakis 1995, pl. 39, 5–6; Peatfield and Morris 2012, 237–238, fig. 11.5). However, according to Giorgos Rethemiotakis (2001, 80), the gesture of "raising both hands in front of the chest" is not popular on clay figurines and it is largely abandoned after the Neopalatial period. Perhaps one of its latest appearances is on a LM III B clay male figurine from Palaikastro whose hands – with tightly clenched fists – are positioned in front of the chest and touch (Rethemiotakis 2001, col. pl. 5). Out of the 170 bronze figurines from the Bronze Age Aegean studied by Sapouna-Sakellaraki, the 'hands-to-chest' gesture is attested on only 12 examples (Sapouna-Sakellarakis 1995, 106–108, pls. 1: 4, 73, 81; 2: 143; 21: 68; 28: 97; 31: 15; 32: 38, 88; 33: 45; 36: 18, 20), the earliest of which is dated to EM III–MM I A and the latest to LM III (Sapouna-Sakellarakis 1995, pl. 1: 73 and pl. 31: 15 respectively). It should be noted that for the overwhelming majority of the bronze figurines of this group, the 'chest gesture' is executed with both forearms raised at almost shoulder-level and held horizontally in front of/at the height of the upper arms, in a manner similar to the execution of the 'chest gesture' on clay figurines, such as the ones from Petsophas (Sapouna-Sakellarakis 1995, pls. 1: 4, 73; 21: 68; 28: 97; 33: 45; 36: 18, 20; 39: 5). On the other hand, the examples of the 'chest gesture' on seals are executed in a noticeably different manner: the forearms are held in an upwards diagonal position, whereas the upper arms are either vertical or diagonally raised, next to the sides of the body (Figs. 1, 3–8).

A certain process of 'standardization' in respect to the shapes of the seals of this group can be observed during the transition from the Middle to the Late Bronze Age. At a time of experimentation due to the recent introduction of the fixed lapidary lathe (Krzyszkowska 2005, 83–85), it is not surprising that the earliest seal of this group, dated stylistically to the MM II period, is a rectangular faced prism (Fig. 1; *CMS* II 8, no. 39). In LM I, representations of figures in the 'chest gesture' are found on signet-rings with elliptical bezels (Figs. 2 and 4; two examples: *CMS* II 6, no. 9; II 8, no. 248), whereas from LBA II on, the lentoid, which dominates the Aegean glyptic repertoire (Krzyszkowska 2005, 196, 198), is also the preferred shape for the seals of this group (Figs. 3, 5–7; four examples: *CMS* VI, no. 314; II 3, no. 193; III, no. 361; V.1, no. 201), with the amygdaloid following in second place (Figs. 8, 9; two examples: *CMS* V Suppl. 3, no. 154; I, no. 68).

Metals and semi-precious hard stones were the materials used for the signet-rings and seals of this group. The LM I signet-rings used to impress the clay sealings from the 'Archives Deposit' at Knossos (*CMS* II 8, no. 248) and from Agia Triada (*CMS* II 6, no. 9) were probably made of gold and bronze respectively, while the MM II rectangular prism seal that impressed the clay sealing from 'Hieroglyphic Deposit' at Knossos (*CMS* II 8, no. 39) was most likely made of an unidentified hard stone. Aside from the single occurrences of haematite (*CMS* VI, no. 314) and lapis lacedaemonius (*CMS* V, no. 201), stones which are both locally available in the Aegean – with the latter quarried exclusively at the region of Krokeai in Laconia,[1] the majority of the LBA II–III A seals of this group (*CMS* I, no. 68; II 3, no. 193; V Suppl. 3, no. 154) are made of agate, a stone probably imported in the Aegean.[2] The stone of *CMS* III, no. 361 has been identified solely as a "medium-hard limestone" in the online database, which however has been engraved with the technique used for hard-stone seals, which involves the employment of a cutting wheel and drilling bits mounted on a fixed lapidary lathe.

---

1 Aruz 2008, 93; Krzyszkoswska 2005, 196. On the importation of haematite from the Near East, see Krzyszkoswska 2005, 123.

2 On the insignificant and sporadic occurrences of agate in Greece, see Stamatatou 2004, 8.

The prevalence of seals in this group deriving from Cretan contexts is certainly noticeable, whereas only a single amygdaloid comes from a mainland context. In fact, in respect to their provenance, five seals are/can be associated with major centers of central Crete, namely Knossos – and its harbor at Poros (Figs. 1, 4–6; *CMS* II 8, nos. 39, 248; II 3, no. 193; III, no. 361; Dimopoulou-Rethemiotaki 2004) and Agia Triada (Fig. 2; *CMS* II 6, no. 9). One seal is associated with the site of Pyrgos Psilonero Kydonias in western Crete (Fig. 7; *CMS* V.1, no. 201), located at only 16 km to the west of the major Late Bronze Age center of Chania Kastelli and most likely within the territory under its control.[3] *CMS* V Suppl. 3, no. 154 (Fig. 8) is reportedly from the cemetery of Moni Odigitria in south-central Crete. However, it should be mentioned that, as one of the latest pieces formerly in the Mitsotakis collection, it is uncertain whether this seal should be attributed to the Moni Odigitria cemetery or whether it came from the Herakleion prefecture or from a grave in Chania.[4]

Last but not least, the only seal of this group from the mainland comes from Mycenae (Fig. 9; *CMS* I, no. 68): it was found in chamber tomb 27 of the Epano Pegadi cluster/site, one of the largest and most elaborate chamber tombs of the cemetery of the Hill of Panagia. Despite the disturbance of its contents due to the practice of secondary burial, the monumentality and architectural elaboration of this tomb, which was equipped with a main burial chamber of 37 m² and an approximately 14 m long dromos, as well as the impressive quantities of ivory objects and the plethora of gold items uncovered during its excavation provide irrefutable evidence for the elite character of the seal's original associated funerary assemblage.[5] It is perhaps indicative that the seal in question was discovered with three iconic 'Mycenaean' artifacts of LH III A stylistic date: the hippopotamus ivory helmeted warrior heads (Papadimitriou 2015, 16, 17), which belong to a rather rare type of decorative attachments of furniture pieces, which must "have been reserved for special compositions and perhaps also for special clients" (Krzyszkowska 1991, 109, 112–113, 117–119).

Seals with Female Figures

Turning our attention to the two glyptic examples with female figures in the 'chest gesture' from Knossos and Agia Triada (*CMS* II 6, no. 9; II 8, no. 39) we cannot help but notice the movement of their postures: even though they are both rendered in the standard Aegean convention with upper bodies frontal and heads and lower bodies in profile, the upper body of the female figure on the sealing from Knossos (Fig. 1) appears to be leaning forward (to the right), whereas the elite female participant in the "special procession" scene on the sealings from Agia Triada (Fig. 2; Blakolmer 2018, 30) is shown with her upper body leaning backwards (to the right), her neck extended and her head raised upwards.

The gesture of the female figure on the Agia Triada sealing (Fig. 2), which culminates in the placement of her tightly clenched hands immediately under the breasts, as well as the special character of her coiffure, skirt, headgear, and accessories have been considered as evidence for her identification as a "priestess, cult attendant or other ritual functionary of probably higher rank" participating in "an exclusive ceremony on the highest palatial level of Minoan Crete" that probably included also "the transportation of ritual equipment" (Blakolmer 2018, 32, 38–42). It is possible that the combination of the figure's particular 'chest gesture' (with hands placed close together and below the chest) with the intense upwards movement of her head might indicate some sort of musical performance in the form of singing as part of a highly exclusive ceremony, a scene of which was engraved on the metal signet-ring that impressed the Agia Triada sealings

---

3 For example, the territory under the control of Ano Englianos in LH III B extended at a distance of over 40 km to the east of the palatial site: Nakassis 2015, 588, fig. 1).

4 On the difficult issue of the number and provenance of the seals from the Mitsotakis collection, see Sbonias 2010, 201.

5 Xenaki-Sakellariou 1985, 92–100; Laffineur 1990, 126–127. Based on its main burial chamber size alone, Chamber Tomb 17 corresponds to Cavanagh's (1987) Size Group 1 of mainland chamber tombs, which includes the larger and most elaborate tombs with an average chamber size of 24 m².

(*cf.* the singing male figures on the Agia Triada Harvesters Vase: Fig. 10).[6] In fact, the particular 'chest gesture' might not be accidental: the placement of the hands at the base of the chest and right above the abdominal area might be indirectly associated with the singer's technique and the advantages resulting "of an active control of the abdomen" during singing performances (Salomoni, van den Hoorn, and Hodges 2016, 1). Medical assessments on classical singers have verified that the use of abdominal muscle 'support', in the form of inward abdominal movements, can potentially improve respiratory control and overall tone and voice quality (Salomoni, van den Hoorn, and Hodges 2016).

Fig. 10. Detail of the group of singers on the Harvesters Vase from Agia Triada (after Sapouna-Sakellaraki 2006, 172 [42]).

Even though the 'chest gesture' of the female figure on the Agia Triada sealings has strong parallels in Near Eastern glyptic representations of the nude goddess (*cf.* Collon 2005, 45–47 [165]; Pittman with Aruz 1987, 68, fig. 59), the celebratory character of the ceremony in which the figure in question participates might allude to similar ceremonial celebrations in honor/exaltation of the pharaoh, which are depicted in Egyptian art as early as the Old Kingdom period and the third millennium BC. Within its Egyptian context, the 'chest gesture' with tightly clenched hands brought under the chest is understood as part of a corpus of successive praising gestures performed by high status individuals in celebration of the pharaoh's jubilee (Kekes 2021, 322–323, 325).

Despite the rather rough execution of the female (?) figure on the MM II rectangular prism used to impress a sealing from the 'Hieroglyphic Deposit' of the palace of Knossos (Fig. 1; *CMS* II 8, no. 39), one cannot disregard the engraver's attention in depicting the figure's facial features in such a manner as though rendering her with an open mouth. If this hypothesis is correct,[7] it might be possible to interpret this figure as engaged in singing as well: hands are brought or about to be brought to the chest, while the forward leaning of the upper body serves to convey feeling and perhaps emphasize content.

Unlike the female figure on the sealings from Agia Triada, her hands are not rendered in tightly clenched fists but perhaps with open palms (in profile) in a manner that has strong parallels in Egyptian art (*cf.* Kekes 2021, 248–264, 697, fig. 358). It is not unlikely that the heavily stylized female figure on the lentoid in the Ashmolean Museum Collection (Fig. 3; *CMS* VI, no. 314) is also depicted with her hands under her breasts and at the base of her chest. However, the framing of this figure by a symmetrical pair of griffins standing on their hindlegs and raising their heads to gaze upwards to the direction of her face is indicative of her divine status as a Mistress of Animals. In this case, the figure's 'chest gesture' should be understood within the context of her overall formal (hieratic) pose.

---

6 German 2005, 61, fig. 86 draws attention to the sense of movement and swaying postures of all three figures on the Agia Triada sealing as suggestive of some sort of dance performance.

7 Weingarten 2009, 140, no. 8, argues that the fe-

male figure in question is depicted with a bird-shaped head. However, unlike the cited stylistic parallels, there is nothing else in the figure's rendition to suggest a hybrid nature.

Eleni Drakaki

Seals with Male Figures

Aside from the solitary figures on the two amygdaloid seals (Figs. 8, 9; *CMS* V Suppl. 3, no. 154; I, no. 68), all other sealing devices of this group carry the motif of a male figure in the 'chest gesture' flanked by animals or hybrid creatures in the all-familiar composition of the 'Master of Animals'. The formality of the protagonist's upright posture, which culminates in the 'chest gesture', encapsulates his power over his attendants, who are not shown forcefully subdued but instead as companions and protectors of the central male figure.[8] On the seals from central Crete, the protagonists are framed by symmetrical pairs of dogs and lions (Figs. 4–6; dogs: II 8, no. 248; II 3, no. 193; lions: *CMS* III, no. 361). On the seal from the western Cretan site of Pyrgos Psilonero however, the male figure is in the company of an extraordinary pair of supernatural beings: a winged hybrid creature (main body: lion; neck and head: agrimi) and a Minoan 'genius' holding a libation jug (Fig. 7; *CMS* V, no. 201; for this seal, see also Kekes 2021, 698–699, fig. 361). In two cases, the hands of the male figures are clearly shown: on *CMS* V, no. 201, the protagonist's hands are rendered as tightly clenched fists (Fig. 7); on *CMS* II 8, no. 248 (Fig. 4), the male protagonist appears to be holding the leashes of his animal attendants but the sealing's state of preservation does not allow us to discern whether his hands are rendered as tightly clenched fists or in the open palm manner.

Taking into consideration the different nature of the Master's attendants, which range from domesticated animals (dogs), to wild animals (lions), and finally to supernatural hybrid creatures, we are faced with multiple possibilities regarding the nature/character of the male figures. Even though the most obvious explanation of this group of glyptic images would be that we are perhaps dealing with different protagonists with similar but nevertheless distinguishable powers/spheres of authority (mastery of domesticated animal life, mastery of wildlife, mastery of supernatural beings), Aegean iconographic studies have raised serious doubts on the validity of identifying "distinct deities with individual theological profiles" based on their associations with specific animals or mythical creatures (Blakolmer 2016, 150–151, n. 406), 151]. On the other hand, it might be possible that we are faced with different manifestations/versions of the power of animal mastery and therefore the protagonist should be understood as one and the same Master, whose power over animals/supernatural beings might have been viewed as emblematic of the power of civilization over the wild and of enforcement/guardianship of cosmic order.[9]

Overall, the pictorial scheme of the 'Master of Animals' in combination with the formality of the 'chest gesture' serve to indicate the sacredness and/or importance of the anthropomorphic figures of this group, whose divine (deity) or semi-divine (hero, deified ruler) character can hardly be questioned (Blakolmer 2016, 147). However, we cannot help but wonder whether it might be possible to guess the character/identity of the male figures of this group of seals (deity or hero/deified ruler) based on the position of their attendants in the hierarchical order of creatures in Aegean iconography (Blakolmer 2016, 166, Diagram 19). If so, it is possible that a powerful – but originally human – being (hero/deified ruler) is represented in the guise of the 'Master of Hounds' on *CMS* II 8, no. 248 (Fig. 4) and *CMS* II 3, no. 193 (Fig. 5), since the dog appears to be one of the animals "most closely related to humans and less often to deities" (Blakolmer 2016, 159). Especially in the case of *CMS* II 8, no. 248 (Fig. 4), the high status of the Master is indicated not only by his impressive accessories (headdress, torque) but also the massive size of his hounds – undoubtedly his hunting companions.[10] On the other hand, there is noth-

8 Marinatos, 1993, 169; Blakolmer 2016, 147. However, Bloedow 1996, 1163–1164 ascribes a concept of violent subjugation of the animals by the Master, manifested in the 'unnatural' attendance pose performed by the animals in the Master of Lions compositions.

9 Kielt Costello 2010, 29 argues that the relevant compositional scheme of the Mesopotamian 'nude' hero mastering wild animals symbolizes civilization vs. the wild, while the figure of the hero should be viewed as "emblematic of human control of civilization".

10 Shapland 2009, 251 suggests that, in LBA Crete, ownership of certain dog breeds might have been indicative of elite/high status. However, Marinatos 1993, 169, fig. 159 identifies the male figure as "a youthful deity".

ing in the austere (personal) appearance of the male figure on *CMS* II 3, no. 193 (Fig. 5), who is depicted wearing only a belt and perhaps a loincloth, to indicate his important status, which is communicated solely by the formality of his overall pose in combination with his animal attendants.

Quite similar in austerity is the (personal) appearance of the male protagonist on *CMS* III, no. 361 (Fig. 6),[11] who is depicted wearing a double belt but is framed by a pair of lions. Placed on top of the animal hierarchy, the lion was viewed as the most powerful of animals with a dangerous but also exotic character and was featured as a prominent protector of deities and rulers alike (Shapland 2010, 120; Blakolmer 2016, 159). Even though, based on present evidence, it seems impossible to distinguish between a divine (deity) or semi-divine (hero/deified ruler) character for the male protagonist of *CMS* III, no. 361, it might be reasonable to suggest a higher ranking for the 'Master of Lions' in comparison to the 'Master of Hounds'.

On the other hand, there is little room to doubt the fully divine character of the Master on the Pyrgos Psilonero lentoid (Fig. 7; *CMS* V, no. 201), whose austere appearance with only a single belt around the waist is counter-measured by the supernatural character of his attendants (Minoan 'genius' and winged hybrid animal) and his placement on top of a pair of horns of consecration (Vlazaki 2005, 23). Horns of consecration are regarded as "symbolic reference to sacred space" (Marinatos 1993, 169, fig. 160), while the Minoan 'genius' occupies the most dominant position in the hierarchical order of animals and creatures represented in Aegean art and has been identified as "a kind of a minor deity" inferior only to anthropomorphic deities (Blakolmer 2016, 138).

Finally, it is rather difficult to ascertain whether the solitary figure of a 'bull-man' or 'minotaur' engraved on the seal reportedly from Moni Odigitrias (Fig. 8; *CMS* V Suppl. 3, no. 154) is a masked human (performer?) or a hybrid (demon) (Aruz 2008, 203, fig. 421; Anastasiadou 2018, 171, fig. 4a), while there is no (visual) indication to identify the solitary male figure on the seal from Mycenae (Fig. 9; *CMS* I, no. 69) as anything else but human.

The Aegean 'chest gesture' bears close similarities with the gesture of the nude Hero', a staple figure of Mesopotamian and Near Eastern glyptic production, which would have been introduced to the Aegean through imports such as the Old Babylonian haematite cylinder seal found at Giofyrakia, a suburb of modern-day Herakleion (Fig. 11; *CMS* II 2, no. 206). However, in eastern glyptic iconography the 'hero's' 'chest gesture' serves a purpose and is understood within

*Fig. 11: Drawing of modern impression of cylinder seal from Giofyrakia, Herakleion (*CMS* II 2, no. 206).*

---

11 However, one should keep in mind that *CMS* II 3, no. 193 and *CMS* V Suppl. 3, no. 154 are of LBA III A1–2 and LM II–III A1 stylistic date respectively and that, according to Krzyszkowska 2005, 201, 203–204, LBA II– III A Aegean glyptic is characterized by a sharp decrease in the rendering of anatomical or other features of human and animal figures.

the context of performing a very specific act, which is holding a vase with water streams running from it (Dubcová 2015, 224, 231, figs. 8, 24–25). Likewise, in Egyptian art, the 'chest gesture' is associated with representations of Osiris and the pharaoh, who are shown in the act of holding their scepters, the emblems of their royal power (Kekes 2021, 321, 324). In Aegean glyptic however, no such action is depicted:[12] the 'chest gesture' appears to be a "self-sufficient" gesture (Kekes 2021, 700), a basic component of the overall formal posture of the male protagonist, meant to communicate power and high status (Kekes 2021, 708).

This association of the 'chest gesture' with a display of power and high/elite status is highlighted in Crowley's work, who focuses on the physicality of the gesture and argues that the flexing of the muscles of the male protagonist results in the overall "effect of the powerful presence of the male Lord", which, in most cases, is "achieved without recourse to elaborate clothing or ornate insignia" (Crowley 2013, 140). However, this intense flexing of muscles is less obvious in the examples from Knossos (*CMS* II 8, no. 248; III, no. 361), Poros (*CMS* II 3, no. 93), and Moni Odigitrias (*CMS* V Suppl. 3, no. 154) (Figs. 4–6, 8), in which the 'chest gesture' is rendered with upper arms held vertically by the sides of the body, creating a rather closed form, which is even more exaggerated by the diagonal placement of the forearms of the figures. In fact, the key piece for Crowley's definition of the powerful 'chest gesture' with "both arms held up, elbows bent outwards, and hands towards or touching the chest" (Crowley 2013, 189, E 119), showcasing true flexing of muscles that results in a show of strength and upper body mass is the lentoid from the western Cretan site of Pyrgos Psilonero Kydonias (Fig. 7; *CMS* V, no. 201): the way that the arms of the male figure are depicted not only bent at the elbows but also raised and held away from the sides of the body follows in the visual tradition established by the powerful male 'Lord' of the LM I B 'Master Impression' (Figs. 12–13; *CMS* V Suppl. 1A, no. 142) discovered at Chania Kastelli, the major Bronze Age power center of western Crete. Closely related is the rendition of the solitary male figure on the agate amygdaloid seal from Mycenae (Fig. 9; *CMS* I, no. 68), the only seal of this group from the mainland: standing firmly on his muscular legs, the male protagonist flexes his arms and enhances the size of his upper body in the manner of modern-day bodybuilders. Like the Master on the Pyrgos Psilonero Kydonias seal (Fig. 7; *CMS* V, no. 201), the male protagonist on *CMS* I, no. 68 is depicted with his left arm raised and strongly bent at the elbow, while the end of his forearm is brought to the side/in front of his chest. Even though his left upper arm is not raised but held vertically and at a right angle with the forearm, the ample free space left between the arm and the torso still works towards creating a visual impression of upper body mass. In fact, an impressive analogy can be found in one of the classic bodybuilding poses, which is known as the "Lat Spread Pose" and which highlights the muscles extending from the lower back to the sides of the torso and ultimately accentuates the V-shape of the upper body of the athlete (Schwarzenegger 1998, 603–604).

Even though a similar demonstration of upper body strength can be discerned in the case of the male figures on the seals – and especially the lentoids – from Knossos and Poros (*CMS* II 3, no. 193; III, no. 361) and of the 'bull man'/'minotaur' on the Moni Odigitria (?) amygdaloid (*CMS* V Suppl. 3, no. 154) (Figs. 5, 6, and 8), this is achieved not through the positioning of the upper arms and forearms of the figures but mainly through the exaggeration in the rendering of the figures' voluminous chest and shoulders.

Based on the available evidence, one could argue for the existence of two distinct regional variations of the 'chest gesture' in Aegean glyptic, in respect to its association with male figures. In the central Cretan glyptic tradition, the prevalent type (variation) is the 'narrow' 'chest gesture' with upper arms along the sides of the body, elbows bent, forearms in an upwards diagonal position and hands to the chest. On the other hand, the type (variation) of the 'wide' 'chest gesture', with upper arms diagonally raised, elbows bent outwards and hands held in front of or brought to-

---

12 Except for *CMS* II 8, no. 248, where the male protagonist holds the ends of the leashes of his massive hounds.

Fig. 12: Drawing of sealing from Chania, Kastelli (CMS V Suppl. 1A, no. 142).

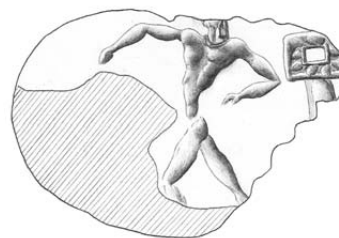*Fig. 13: Detail of male figure on sealing from Chania, Kastelli (CMS V Suppl. 1A, no. 142).*

Fig. 14: Drawing of sealing from Knossos (CMS II 8, no. 280).

wards the chest, is found only in western Crete and the Greek mainland.[13] We certainly cannot exclude the possibility that we might be faced with an accident of discovery, since the single flexing-arm gesture with upper arm raised and elbow bent outwards can be seen performed by male figures in scenes of combat sports executed in relief on a variety of LM I artifacts from central Crete, such as the Boxer Rhyton from Agia Triada (Di Stazio 2012, 121, 137, fig. 4) or the signet-ring that impressed one of the sealings from the Knossos Temple Repositories (Fig. 14; *CMS* II 8, no. 280), while the 'chest gesture' of the extraordinary LM I B ivory figurine of the Palaikastro Kouros is certainly of the 'wide' type (variation) (Hemingway 2012, 30, fig. 53). However, the careful study of three-dimensional works of glyptic and particularly of Minoan bronze figurines supports the idea of a central Cretan glyptic tradition of the 'narrow' type/variety of the 'chest gesture' argued for the seals' group. In fact, among the group of 12 figurines of the 'hands-to-chest' gesture, aside from the predominant variation with both forearms raised at almost shoulder-level and held horizontally in front of/at the height of the upper arms (7 examples), all remaining examples not only demonstrate the 'narrow' variety of the gesture with upper arms held vertically by the sides of the body and forearms either at a right angle or diagonally raised but also originate from the central Cretan peak sanctuary of Juktas (Sapouna-Sakellarakis 1995, pls. 1: 81; 2: 143; 32: 88), with only one figurine from Psychro in eastern Crete (Sapouna-Sakellarakis 1995, pl. 31: 15), which however at the time of the deposition of the figurine in question (LM III) was probably controlled by and under the influence of Knossos (Watrous 2004).

If the hypothesis regarding the regional variations of the 'chest gesture' in Aegean glyptic is correct and if we take under consideration the strong connection between the region of Chania in western Crete and the eastern Peloponnese (especially the Argolid), which reaches its peak in LBA II–III (Andreadaki-Vlazaki 2012, 519–520, 523–527), then the connection established between the two seals from Pyrgos Psilonero Kydonias (*CMS* V, no. 201) and Mycenae (*CMS* I, no. 68) (Figs. 7 and 9) does no longer appear purely accidental. This connection is further supported by the fact that the Pyrgos Psilonero Kydonias seal (*CMS* V, no. 201) is also made of lapis lacedaimonius, a semi-precious stone that was exclusively sourced from the Peloponnese.

Furthermore, the unique characteristics of these two seals support the idea of strong individual agency in their creation. The Pyrgos Psilonero Kydonias lentoid (Fig. 7) stands out not solely for being the only seal from Crete with the figure of the 'Master of Animals' in the 'wide'

---

13 *CMS* I, no. 68, the only stone seal of this group from the Greek Mainland, is executed more in the manner of the 'wide' variation of the "chest gesture".

variation of the 'chest gesture' but also for the unique asymmetrical pairing of his attendants (Blakolmer 2016, 148) and the extraordinary hybridity of the one to his right: a winged creature with the main body of a lion but the neck and head of an agrimi.[14] The amygdaloid seal from Mycenae (Fig. 9) is one of few Aegean seals embellished with gold caps (Papadimitriou 2015, 147; Krzyszkowska 2005, 13, 198). Even though the 'wide' 'chest gesture' of the male figure on *CMS* I, no. 68 probably establishes a connection with the western Cretan glyptic tradition of the 'Master of Animals', a certain degree of originality can be detected: the choice to take away from the composition the attendants of the Master and instead isolate his figure on the pictorial field succeeds in removing the supernatural aspect of his character, while placing the focus solely on the male protagonist and his portrayal – by means of the figure's pose – as a secular image of strength and raw physical power, perfectly accommodated by the seal's amygdaloid shape.[15]

Conclusions

On Aegean seals and signet-rings, the 'chest gesture' appears as early as LBA I but with greater frequency in LBA II–III A and mainly on sealing devices from/used at central and western Crete and is executed according to two different regional variations, the 'narrow' and 'wide' variation respectively. The anthropomorphic figures performing the 'chest gesture' are predominantly male, who are depicted in the all-familiar composition of the 'Master of Animals'. These extraordinary combinations of male figures and pairs of attendant animals (lions, dogs) or other creatures (Minoan 'genius' and winged hybrid) might be suggestive of the character/nature of the Master/Masters as divine (deity: *CMS* V, no. 201) or semi-divine (hero or deified ruler: *CMS* II 8, no. 248). A divine character is also suggested for the female figure on *CMS* VI, no. 314 who exerts her mastery over a pair of griffins, while executing the 'chest gesture'.

Only in the case of *CMS* I, no. 68 (Fig. 9), a unique seal from Mycenae, the figure of the male protagonist is depicted alone in the 'wide' variation of the 'chest gesture'. However, despite its possible link with the western Cretan glyptic tradition, this emblematic image of male strength is stripped of any supernatural references: its shockingly secular character could serve to advertise the power of its owner, whose elite status is reflected in the monumentality and impressive wealth of ivory and gold finds of the associated chamber tomb. Unfortunately, the heavy disturbance of chamber tomb 27 does not allow us to securely reconstruct the seal's funerary assemblage but only to note that ivory objects with martial associations were found in its close vicinity: three decorative attachments shaped as helmeted warrior heads;[16] five decorative attachments shaped like figure-of-eight shields; and a scabbard fitting or a sword hilt guard (Xenaki-Sakellariou 1985, cat. no. 2332; *cf.* Poursat 1977, 178, 182, 183, cat. nos. 129, 381, 438).

In the very few cases where the 'chest gesture' is associated with a female figure, another possible explanation for it can be suggested: its execution can be understood as part of a wider performance taking place during a highly important/'royal' ceremony (esp. Fig. 2; *CMS* II 6, no. 9). In general, it can be argued that the 'hands-to-chest' gesture, which appears as an arrested image on this group of seals, can be understood as "part of a set of ritual movements" that would have been

---

14 In Aegean iconography, the Master or Mistress of Animals is usually flanked by a symmetrical pair of attendants of the same species and type. *CMS* V, no. 201 is the only seal, based on the author's knowledge, where a unique winged hybrid and a Minoan Genius are combined (both supernatural beings but surely of different types). Perhaps the closest parallel to the winged hybrid creature on the Pyrgos Psilonero lentoid is the creature on *CMS* V Suppl. 1B, no. 315, identified by Blakolmer 2016, 144, n. 349 as "a winged lion with agrimi head". In fact, the heads of two horned animals (perhaps of a bovine and of an agrimi) can be seen above the winged lion but it is impossible to judge if the engraver's intention was to depict a three-headed

creature or to indicate the winged lion's victims by adding their heads into the composition.

15 However, it is impossible to discern which might have taken precedence in the patron's and/or engraver's decision-making and whether the choice of subject matter determined the shape of the seal or the shape 'inspired'/necessitated the changes to the standard Master of Animals composition thus resulting in the engraving of an unattended solitary male figure.

16 Even though the ivory helmeted warrior heads have been identified as decorative attachments of a piece of furniture, it is tempting to associate them instead with a jewelry box (pyxis) that would have contained the seal in question.

performed in the company of music and/or chanting/singing and perhaps used to emphasize spoken words (Morris 2001, 247). However, it seems that after LM I/LBA I, the 'chest gesture' appears to be almost exclusively associated with representations of powerful (predominantly) male and female figures and is associated with their mastery of animals and/or fantastic creatures.

The elite associations of the 'chest gesture' are affirmed by the highly exclusive sealing devices which carried the relevant compositions, *i.e.* the metal signet-rings used to impress the sealings found in two of the most important LBA Cretan sites, the palace of Knossos and the villa at Agia Triada (Figs. 2 and 4; *CMS* II 6, no. 9; II 8, no. 248) and the extraordinary contextual associations of *CMS* I, no. 68 (Fig. 9), the only seal of this group from the Mainland and especially Mycenae, one of the most important LBA power centers. Unfortunately, the majority of seals engraved with the 'chest gesture' (Figs. 3, 5–8; *CMS* II 3, no. 193; III, no. 361; V, no. 201; V Suppl. 3, no. 154; VI, no. 314) are products of illicit excavations and the details of their contextual associations are forever lost. However, their systematic and careful study should not be dismissed in the hopes that future finds will help us restore them in their rightful place in the history of Aegean glyptic.

Acknowledgements

References

Anastasiadou, M. 2018. "The origin of the different: 'gorgos' and 'minotaurs' of the Aegean Bronze Age." In *Making monsters,* edited by E. Bridges and D. al-Ayad, 165–175. Futurefire.net Publishing.

Andreadaki-Vlazaki, M. 2012. "Khania (Kydonia)." In *The Oxford Handbook of the Bronze Age Aegean,* edited by E. H. Cline, 519–525. Oxford: Oxford University Press.

Aruz, J. 2008. *Marks of distinction: seals and cultural exchange between the Aegean and the Orient (ca. 2600–1360 B.C.). CMS* Beiheft 7. Mainz: Verlag Philipp von Zabern.

Blakolmer, F. 2016. "Il buono, il brutto, il cattivo? Character, symbolism, and hierarchy of animals and supernatural creatures in Minoan and Mycenaean iconography." *Creta Antica* 17: 97–183.

Blakolmer, F. 2018. "A 'special procession' in Minoan seal images: observations on ritual dress in Minoan Crete." In *EYΔAIMΩN. Studies in honour of Jan Bouzek,* edited by P. Pavúk, V. Klontza-Jaklová, and A. Harding, 29–50. *Opera Facultatis philosophicae Universitatis Carolinae Pragensis* vol. XVIII. Prague: Charles University, Faculty of Arts and Masaryk University.

Bloedow, E. 1996. "The lion of the Lion Gate at Mycenae." In *Atti e memorie del secondo congresso internazionale di Miconologia, Roma – Napoli, 14–20 Ottobre 1991,* edited by E. De Miro, L. Godart, and A. Sacconi, 1159–1166. Rome: Gruppo Editoriale Internazionale.

Cavanagh, W. 1987. "Cluster analysis of Mycenaean chamber tombs." In *Thanatos. Les coutumes funéraires en Égée à l'âge du Bronze. Actes du Collogue de Liège (21–23 Avril 1986),* edited by R. Laffineur, 161–170. *Aegaeum* 1. Liège: Université de Liège.

Clough, S., and M. C. Duff. 2020. "The role of gesture in communication and cognition: implications for understanding and treating neurogenic communication disorders." *Frontiers in Human Neuroscience* 14: 323.

Collon, D. 2005. *First impressions. Cylinder seals in the Ancient Near East.* London: The British Museum Press.

Crowley, J. L. 2013. *The iconography of Aegean seals. Aegaeum* 34. Leuven and Liège: Peeters.

Dimopoulou-Rethemiotaki, N. 2004. "Το Επίνειο της Κνωσού στον Πόρο-Κατσαμπά". In *Knossos: palace, city, state. Proceedings of the conference in Herakleion organized by the British School at Athens and the 23rd Ephoreia of Prehistoric and Classical Antiquities of Herakleion, in November 2000, for the centenary of Sir Arthur Evans' excavations at Knossos. BSA* Suppl. 12: 363–380. London: British School at Athens.

Di Stazio, G. 2012. "Pygmè et pankration. Sur le port du gant dans l'Antiquité gréco-romaine." *Journal of Ancient History* 3: 119–144.

Dubcová, V. 2015. "The Near Eastern "hero" and "bull-man" and their impact in Aegean Bronze Age iconography." In *There and back again – the Crossroads II. Proceedings of an international conference held in Prague, September 15– 18, 2004,* edited by J. Mynářová, P. Onderka, and P. Pavúk, 221–243. Prague: Charles University in Prague.

German, S. 2005. *Performance, power and the art of the Aegean Bronze Age.* BAR-IS 1347. Oxford: Archaeopress.

Hemingway, S. 2012. "Art of the Aegean Bronze Age." *The Metropolitan Museum of Art Bulletin* 69: 5–48.

Kekes, C. 2021. *ΟΜΙΛΟΥΝΤΑ ΣΩΜΑΤΑ. Μια προσέγγιση των αιγυπτιακών τελετουργικών χειρονομιών της Εποχής του Χαλκού,* Ph.D. Diss. Πανεπιστήμιο Αιγαίου, Rhodes.

Kielt Costello, S. 2010. "The Mesopotamian "nude hero": context and interpretations." In *The Master of Animals in Old World Iconography,* edited by D. B. Counts and B. Arnold, 25–35. Budapest: Archaeolingua Foundation.

Krzyszkowska, O. 1991. "The Enkomi Warrior Head reconsidered." *BSA* 86: 107–120.

Krzyszkowska. O. 2005. *Aegean seals. An introduction. BICS Suppl.* 85. London: Institute of Classical Studies.

Laffineur, R. 1990. "The iconography of Mycenaean seals and the status of their owners." *Aegaeum* 6: 117–160.

Marinatos, N. 1993. *Minoan religion: ritual, image, and symbol.* Columbia, South Carolina: University of South Carolina Press.

Morris, C. 2001. "The language of gesture in Minoan religion." In *Potnia: deities and religion in the Aegean Bronze Age, proceedings of the 8th International Conference Göteborg, Göteborg University, 12–15 April 2000,* edited by R. Laffineur and R. Hägg, 245–251. *Aegaeum* 22. Liège: Université de Liège.

Nakassis, D. 2015. "Labor and individuals in Late Bronze Age Pylos." In *Labor in the Ancient World,* edited by P. Steinkeller and M. Hudson, 583–615. *The International Scholars Conference on Ancient Near Eastern Economies* 5. Dresden: Islet.

Papadimitriou, A. 2015. *Mycenae.* Athens: John S. Latsis Public Benefit Foundation.

Peatfield, A. A.D., and C. Morris. 2012. "Dynamic spirituality on Minoan peak sanctuaries." In *The Archaeology of Spiritualities,* edited by K. Rountree, C. Morris, and A. Peatfield, 227–245. New York: Springer.

Pittman, H., with J. Aruz. 1987. *Ancient art in miniature: Ancient Near Eastern seals from the collection of Martin and Sarah Cherkasky.* New York: The Metropolitan Museum of Art.

Poursat, J.-C. 1977. *Catalogue des ivoires mycéniens du musée national d'Athènes.* Athens: École Française d'Athènes.

Rethemiotakis, G. 2001. *Minoan clay figures and figurines: from the Neopalatial to the Subminoan period.* Athens: The Archaeological Society at Athens.

Salomoni, S., W. van den Hoorn, and P. Hodges. 2016. "Breathing and singing: objective characterization of breathing patterns in classical singers." *PLoS ONE* 11(5). e0155084. https://doi.org/10.1371/journal.pone.0155084.

Sapouna-Sakellaraki, E. 1994. "Μινωική τέχνη." In *Ελληνική τέχνη. Η αυγή της ελληνικής τέχνης,* edited by G. Sakellarakis, C. G. Doumas, and E. Sapouna-Sakellaraki, 131–217. Athens: Εκδοτική Αθηνών.

Sapouna-Sakellarakis, E., 1995. *Die bronzenen Menschenfiguren auf Kreta und in der Ägais, Prähistorische Bronzefunde* 1, 5. Stuttgart: Franz Steiner Verlag.

Sbonias, K. 2010. "Seals from the cemetery." In *Moni Odigitria. A Prepalatial cemetery and its environs in the Asterousia, Southern Crete,* edited by A. Vasilakis and K. Branigan. *Prehistory Monographs* 30. Philadelphia, Pennsylvania: INSTAP Academic Press.

Schwarzenegger, A. 1998. *The New Encyclopedia of Modern Bodybuilding.* New York: Simon & Schuster.

Shapland, A. 2009. *Over the horizon: human-animal relations in Bronze Age Crete.* Ph.D. diss., UCL Institute of Archaeology.

Shapland, A. 2010. "Wild nature? Human-animal relations on Neopalatial Crete." *CAJ* 20:1: 109–127.

Stamatatou, E. 2004. *Gemstones in Mycenaean Greece: their use and significance.* BAR-IS 1230. Oxford: Archaeopress.

Vlazaki, M. 2005. "Cultes et divinités dans la ville minoenne de la Canée. Quelques réflexions." In *ΚΡΗΣ ΤΕΧΝΙΤΗΣ. L'artisan Crétois. Recueil d'articles en l'honneur de Jean-Claude Poursat, publié à l'occasion des 40 ans de la découverte du Quartier Mu,* edited by I. Bradfer-Burdet, B. Detournay, and R. Laffineur, 17–28. *Aegaeum* 26. Liège: Université de Liège.

Watrous, V. L. 2004. "New pottery from the Psychro Cave and its implications for Minoan Crete." *BSA* 99: 129–147.

Weingarten, J. 2009. "The Zakro Master and questions of gender." In *Fylo. Engendering prehistoric 'stratigraphies' in the Aegean and the Mediterranean,* edited by K. Kopaka, 139–146. *Aegaeum* 30. Liège: Université de Liège.

Xenaki-Sakellariou, A. 1985. *Οι θαλαμωτοί τάφοι των Μυκηνών ανασκαφής Χρ. Τσούντα 1887–1898.* Paris: de Boccard.

Zografaki, V. 2008. "117. Male figurine." In *From the Land of the Labyrinth. Minoan Crete, 3000–1100 B.C. – Catalogue,* edited by M. Andreadaki-Vlazaki, G. Rethemiotakis, and N. Dimopoulou-Rethemiotaki, 222. New York: Alexander S. Onassis Public Benefit Foundation USA & Hellenic Ministry of Culture.

The Gesture of the Male Bronze Figurine from Katsambas

Alexia Spiliotopoulou

In memory of Aikaterini Mylopotamitaki and Maria Nikoloudi
Archaeologists dedicated to the protection of the Cretan antiquities
Beautiful souls departed.

Abstract   *This paper investigates the gesture, unique in Minoan iconography, of the male bronze figurine from Katsambas (no. X 1829, currently displayed in the Archaeological Museum of Heraklion). This particular figurine was published by Iossif Chatzidakis and over the years it has attracted the attention of several scholars, such as Arthur Evans, Colette Verlinden, Efi Sapouna-Sakellaraki, and Olivier Pelon, all underlining its importance. This exquisite specimen of Minoan craftsmanship was found by chance at Katsambas near Poros, stripped of context and therefore of valuable data such as chronology, type of context associated, and likely use. However, the figurine bears features – some unique, such as the tall cap and its eloquent gesture – surely comprehendible on sight by any Minoan, but now a subject of discussion. The new reading of the gesture here proposed, is based on insights gained by the study of the anthropomorphic figurines from the peak sanctuary of Kophinas on the Asterousia mountain range and a hands-on examination of the figurine at the Heraklion Museum. The paper concentrates on common features between the figurines from Kophinas and the figurine from Katsambas as a means to define the identity of the male and possibly to unveil the nature of the message its gesture conveys.*

This paper explores the meaning of the gesture of the male bronze figurine (X 1829 in the Heraklion Archaeological Museum) found at Katsambas, near Heraklion, in 1914. It represents a male standing figure with boots, a loincloth, a tall hat and an enigmatic gesture. The figurine was initially published by Iossif Chatzidakis (1916); it was later included in the second volume of *The Palace of Minos* (Evans 1930, 234–235, fig. 132) and in the studies of bronze anthropomorphic figurines by Colette Verlinden (1984, no. 93) and Efi Sapouna-Sakellaraki (1995, no. 97). A more in-depth study was published by Olivier Pelon (1987).

The gesture of the figurine under examination is unique so far. Apart from the obvious impediment this fact creates for our study, there is a series of other handicaps that make the planning of a methodological framework challenging. Its provenance is that of a general area (Katsambas), but no information is clear about its find spot. No excavation was carried out after the figurine was brought to the Ephorate's attention, therefore there is essentially no context. The figurine is undoubtedly a masterpiece of its era. Fortunately, scholars agree on its authenticity (Verlinden 1984, 199; Sapouna-Sakellaraki 1995, 2).

Michael Wedde defines gesture as "a movement performed by one or two hands/arms, while holding the body in one or more specific postures, invested with a meaning that can either be commonly understood by all, or part of codified behavior of a smaller group within a society" (Wedde 1999, 912). If the gesture is indeed invested with a meaning that was understood by all within Minoan society, and if this gesture is unique to us, and thus not easily discernible, then might there be some other element that is able to reveal the original meaning? Consequently, what is left for us to analyze? The present approach focuses on the 'λαλούντα σύμβολα', the talking symbols, the components of the figurine itself: namely the body, the stance, the garments and the accessories.

New iconographic evidence from a sanctuary in Crete provided the opportunity for a reconsideration. A close examination of the figurine yielded some observations that could be tested against the iconographic background of the clay anthropomorphic figurines of the peak sanctuary of Kophinas (which is located on the mountain range of Asterousia). The clay figurines, as well as all the pottery of the sanctuary, were trusted to the author by the excavators Alexandra Karetsou and Giorgos Rethemiotakis and by Eleftherios Platon. The majority of the material was examined: more than 3,000 fragments of figurines. Ironically, because of the excessive fragmentation of the material, be it intentional or accidental, gesture is one element of human representation rarely preserved at the sanctuary.

The Find Place, the Owner, and the Golden Wire

The male bronze figurine from Katsambas was a chance find. It was handed to Chatzidakis by agricultural workers employed by Nikolaos Frantzeskakis on his plot in the area of Katsambas, 1 km east of Heraklion. Chatzidakis published the figurine in 1916 along with his observations: the figurine is not finished, its legs are disproportionately long compared to the rest of his body, the hat has no parallel, and the pose is unusual. The enigmatic gesture must have weighed on his mind for some time, because he eventually wrote – almost in defeat – that "nobody can decipher its meaning" (Chatzidakis 1916, 168).

Some years later Evans included the figurine in the second volume of the *Palace of Minos,* in the chapter about the harbor town of Knossos (Fig. 1). Evans (1930, 235) added that it was found "on the SW flank of the hill that rises immediately above the right bank of this little stream, in an irregular rock vault". It is still not clear how Evans came across this piece of information that is not mentioned in our primary source of knowledge, Chatzidakis' article. Sapouna-Sakellaraki (1995, 56) mentions that it was found in a tholos tomb, even though she thinks that a grave is an unusual place to come across a bronze figurine. However, nothing of the sort is mentioned in the primary source.

An attempt was made towards a reevaluation of the topography of Poros-Katsambas by Nota Dimopoulou, in a large area between the hill of Trypiti and the small promontory of Mandraki 1.5 kms east of Heraklion. Her excavations, as we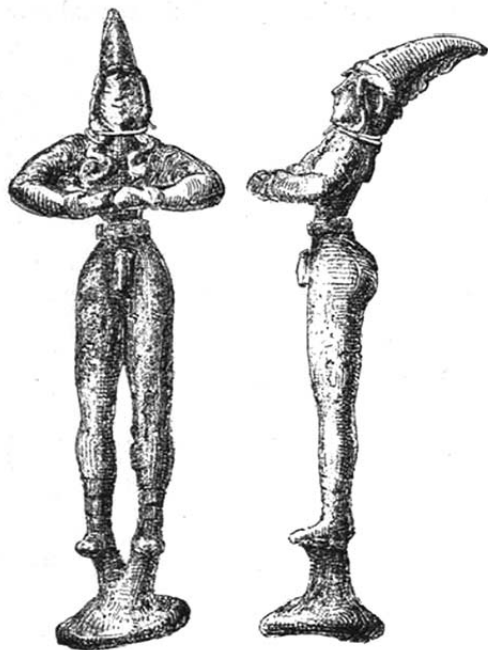ll as older ones and chance finds from the area, revealed parts of a Minoan settlement, the area of the cemeteries, the seaport facilities and the workshops. Dimopoulou excavated areas where metallurgical activities took place, such as the plots Sanoudakis, Skantzourakis, Charonitakis and Psychogioudakis (Dimopoulou 1997), as is attested by the abundance of crucibles, slags, tuyeres, ingots, molds, and obsidian unearthed there.

Fig. 1: The drawing of the figure from Katsambas (after Chatzidakis 1916, 168, fig. 3, and Evans 1930, 234, fig. 132).

The figurine is not finished: it still has flashings from the mold as well as traces of tools from its partial removal. This means that the product was not yet ready for consumption and was probably closer to the artisan who produced it than to the client who commissioned it. It was arguably never exposed to a wider audience. The truth is that we do not know exactly where the figurine was found, but in all probability, it was not in a burial context, given that clear evidence exists for active metal-smithing workshops operating in the area since EM I (Dimopoulou-Rethemiotaki 2004, 375).

The figurine is depicted in Chatzidakis' article with a wire around its neck, which has now been removed (Fig. 1). Golden accents on metal figurines drawing attention to the face, hands or garments were quite popular in Anatolian art (Aruz et al. 2008, 21, 46, 53 and more). Minoan craftspeople used the same approach on ivory figurines, as is attested by the Palaikastro Kouros, whose loincloth, shoes and bracelets were made of gold (Moak 2000, 74–75), by the remains of an ivory workshop in Knossos Royal Road (Evely 1993, 228), by the ivory deposit from the Temple Treasury (Evans 1932, 428), and possibly by the 'chryselephantine ivory group' from Archanes (Sakellarakis and Sapouna-Sakellaraki 1997, 719). However, to our knowledge, golden accents were not used on Minoan bronze figurines. The addition of the wire is not a standard practice and it is not consistent with the fact that the figurine is unfinished. One could also make the logical observation that if the craftsperson wanted the figurine to wear a necklace they would have rendered one on the wax prototype, and certainly not in a way where the hair is obscured by its presence.

It was by mere coincidence that some enlightening information about the owner of the plot where the figurine was found presented itself: Kleanthis Sidiropoulos and Manolis Drakakis (2017), along with Eleftheria Christinidou (2016), have undertaken the arduous task of compiling a database of all the citizens of Heraklion between 1863 and 1913 from archival material such as tax records and census and from documents from the Demogerontia Archive and the Municipal Archive of Heraklion. Sidiropoulos was able to trace Nikolaos Frantzeskakis in the data collected and informed the author that he was a jeweller by profession, as was his brother Dimitrios. This possibly explains why the figurine was handed to Chatzidakis with a golden wire around its neck. This supposition of course is not hard evidence, but it does raise concerns over the find spot and of course the golden wire. Maybe that was the reason that at some point the wire was silently removed.

The Boots, the Headgear, the Loincloth, and the 'Bracelets'

The figurine wears high ankle boots as can be understood by the three parallel incisions around each of its ankles and lower part of the calf. Traces of the use of a sharp tool can be detected, possibly the lines were added after the removal of the piece from its mold (Fig. 2). Similar boots are worn by men as shown in a variety of iconographic media, *e.g.* on the ring *CMS* I, no. 19 from Vapheio, on the sealing *CMS* II 6, no. 15 from Agia Triada, on the ring *CMS* XI, no. 29, currently in Berlin, on the figure of the Pylos Combat Agate seal-stone, on the Boxers Rhyton, and on metallic vases with relief decoration such as the Vapheio cups. A different artistic angle of the
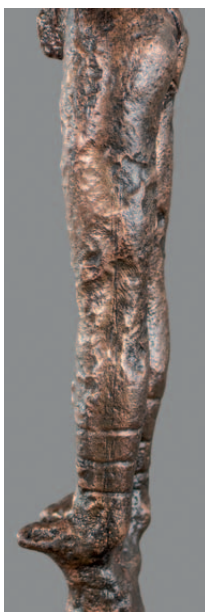

Fig. 3: The figurine from Katsambas, detail of the hat, incisions on left side (photo by Y. Ploumidis-Papadakis).
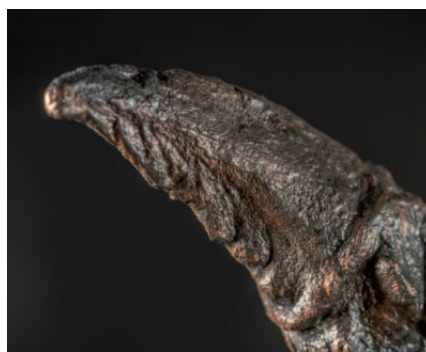

Fig. 4: The figurine from Katsambas, detail of the hat, incisions on right side (photo by Y. Ploumidis-Papadakis).

Fig. 2: Vertical traces of the sharp tooling along the side of the left leg (photo by Y. Ploumidis-Papadakis).

Fig. 5: CMS *II 8, no. 237, Knossos (courtesy of the* CMS *Heidelberg).*

Fig. 6: CMS *II 8, no. 236, Knossos (courtesy of the* CMS *Heidelberg).*

Fig. 7: CMS *II 6, no. 36, Agia Triada (courtesy of the* CMS *Heidelberg).*

Fig. 8: The "Sacred Conversation" ring from Poros (after Dimopoulou-Rethemiotakis 2000, 43 Fig. 4c)
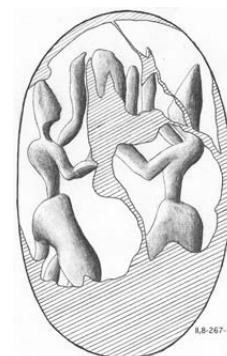
Fig. 9: CMS *II 8, no. 267, unknown find place (courtesy of the* CMS *Heidelberg).*

Minoan boot is provided by the Egyptian fresco at the tomb of Rekhmire at Thebes (Betancourt 2001, 91). The peak sanctuary of Kophinas has also produced one fragment of a clay foot wearing what seems to be a boot, rendered with added strips of clay (Spiliotopoulou 2018, Vol. A, 142; Vol. B, 111–112, pl. 59, 111). Based then on the iconography, boots are worn by people engaged in all sorts of activities, athletic, hunting, fighting, worshipping, etc.

The tall hat (or tiara as termed by some) consists of three parts: a rounded brim, a pointed peak curving backwards in an arc, resembling an elongated shark fin, and the foliage or plumage along the spine of the hat (consisting of a series of overlapping sections, each one dangling from the spine). There are some cross-hatched incisions on each side of the plumage: made either while cleaning the figurine after the cast or earlier while preparing the wax surface (Figs. 3–4).

Pelon (1987, 433) compared the tall headgear of the figurine to the hat worn by men in two sealings from the Temple Repositories of Knossos, *CMS* II 8, no. 237 (Fig. 5) and no. 236 (Fig. 6) and one from Agia Triada, *CMS* II 6, no. 36 (Fig. 7). They all wear a pointed hat, they hold weapons and are accompanied by an animal. The hat worn in *CMS* II 8, no. 237 does bear a respectable resemblance to the hat under discussion in that it is the sole example of a conical hat with a decoration. The hat worn by the central male figure (Fig. 8) in the 'sacred conversation' ring of Poros (Dimopoulou and Rethemiotakis 2000) may very well be another instance. That the Knossos sealing and the Poros hat form a stylistic group can thus be argued for. However, I believe that there are differences between the said group and the Katsambas hat, based on

the size ratio of the hat to the head, its shape and the nature of the dangling plumage. The Poros and Knossos hats are proportionately smaller compared to the head, rather more conical, and the decorative elements, made from a soft material that floats in the air, spring from its very tip. They do not hang down from the spine as in the Katsambas hat. The Poros hat's decoration seems to be bulkier where attached to the hat, and diminishes thereafter, whereas the Katsambas hat has decorative elements that progressively grow smaller towards the pointed end.

Aegean iconography provides a variety of individuals that wear conical hats: *e.g.* the sealing *CMS* II 8, no. 267 (Fig. 9) with two men in a heraldic rendering, the group of two women from the golden ring from Pylos (Davis and Stocker 2016), and the hats of the female figures of *CMS* II 3, no. 236, the warrior from *CMS* I, no. 294 or the conical hat of the bronze figurine from the Metaxas collection that possibly represents a priest (Sapouna-Sakellarakis 1995, 67, no. 114). All of the above have been rejected as comparable material for the Katsambas hat in this study because of stylistic and contextual differences.

The closest parallel for the hat then is one that Rethemiotakis located at the British Museum and identified as coming from the peak sanctuary of Kophinas (Rethemiotakis 2001, fig. 138),[1] rightly so. The figurine here has the same sort of hat with a strip of what seems to be a foliate or plumed band. The clay figurine preserves a hand with a boxing glove resting on its chest. The original gesture was the typical hands-on-chest as can be extrapolated from the broken surface on the right part of the chest. This could then have provided an impressive iconographic parallel by which to identify the Katsambas figurine as a boxer. But a serious flaw exists: the piece is actually two different figurines, glued together. The head is made of a reddish-brown clay, while the clay of the torso has a more orange hue, both being separate types of clay known from the sanctuary of Kophinas. This is a practice performed by looters, as a means to make a figurine larger and with more features, for the obvious reason of gaining a better price. Moreover, the head is obviously smaller than the torso and the angle of the head as joined is distorted, forcing it to tilt forward and not to have its chin raised in the proud stance that most figurines adopt.

Kophinas has ten more head fragments that wear this type of hat, out of a total of 349 head fragments studied. None of these though is directly connected to other boxing paraphernalia, though of course they are all part of a material group with a strong narrative about boxing games.

Colette Verlinden (1984, 125) believes that the tall pointed hat was reserved for divinities and people of rank and royalty. Likewise, Sapouna-Sakellaraki (1995, 56) concludes the tiara is to be understood as the insignium of an office. Pelon (1987, 434) searched Anatolia and the Hittites for a prototype, since conical hats of various forms are worn by Hittite kings, queens, gods, goddesses, priests and heroes at that time and no similar hat had been found or at least published in the iconographic imagery of Minoan or even Aegean art and culture. However, apart from the palpable reason that similar hats have now been detected in Crete and presented in the archaeological literature, there is another cause to avoid comparison with Anatolian art and culture. Basically, it is an unnecessary methodological leap, and one that could introduce dubious distractions.

Pointed hats have been used in multiple cultural contexts worldwide and they are not always associated with gods and kings or even nobles. Sometimes the pointed hat is linked to rites of passage as is the case with the tantoor, a hat that is given as a gift to a Levantine bride. In many other instances conical hats are an indication of provenance or cultural group, as is the case of the Jewish hat or that of the Welsh. In Spain penitents used to wear a capirote with a two-fold purpose: first to draw the attention away from the individual to God and later on for the greater ritual and public humiliation of the penitents. In the United States, the Ku Klux Klan wore the same capirote hats, but for different reasons. And of course, a pointed hat is not always worn with pride, especially if it is a dunce's hat used to discipline a student.

---

1 https://www.britishmuseum.org/collection/object/G_1970-1107-1.
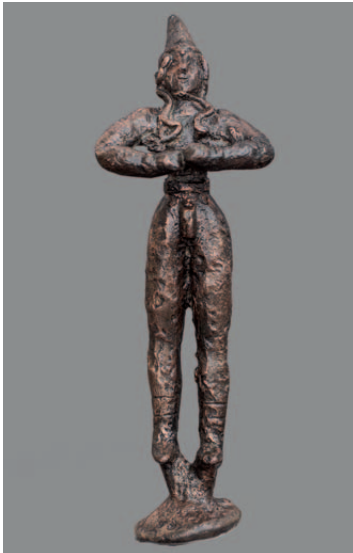
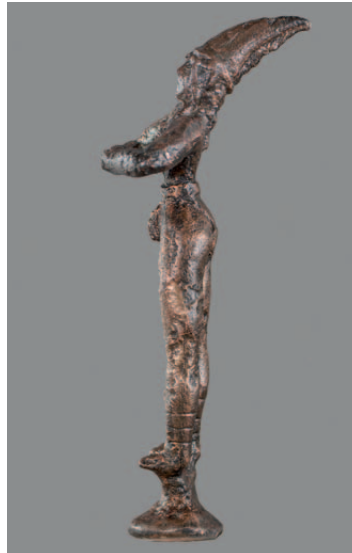*Fig. 10. The figurine from Katsambas, front (photo by Y. Ploumidis-Papadakis).*

Fig. 11: The figurine from Katsambas, side (photo by Y. Ploumidis-Papadakis).

Fig. 12: The figurine from Katsambas, back (photo by Y. Ploumidis-Papadakis).

The Hittite iconography is – we must admit – full of figures with conical hats, most of them with relief decoration, horns and other insignia attached, which were undoubtedly instantly recognizable to a viewer from the same cultural context (for reference see Bryce 2002, 160; Aruz et al. 2008, 174–175, 179–181). Deities with tall conical hats rendered in relief can be seen in Hittite monuments *e.g.* Yazılıkaya, Fasıllar, Fıraktın and of course Boğazköy, to name a few. However, none of the hats share the same shape with plumage and certainly none are accompanied by the same garments, posture and gesture. Reshef, the smiting god, has a very distinct set of attributes. Compared to the Katsambas figurine, Reshef's hat displays more differences than similarities, with the additional discrepancy that his pose, clothes and gesture are not at all relatable.

The body garment of our figurine is a belt that holds an emphasized loincloth/codpiece and a triangular cloth hanging down at the back between the buttocks, leaving them half-covered (Figs. 10–12). According to Sapouna-Sakellaraki (1971, 98) it belongs to her type Γ′ that is worn by men, among them pugilists.
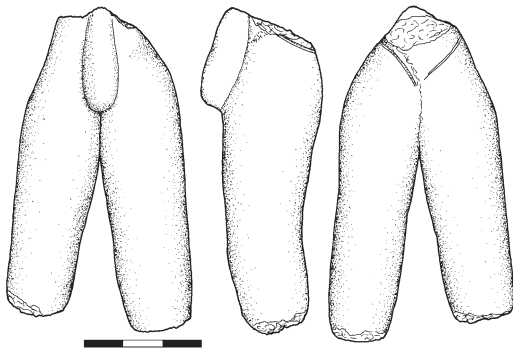

Fig. 13: Clay figurine fragment, peak sanctuary of Kophinas (drawing by the author, after Spiliotopoulou 2018).
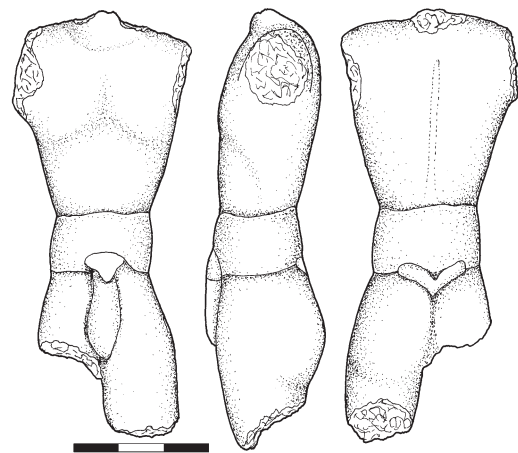
Fig. 14: Clay figurine fragment, peak sanctuary of Kophinas (drawing by the author, after Spiliotopoulou 2018).
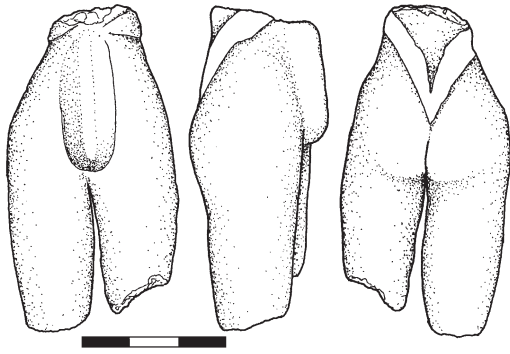
Fig. 15: Clay figurine fragment, peak sanctuary of Kophinas (drawing by the author, after Spiliotopoulou 2018).
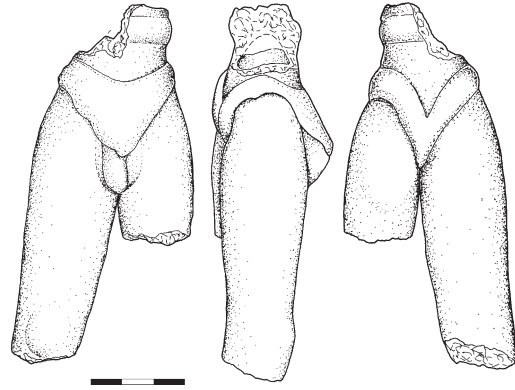

Fig. 16: Clay figurine fragment, peak sanctuary of Kophinas (drawing by the author, after Spiliotopoulou 2018).

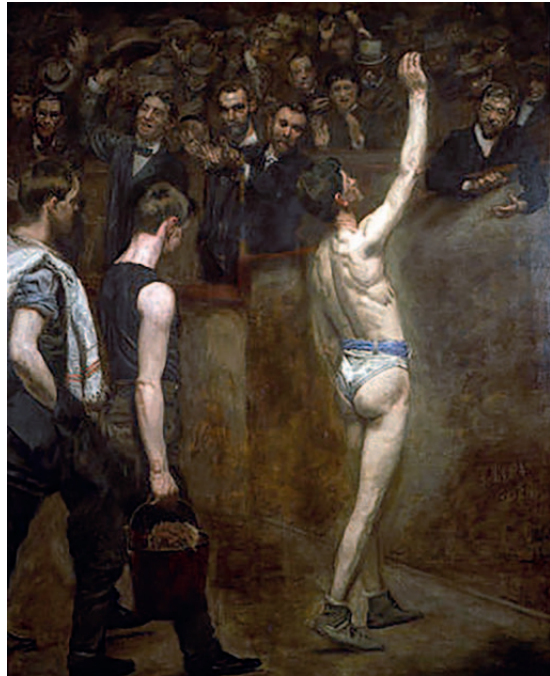Fig. 17: Fragment of a stone vase, Knossos (after Koehl 2006, 647, fig. 768).

Fig. 18: "Salutat", Thomas Eakins, 1898 (https://addison.andover.edu/search-the-collection/?embark_query=/objects-1/info?query=mfs%20all%20%22salutat%22&sort=0&objectName=Salutat).
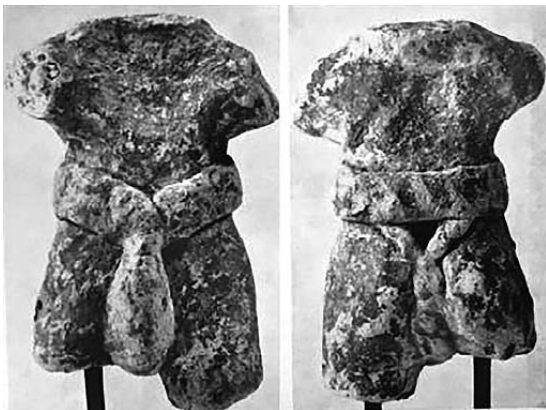

Fig. 19: Clay figurine fragment, Tylissos (after Sapouna-Sakellaraki 1971, 15, middle and right).

Fig. 20. Clay figurine fragment, Vrysinas (after Sfakianakis 2013, fig. 11a).
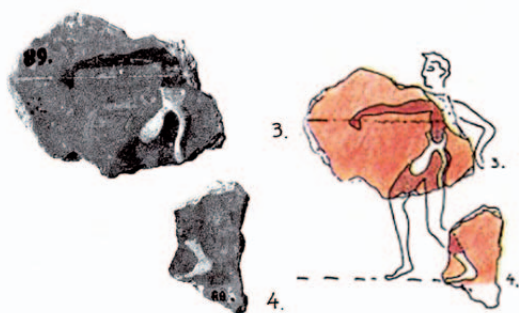
Fig. 21: Fresco from Tylissos (after Shaw 1972, 174, fig. 3; 184, fig. 13).

Quite a few of the lower body fragments from Kophinas wear a similar garment, which is attributed as the typical attire of the boxers. There are two fragments that depict a triangular cloth on the buttocks (Figs. 13–16). The loincloth is emphasized, sometimes even angular in its projecting form (Figs. 13 and 15). This probably is due to the presence of a kind of a protective codpiece. The fragment from Kophinas in Figure 16 is a rendering in the round of the garment worn by the pugilist on the fragment from the stone vase from Knossos (Fig. 17).

The rounded edges of the cloth seen around the gluteal area could have been formed by tucking in the fabric to leave the buttocks uncovered and so allow maximum freedom of movement. The interpretation was inspired by Thomas Eakins' painting "Salutat", showing a boxer with his shorts pulled upwards in a v-form in the gluteal area (Fig. 18).

There are yet more and varied examples in Minoan art of this type of garment that share the above characteristics. The clay figurines from Tylissos (Fig. 19) and Vrysinas (Fig. 20) have a strongly emphasised loincloth, as does the figure in the fresco from Tylissos (Fig. 21) which has been identified as a boxer (Shaw 1972). It is worth pointing out that the special garment drawn in profile in the miniature fresco from Tylissos also leaves the buttocks uncovered.

Every scholar that has described the arms and hands of the Katsambas figurine mentions that it is wearing bracelets. It is even shown in this way on the first drawing that was published by Chatzidakis and later by Evans, because they so interpreted it. But upon a closer inspection, the feature involved is not applied all around the wrist. Usually, when the craftsperson wants to render bracelets they do so by placing them at and encircling the entire circumference of the wrist, like in the bronze figurine from Tylissos (Fig. 22).

The feature for Katsambas, however, is shown only on the upper part of the wrist and vanishes on its sides (Figs. 23 and 24). This small detail is the most crucial element the figurine of Katsambas has that could shed some light on his identity. For the same feature occurs on several fragments of hands in the material of Kophinas that have been classified as wearing boxing gloves.

Two ways to cover the three-dimensional hand of a boxer in the material of Kophinas can be detailed. One is by using strips wrapped around the hand and rendered with incised lines and the other is by shaping the whole hand as a hemisphere, sometimes with a small flap at the fingers and with an added feature on the upper part of the wrist (Fig. 25).

One could argue that the present positioning of the hands was not that originally intended for the wax model, where the gesture was actually the well-known 'hands-on-the-chest', but it became altered by accident during the casting procedure. That would explain the bracelets not being rendered as whole encircling bands. This theory was indeed suggested by Verlinden (1984, 124, n. 207) and it should be addressed here. There is no distortion on the figurine's chest as a result of any detachment of the hands and there are also no signs of distortion or malformation on the figurine's arms. The movement required by Verlinden's proposal would also mean that the upper side of the hands would have moved on the same axis and not become twisted, so as to face away from the chest and not upwards. All in all, I believe that this argument cannot be made to work, and so is invalid. The gesture we see now is the one initially intended.
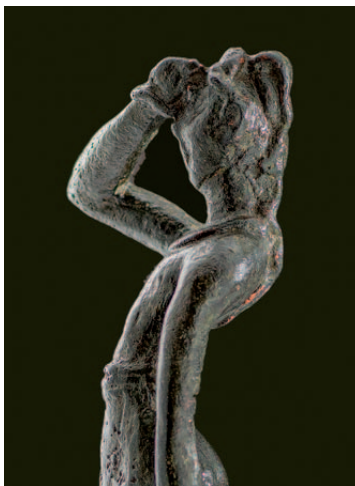
Fig. 22: Bronze figurine from Ty-
lissos (photo by Y. Ploumidis-Papa-
dakis).

Fig. 23: The figurine from Kat-
sambas, detail (photo by Y. Plou-
midis-Papadakis).

Fig. 24: The figurine from Kat-
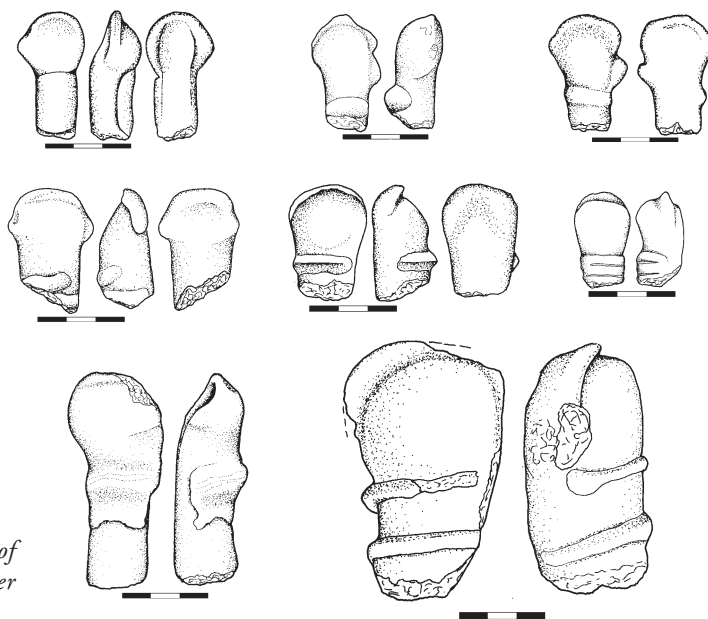sambas, detail (photo by Y. Plou-
midis-Papadakis).

Fig. 25: Boxing gloves, peak sanctuary of
Kophinas (drawings by the author, after
Spiliotopoulou 2018).

The Gesture

The gesture of the Katsambas figurine's hand forms an axis that is perpendicular to the main vertical axis of the body. The elbows are raised and the hands meet on the same horizontal axis as the elbows. The gesture is a closed one but not modest, reserved or introverted. It extends away from the chest and towards the viewer.

Evans describes the figurine's gesture as being in a "usual ceremonial attitude", which "along his tiara-like head-piece suggest the possibility that we have here before us the Boy-God" and concludes that "he is in the act of saluting his divine Mother" (Evans 1930, 235). Pelon's study concludes that the gesture of the arms, by being brought back towards the chest, was not a gesture of greeting but underlined the majesty of the character. Therefore, the figurine represents a male god, borrowing some stylistic elements from the Hittite and general Anatolian tradition (Pelon 1987, 435). However, he admits that its overall spirit is deeply Minoan (Pelon 1987, 436).

The multiple ways the gesture of the Katsambas figurine has been treated in the descriptive systems is an indication of its uniqueness. Chatzidakis calls it unusual. Verlinden on the other hand puts it under gesture 4, "les mains sont repliées sur la poitrine", being the sole member in the subcategory c), "les coudes sont relevés sur les côtés mais les mains ne touchent pas la poitrine", while admitting that the placement of the hands is "exceptionnelle dans l'iconographie

Fig. 26: Agia Triada Box-
ers Rhyton, detail of boxer
(after Zervos 1956, 372,
fig. 546).

Fig. 27: Agia Triada
Boxers Rhyton, detail of
boxer (after von Matt et
al. 1967, 132).

Fig. 28: Agia Triada Boxers Rhyton, detail bull-lea-
per (after von Matt et al. 1967, 133).

minoenne" and that it could be interpreted as greeting gesture, albeit one different from the norm
(Verlinden 1984, 124). Pelon seems to disagree with this interpretation as he insists on the Anato-
lian prototypes of figurines with hands set apart from the chest and with a hole to accommodate
objects (Pelon 1987, 435). However, there is no such hole on or between hands of the figurine of
Katsambas. Sapouna-Sakellaraki (1995, 107) classifies it under Gesture A "Segensgestus", that is a
blessing gesture, but because the arms stretch away from the chest it again belongs to a category
of its own, type Ab. Louise Hitchcock (1997, 121) follows Verlinden's classification. Although
she admits that its gesture is unusual, she sees the figurine from Syme as performing the same ges-
ture as the Katsambas one. In Hitchcock's study the figurine's gesture is classified under Gesture 4
"both hands are folded in the chest", which is clearly inaccurate (Hitchcock 1997, 113, 122). The
conical hat is stressed because of the rarity of headdresses on bronze figurines, and she regards it
as a symbol of divinity or ruler status in the Near East (Hitchcock 1997, 121).

The one all-important question we have to ask ourselves, even if we establish that this per-
son was indeed a pugilist, is whether his gesture belongs to that class alone, or if it belongs to a
more general ritual or religious one. Is this a gesture typically to be identified as one performed
by a boxer or is this one performed by a worshipper or an adorant who happens to be a boxer, re-
gardless of their expertise or skill, much like the torso of the figurine of the boxer from the Brit-
ish Museum (Rethemiotakis 2001, fig. 138; also British Museum, no. 1970,1107.1)?

Some arguments supporting the idea that the gesture of the figurine reflects the level of
skill of the represented male will be presented here. First of all, one has to contemplate the es-
sence of the sport and the general rules of the game (that in all probability applied to Minoan
sports as a whole); here, *hit but do not get hit.* Offense means going for the head and the torso.
An effective defense, one that protects the vulnerable areas, is equally as important.

Pugilistic scenes are our best iconographic source. The Boxers Rhyton depicts three friezes
with boxing scenes. Each frieze has different episodes with boxers that are about to win and
others that have fallen on their knees and backs. The gestures of the first group fall in two main
types: the shoulders and elbows form a straight line, but the hands and lower arms turn in to-
wards the torso thus enclosing the frame (Figs. 26–27). The wrist is not bent and its upper side
always faces upwards. This is a majestic gesture that shows off the athlete's strong torso to the
viewer. The artist captured the boxing movements by rendering the athletes with the elbow back
as to impart enough kinetic energy for a telling blow, but not too much so as to create a gap in
the defense. The other gesture is seen on the upper frieze; a hit on the opponent's abdomen with
the arm moving through a horizontal axis. Both gestures show control, energy, strength and possi-
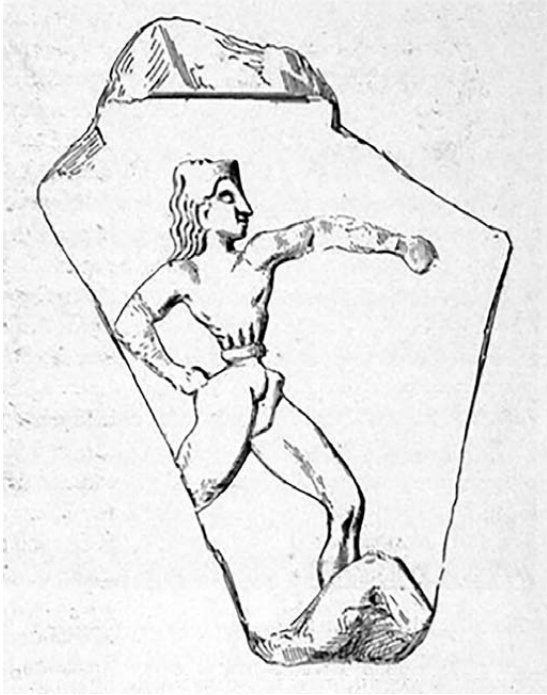bly indicate who the victor is.

Fig. 29: Fragment of a stone vase, Knossos (after Evans 1921, 689, fig. 510).

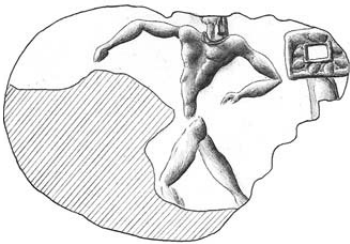Fig. 30. Fragment of a stone vase, Boston (after Militello 2003, 366, fig. 6).

Fig. 31: CMS II 8, no. 280, Knossos (courtesy of the CMS Heidelberg).

Fig. 32: The golden ring from Syme (after Lebessi et al. 2004, table 2).

Fig. 33: Fragment of a stone vase, Knossos (after Evans 1928, 614, fig. 386).

The other group of figures, those who receive hits, are shown mainly falling on their backs or onto their knees. Their gestures reveal a loss of control with the hands flying in the air, an attempt to stand and resume a vertical position, the need to take a breath and manage pain or even to hide the embarrassment. In a similar manner the hands and legs of the acrobat impaled on the bull's horn on the Boxers Rhyton (Fig. 28) and the fallen youth of the Vapheio cup are thrown up into the air with no sign of control, just a flailing reaction to the animal's blow.

Apart from the Agia Triada rhyton there are two other fragments of stone vases with relief decoration and a sealing, that all replicate the same strong gesture with the aligned shoulders and elbows and the closed frame of swift hands, as if copying a prototype. These are a stone vase fragment found at Knossos with a single boxer (Fig. 29), a similar fragment from Boston belonging to the upper frieze of a conical rhyton depicting two boxers (Fig. 30), possibly a forgery, and sealing *CMS* II 8, no. 280 from Knossos (Fig. 31).

To further understand the movement, a comparison of the boxers' gestures with the ones performed by men engaged in other sports is necessary. The comparison shows that the Minoan craftsperson was well aware of the different positioning of the hands pertaining to each sport. The force with which the central figure of the golden ring of Syme (Lebessi et al. 2004) is running, is shown by the wide stride and by the pumping movement of the arms and hands (Fig. 32). The arms stretch outwards in a very open shape in order to increase his velocity. On a different stone fragment from Knossos another athletic scene is captured. The shoulders and elbows of the best-preserved figure are aligned but the hands move outwards and the shape of the gesture is again an open one (Fig. 33). Thus, the pugilists move their hands inwards in order to form an impenetrable shield in front of their face and torso, but the runners employ the hands openly and outwards to facilitate their forward motion.

One could ask at this point why a boxer would be represented by a metal figurine when most of this class show worshippers and adorants. Are there any more such pugilists in metal? The present study has potentially classified at least two more figurines, forming a group that share certain features.

The figurine from Kambos in Messenia (Fig. 34), which was found in a Mycenaean tholos tomb and was published by Christos Tsountas (1891), possibly depicts a boxer. His musculature is extremely developed and rendered in strong relief modelling on his thick thighs and arms: so much so that Tsountas without hesitation dubbed him an athlete. After Tsountas there were various interpretations of this unique gesture that disregarded his athletic body, until Valerios Stais (1909) claimed that the figurine represents a pugilist.

The Kambos figurine imitates a prototype of earlier times according to Sapouna-Sakellaraki (1993, 141), who suggests that the prototype was Minoan, and that the later figure probably has a similar disposition and meaning as that of its prototype.

When placed side by side the Kambos figurine does display a degree of resemblance with the figurine of Katsambas. The first wears a humbler variation of the garment, albeit with a still emphasized loincloth. It does not bear any gloves or shoes, or any other accessories apart from a hat that is also conical but much shorter. One could say that its gesture is close to the Katsambas' one. However, the hands do not meet, though one is closer to the chest than the other, forming an asymmetrical shape (Fig. 35). The gesture is again a rather closed one but not reserved. The figure presents its athletic and toned arms to flaunt its power. The form of the body and the gesture as well as the assertiveness of the two figurines seems strikingly similar.
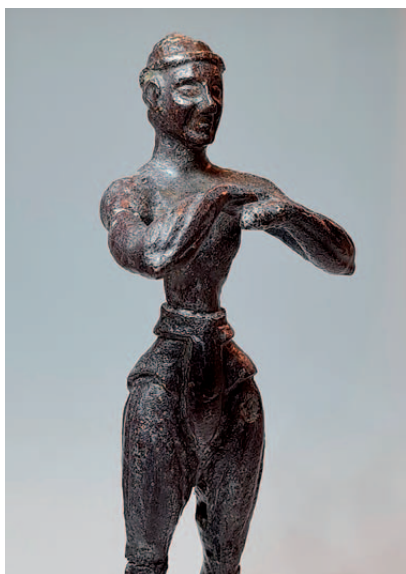

Fig. 34: The lead figurine from Kambos, Messenia (National Archaeological Museum, photo by the author).
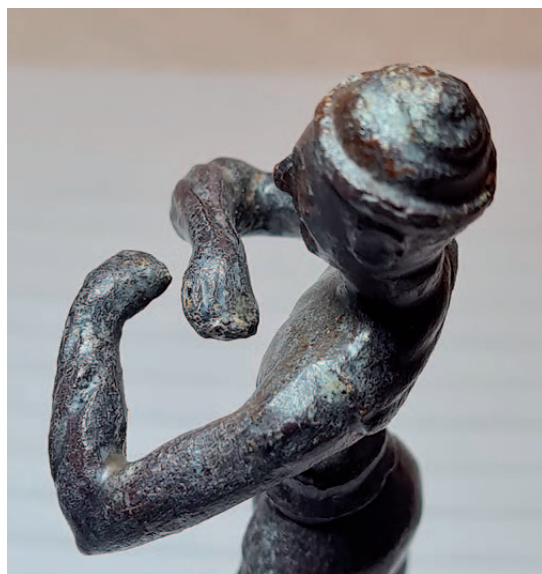
Fig. 35: The lead figurine from Kambos, Messenia, detail (National Archaeological Museum, photo by the author).
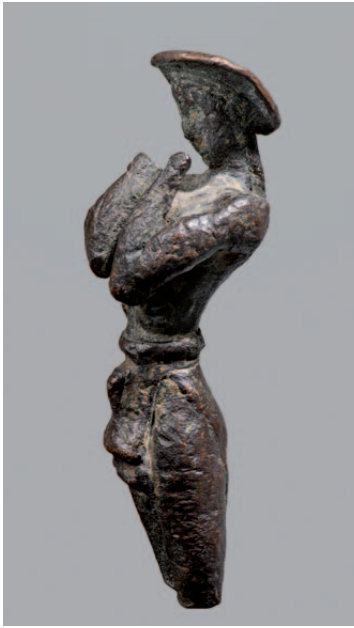
Fig. 36: The bronze figurine from the area of Phaistos (photo by Robbert Jan Looman, National Museum of Antiquities, Leiden).
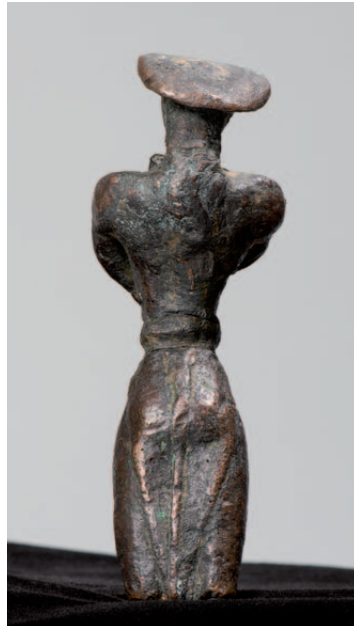
Fig. 37: The bronze figurine from the area of Phaistos, back (photo by Robbert Jan Looman, National Museum of Antiquities, Leiden).

Fig. 38: The bronze figurine from the area of Phaistos, detail (photo by Robbert Jan Looman, National Museum of Antiquities, Leiden).

The last figurine of the group is the one from the Museum of Leiden (Figs. 36–38). This is a figurine that was given to the Museum in 1904 with a brief account of the provenance: the area of Phaistos. The figurine from Leiden comprises of a set of interesting and – again – unique features. Unfortunately, the hands and the legs from the knees down are not preserved. It wears a garment that is long in the back with a line in the middle which could be either a seam or the two ends of the cloth (Fig. 37). The front part has a piece of fabric overlapping the loincloth, as if it is folded over (Fig. 36). This is a feature that is known so far only in the material of Kophinas (Spiliotopoulou 2018), as is also mentioned by Sapouna-Sakellaraki (1971, 89, fig. 17). It still remains a valid observation.
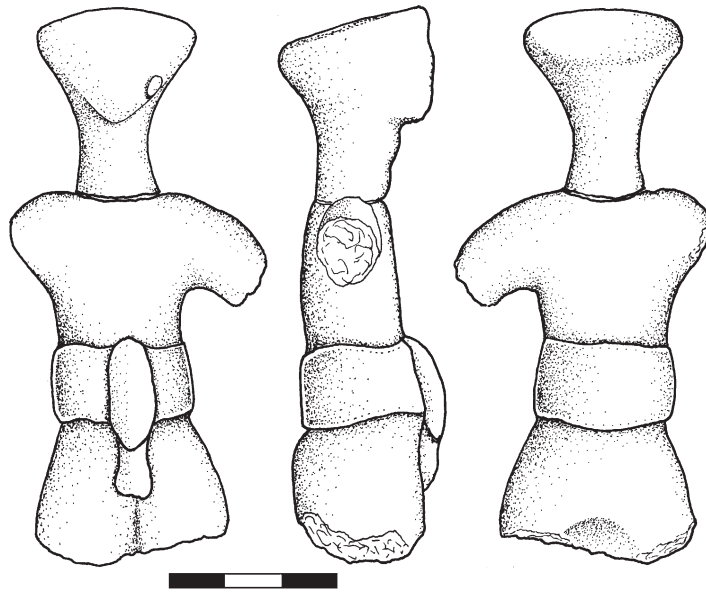
Fig. 39: Clay figurine fragment, peak sanctuary of Kophinas (drawing by the author, after Spiliotopoulou 2018).

Sometimes the overlapping cloth can be seen on lower body fragments from Kophinas combined with the triangular fabric at the gluteal area (Figs. 13–14, 16), an arrangement that was defined through correlations as the attire of the pugilists in the material of Kophinas (Spiliotopoulou 2018, 137). The long fabric in the back of the Leiden figurine (Fig. 37) is rare,

but it seems to agree with the length of the fabrics worn by the boxers of Agia Triada and of the fresco from Tylissos (Fig. 21).

The beret worn by the figurine of Leiden finds its iconographic parallel once more in the material of Kophinas. There are two heads of figurines from the sanctuary that possibly wear the same style of headgear. One of them even sports a raiment with the overlapping cloth over the loincloth (Fig. 39). The more modest medium of clay and the poor preservation of the clay figurine from Kophinas makes the certain recognition and acceptance that these two figurines depict the same iconographic type difficult to grasp.

Lastly, the Leiden gesture is again one of a kind. The arms are bent at the elbow with the forearms raised close together in front of the face of the figurine. This is a rare instance where a figurine has its chin tucked closer to the chest, not lifted for a prouder stance. This combination of features, the chin and the arms in front of the face is another expression of a boxing gesture, but this time a defensive one.

Discussion

The corpus of the anthropomorphic figurines from the peak sanctuary of Kophinas has revealed about 100 fragments of hands with boxing gloves and a series of clay representations of boxing men with various hats on, in both a passive adorant attitude and in a more energetic and active pose as figures of compositions inside of clay models (Spiliotopoulou 2018). The prospect that this was the first time a relatively detailed and three-dimensional rendering of boxing gloves was encountered led the author to search for overlooked details in the corpus of the bronze figurines, especially those figurines that bear similar attributes to the Kophinas boxers. The search was successful as two more metal figurines are highlighted, all with unique gestures, attire and hats: the one from Kambos in Messenia and the one from the Museum of Leiden with an alleged origin of the wider area of Phaistos, and possibly thus from Kophinas.

The comparison of the Katsambas figurine against the iconographic wealth of the instances at Kophinas has not only assisted in the understanding of its identity but also unveiled the methodological shortcomings of previous scholars in their attempts to decipher the unique features of the hat and the gesture. If one encounters a feature that is unique and cannot be understood through iconographical parallels within its immediate geographical and temporal limits and within its cultural context (where it provoked instant recognition within the people who conceived, created and conferred on it a meaning), it seems unsound to be looking for 'similarities' in material from other cultural contexts, with no regard to the composition of the object as a whole.

There are several types of conical hats in Minoan imagery worn by various individuals. They exhibit differences and need to be examined individually. There is also an abundance of conical hats in Hittite imagery, worn by gods and men. However, none of the interpretations of the Katsambas figurine takes into account that a) there are no hats in Hittite imagery that look exactly the same as the Minoan one(s) and b) none of the other attributes demonstrated by the Hittite individuals with conical hats are reproduced on the Katsambas figurine. Diamantis Panagiotopoulos addresses the issue in his insightful review of the history of research of Minoan images: "The main problem with this approach, which has been quite popular, is that scholars isolated specific pictorial themes or single motifs and studied their distribution in space and time across different media, paying less attention to their meaningful association within the overall composition, its medium and spatial context" (Panagiotopoulos 2020, 387). In this particular case the spatial context might be lost but the figurine is meaningful in a cultural context where not only boxing is celebrated, but also other sports or competitions, as can been seen on ceremonial vases, frescoes, figurines, and so forth.

Boxing was one of the sporting activities that, along with running, hunting and bull-leaping, the Minoans chose to depict through several artistic media in a way suited to their culture (for an overview see Militello 2003; Panagiotopoulos 2004; Platon 2008). The best-known depiction of these sort of events is demonstrated in three out of the four friezes of a truly remarkable

and elaborately decorated object, the Agia Triada Boxers Rhyton. There are pugilistic scenes on other fragments of Knossian stone vases, objects of value that were in all probability used in ceremonial rituals of rites of passage. Boxing scenes were decorating frescoes at Tylissos, possibly the Palace of Knossos, if we are to accept the observations made on the fresco of the Prince of Lilies (Coulomb 1979, 1981, 1985) and the alternative reconstruction of the Staircase Procession Fresco that Fritz Blakolmer (2018) has offered.

The last potential strand of a connection with the Hittites or Anatolia in the related bibliography, namely the golden wire around the figurine's neck, has been removed or at least questioned by the circumstances of its discovery as presented here. The figurine has a Minoan personality, or as Pelon puts it 'a Minoan allure'.

Douglass Bailey defined the prerequisites of the way to "read" a figurine: "… the *methodology* for accurately reading prehistoric figurines depends on the visual examination of the figurine, the identification of the subject of representation and a thorough knowledge of the archaeological and social context of both figurine and its represented subject" (Bailey 1994, 323). Are we certain about what it is we see? If not, how can we possibly proceed to the next step, the "identification", and even more so, to the interpretation and the theoretical construction – with such built-in inaccuracies? The present study of the Katsambas figurine has presented arguments focusing on the "visual examination of the figurine". Both the Katsambas and the Kambos figurines, as well as other bronze figurines of the Heraklion Museum, were examined and observed not from old published photographs or secondary sources, but from up close and with one's own eyes.

Corresponding to that argument is the inaccurate first drawing of the figurine. Most archaeologists are familiar with the concept that the drawing of an artifact is just another form of interpretation. The artifacts are not always made of specific shapes with clean lines. There is decay, distortion, surface wear, gaps and holes, and unfamiliar elements that the draughtsperson or the skilled archaeologist needs to sort out in order to produce a comprehendible image. The gap is usually filled with the archaeologist's assumption, at best an educated guess drawn from a bank of personal knowledge, however adequate or inadequate, accurate or distorted it may be. Sometimes all it takes is a change to one small line and the meaning assigned becomes a totally different one. In the case of the Katsambas figurine the first drawing shows a man wearing thick bracelets because the archaeologist interpreted them as such, ignoring the fact that the element on top of the wrist does not continue to its inner and side surfaces. Once so interpreted, the accepted description of the figurine was as one with bracelets. That is, of course, quite understandable at the time, since there were not any three-dimensional boxers and boxing gloves then known.

All three figurines were found some time before and after the turn of the 20th century. None is burdened with a suspicion of forgery, because when they were brought to the surface, their iconographic types were not known. They are all one of a kind in their own rights, but seem to form a broad group with a common meaning: one that could probably be recognized by the original viewers, one that was meaningful in Minoan society – showing the strength of well-built and athletic men, an idea that is consistent with other aspects of Aegean iconography in other media.

The Katsambas figurine is shown in a standing and static body posture – he is not captured in action. His gesture is one that is meaningful and consistent with boxing imagery; firm, strong and proud. The gesture of this male could be seen as a pose, a salute or a greeting, a pre-fight ritual, a post-fight celebration, all intended to remind the viewer of his strength, his athletic training, and his skill that makes him stand out. On a more abstract level of interpretation this could yet be seen as a gesture of adoration, one performed by a worshipper, as most bronze figurines are.

References
Aruz, J., K. Benzel, and J. M. Evans, eds. 2008. *Beyond Babylon: art, trade, and diplomacy in the second millennium B.C.* New York and New Haven: The Metropolitan Museum of Art and Yale University Press.

Bailey, D. W. 1994. "Reading prehistoric figurines as individuals." *World Archaeology* 25: 3: 321–331.

Betancourt, Philip. 2001. "nos. 64, 65: copy of a wall-painting." In Karetsou et al. 2001, 91.

Blakolmer, F. 2018. "Eine Boxkampfszene im Prozessionsfresko des 'Grand Staircase' im Palast von Knossos?" In *Akten des 16. Österreichischen Archäologentages am Institut für Klassische Archäologie der Universität Wien vom 25. bis 27. Februar 2016,* edited by G. Schörner and K. Meinecke. *Wiener Forschungen zur Archäologie* 17, Vienna: Phoibos Verlag.

Bryce, T. 2002. *Life and society in the Hittite world.* Oxford: Oxford University Press.

Chatzidakis, I. 1916. "Τρία μινωικά ειδώλια." ArchDelt 2: 164–170.

Christinidou, E. 2016. "Τα ονοματολογικά δεδομένα στον πληθυσιακό χάρτη του Ηρακλείου 1863–1913." In *Πεπραγμένα του ΙΒʹ Διεθνούς Κρητολογικού Συνεδρίου.* https://12iccs.proceedings.gr/en/proceedings/category/38/34/288.

Coulomb, J. 1979. "Le 'Prince aux lis' de Knosos reconsidéré." *BCH* 103: 29–50.

Coulomb, J. 1981. "Les boxeurs minoens." *BCH* 105: 27–40.

Coulomb, J. 1985. "Le Boxeur de Knossos au Fleurs de Lis." In *Πεπραγμένα του Εʹ Διεθνούς Κρητολογικού Συνεδρίου, Άγιος Νικόλαος, 25 Σεπτεμβρίου – 1 Οκτωβρίου 1981, Αʹ,* edited by Th. Detorakis, 67–76. Ηράκλειο: Εταιρία Κρητικών Ιστορικών Μελετών.

Davis, J. L., and S. R. Stocker. 2016. "The Lord of the Gold Rings: the Griffin Warrior of Pylos." *Hesperia* 85: 627–655.

Dimopoulou, N. 1997. "Workshops and craftsmen in the harbour-town of Knossos at Poros-Katsambas." In *TEXNH. Craftsmen, craftswomen and craftsmanship in the Aegean Bronze Age. Proceedings of the 6th International Aegean Conference, Philadelphia, Temple University, 18–21 April 1996, edited by R. Laffineur and Ph. P. Betancourt,* 433–438. *Aegaeum 16.* Université de Liège, Histoire de l'art et archéologie de la Grèce antique; University of Texas at Austin, Program in Aegean Scripts and Prehistory.

Dimopoulou-Rethemiotaki, N. 2004. "Το επίνειο της Κνωσού στον Πόρο-Κατσαμπά." In *Knossos: palace, city, state: proceedings of the conference in Herakleion organised by the British School at Athens and the 23rd Ephoreia of Prehistoric and Classical Antiquities of Herakleion, in November 2000, for the Centenary of Sir Arthur Evans's Excavations at Knossos,* edited by G. Cadogan, E. Hatzaki, and A. Vasilakis, 363–380. *BSA Studies* 12. London: The British School at Athens.

Dimopoulou, N., and G. Rethemiotakis. 2000. "The 'Sacred Conversation' Ring from Poros." In *Minoisch-mykenische Glyptik: Stil, Ikonographie, Funktion." V. Internationales Siegel-Symposium Marburg, 23.–25. September 1999,* edited by W. Müller, 39–56. *CMS Beiheft* 6. Berlin, Gebr. Mann Verlag

Evans, A. 1921. *The Palace of Minos* at Knossos, I. London: Macmillan.

Evans, A. 1930. *The Palace of Minos* at Knossos, II. London: Macmillan.

Evans, A. 1932. *The Palace of Minos* at Knossos, III. London: Macmillan.

Evely, D. 1993. *Minoan crafts: tools and techniques, an introduction, SIMA* 92:1. Göteborg, Paul Åströms Förlag.

Hitchcock, L. 1997. "Engendering domination: a structural and contextual analysis of Minoan Neopalatial bronze figurines." In *Invisible people and processes: writing gender and childhood into European archaeology,* edited by J. Moore, and E. Scott, 113–130. London: Leicester University Press.

Karetsou, A., et al. 2001. *Crete – Egypt. Three thousand years of cultural links. Catalogue.* Heraklion and Cairo: Hellenic Ministry of Culture.

Koehl, B. R. 2006. *Aegean Bronze Age rhyta. Prehistory Monographs* 19. Philadelphia: INSTAP Academic Press.

Lebessi, A., P. Muhly, and G. Papasavvas. 2004. "The Runner's Ring, a Minoan athlete's dedication at the Syme sanctuary, Crete." *AM* 119, 1–31.

MacGillivray, J. A., J. M. Driessen, and L. H. Sackett. 2000. *The Palaikastro Kouros. A Minoan chryselephantine statuette and its Aegean Bronze Age context, BSA Studies* 6. London: The British School at Athens.

Militello, P. M. 2003. "Il Rhytòn dei lottatori e le scene di combattimento: Battaglie, duelli, agoni e competizioni nella Creta Neopalaziale." *Creta Antica* 4. 359–401.

Moak, M. 2000. "The Palaikastro Kouros." In: A. MacGillivray et al. 2000: 65–83.

Panagiotopoulos, D. 2004. "Αθλητισμός και Αθλητικοί Αγώνες στην Αρχαία Κρήτη. 1. Αθλητισμός και Αθλητικοί Αγώνες στη Μινωική Κρήτη." In *Το Ηράκλειο και η Περιοχή τον. Διαδρομή στο χρόνο. Ιστορία, Αρχαιολογία, Λογοτεχνία, Κοινωνία,* 77–101. Ηράκλειο: Κέντρο Κρητικής Λογοτεχνίας, Υπουργείο Πολιτισμού, Γενική Γραμματεία Ολυμπιακών Αγώνων.

Panagiotopoulos, D. 2020. "The 'death of the painter'. Towards a radical archaeology of (Minoan) images", in *Current approaches and new perspectives in Aegean Iconography,* edited by F. Blakolmer, 385–406. *Aegis* 18, Louvain-la-Neuve: Presses universitaires de Louvain.

Pelon, O. 1987. "Une figurine en bronze du Musée d'Iraklion." In *Ειλαπίνη. Τόμος Τιμητικός για τον Καθηγητή Νικόλαο Πλάτωνα.* Herakleio: Βικελαία Δημοτική Βιβλιοθήκη.

Platon, E. 2008. "Athletes and sports." In *From the Land of the Labyrinth: Minoan Crete, 3000–1100 B.C. Essays,* edited by M. Andreadaki-Vlazaki, G. Rethemiotakis, and N. Dimopoulou-Rethemiotakis, 96–99. New York: Alexander S. Onassis Public Benefit Foundation.

Rethemiotakis, G. 2001. *Minoan clay figures and figurines from the Neopalatial to the Subminoan period. The Archaeological Society at Athens Library* 219. *Ancient Sites and Museums in Greece* 25. Athens: The Archaeological Society at Athens.

Sakellarakis, Y., and E. Sapouna-Sakellaraki. 1997. *Archanes, Minoan Crete in a new light,* Vol. I–II. Athens: Ammos Publications.

Sapouna-Sakellaraki, E. 1971. *Μινωικό Ζώμα. Βιβλιοθήκη της εν Αθήναις Αρχαιολογικής Εταιρείας* 71, Athens: The Archaeological Society at Athens.

Sapouna-Sakellaraki, E. 1993. "Μυκηναϊκή πλαστική στη Λακωνία", in *Sculpture from Arcadia and Laconia, Proceedings of an international conference held at the American School of Classical Studies at Athens, April 10–14, 1992,* edited by O. Palagia and W. Coulson, 137–143. *Oxbow Monograph* 30. London: Oxbow.

Sapouna-Sakellarakis, E. 1995. *Die bronzenen Menschenfiguren auf Kreta und in der Ägäis. Prähistorische Bronzefunde* 1.5. Stuttgart: Franz Steiner.

Shaw, M. C. 1972. "The miniature frescoes from Tylissos reconsidered." *AA:* 171–188.

Sfakianakis, D. 2013. "Η συστηματική ανασκαφή στο ιερό Κορυφής του Βρύσινα. Πήλινα ανθρωπόμορφα ειδώλια". *Αρχαιολογία* Online, March 2013. https://www.archaiologia.gr/blog/2013/02/25/h-συστηματική-ανασκαφή-στο-ιερό-κορυφή/.

Sidiropoulos, K, and M. Drakakis. 2017. "Διαβάζοντας το δημογραφικό μωσαϊκό του Ηρακλείου", in *Το Ηράκλειο και η Κρήτη από την τελευταία περίοδο της οθωμανικής κυριαρχίας ως την Ένωση με την Ελλάδα (1866–1913), Πρακτικά Επιστημονικού Συνεδρίου, Ηράκλειο 23–26 Οκτωβρίου 2013,* edited by Μ. Γ. Ανδρουλιδάκης. Heraklion: Βικελαία Δημοτική Βιβλιοθήκη.

Spiliotopoulou, A. 2018. *Τα Πήλινα Ανθρωπόμορφα Ειδώλια των Μινωικών Ιερών Κορυφής. Τυπολογικές, τεχνοτροπικές και ερμηνευτικές παρατηρήσεις με βάση το υλικό του Ιερού του Κόφινα Αστερουσίων.* PhD Diss., Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών.

Stais, V. 1909. *Collection mycénienne: Guide illustré du Musée d'Athènes.* Athens: Imprimerie P. D. Sakellarios.

Tsountas, Ch. 1891. "Τάφος Θολωτός εν Κάμπωι." *AE:* 189–191.

Verlinden, C. 1984. *Les statuettes anthropomorphes crétoises en bronze et en plomb, du IIIe millénaire au VIIe siècle av. J.-C. Publication d'Histoire de l'art et d'archéologie de l'Université catholique de Louvain* 41; *Archaeologica Transatlantica* 4. Providence, Rhode Island: Brown University Center for Old World Archaeology and Art.

von Matt, L., S. Alexiou, N. Platon, and H. Guanella. 1967. *Das antike Kreta.* Würzburg: Echter.

Wedde, M. 1999. "Talking hands: a study of Minoan and Mycenaean ritual gesture – some preliminary notes." In *Meletemata. Studies in Aegean Archaeology presented to Malcolm H. Wiener as he enters his 65th year.* Vol. III, edited by Ph. P. Betancourt, V. Karageorghis, R. Laffineur, and W.-D. Niemeier, 911–920. Université de Liège, Histoire de l'art et archéologie de la Grèce antique; University of Texas at Austin: Programs in Aegean Scripts and Prehistory.

Zervos, C. 1956. *L'art de la Crète néolithique et minoenne.* Paris: Éditions "Cahiers d'art".

From the Here and Now, to the There and Then: The Most Powerful Woman in Minoan Crete?

Louise A. Hitchcock – Madaline Harris-Schober

Abstract *Nowadays, when we think of figurines and Palaikastro, in our minds' eye, we see the famous Palaikastro "kouros," a dazzling chryselephantine statuette, remarkable for the artist's stunning attention to detail and realism. However, other figurines were found at Palaikastro, that attract little attention in the here and now. We would like to suggest that at least one of them was likely quite famous and powerful in the there and then, despite a lack of individuating features and a diminutive size of just 4.5 cm in height. The figurine is a female based on dress and anatomical features, stylistically dated to the Neopalatial period and was found in an urban deposit, likely a pit containing ritual material, dated to the final palatial period. Based on its gesture placed in comparison to figures depicted on seals and sealings making a similar gesture, and its context that this figurine represented female power that communicated far more status and power than its modest appearance conveys.*

Introduction

When we consider Minoan figurines with regard to the site of Palaikastro in eastern Crete, we think of the famous Palaikastro "kouros" of the Neopalatial period, ca. 1700–1450 BCE (papers in MacGillivray, Driessen, and Sackett 2000).[1] The "kouros" is a dazzling chryselephantine statuette, remarkable for the artist's stunning attention to detail and realism. However, other figurines were found at Palaikastro, that attract little attention in the here and now. We would like to suggest that at least one of them served as a representation of an individual who was important, famous, and powerful in the there and then, despite a lack of individuating features and a diminutive size of just 4.5 cm in height (Fig. 1). The figurine is stylistically dated to the Neopalatial period (Verlinden 1984, no. 68), and was found in an urban deposit, likely a pit or pile containing ritual material. The bronze figure has an accentuated waist and breasts, leading us/the authors to believe this is a stylistic and anatomical depiction of a female body. Alexandra Alexandri (1994, 17), followed by Christine Morris (2009) observed that the breast, accentuated by clothing was the main distinguishing feature of females. Female bodies are further distinguished from male bodies by dress, summarized as an open bodice exposing breasts; the sleeve is rendered by a thickening of the upper arm with borders on the sleeves rendered in high relief that stops at the elbow; the neckline is sometimes rendered by light incision or in relief; the floor length, so-called flounced skirt follows the contours of the body: curving around the thighs with a hollow in the front with a series of oblique panels about halfway down, and a rolled sash which sits on the thighs. In contrast, male dress can be distinguished by a kilt with two panels in the front, and one in the back, the length varies; usually there is a codpiece or penis sheath; the sash or belt may be single, double, or triple, with a "sacred knot" sometimes visible on the right of the garment.[2] Thus, there is no ambiguity in the figurine and seal representations under discussion, as indicated by dress and accentuated breasts on females (*e.g.* Hitchcock 2009). The area under

---

2 This description is based on Verlinden's (1984) highly detailed study, and the reader is directed to her catalog for further consideration.
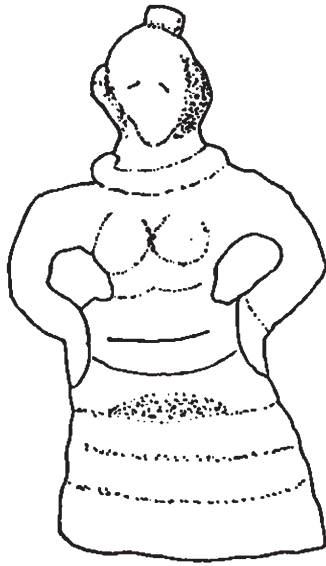
Fig. 1: Figurine from Palaikastro, bronze, making Gesture 3 (Hitchcock, after Verlinden 1984).

discussion at Palaikastro was designated as X41 was a Neopalatial doorless space, defined by LM I foundation walls. Although her facial features were not well defined, she is unusual for being the only bronze figurine from Crete with her hands placed on her hips, a gesture associated with status on seals and sealings. She is also one of only two female bronze figurines wearing jewellery in the form of a necklace. The deposit also contained white ashes, pottery, four to five clay bull heads, fragments of twenty clay lamps, and bovine bones and horn cores. Based on recent studies of foundation, repair, and termination rituals, this study reconsiders the significance of this figurine and concludes she was far more important than originally believed, perhaps the most powerful woman in Minoan Crete.

The figurine is among 114 Neopalatial anthropomorphic figurines that were published in a catalogue by Colette Verlinden.[3] Two of the most significant characteristics of these figurines were gender and gesture whereby details were not obscured (Hitchcock 1997). Two particular gestures made by the figurines seemed to indicate particular status based on gender. One of these was gesture 4, or hands to chest, found on just two unusual male bronze figurines, a seal said to be from Chania but located in the Benaki Museum (*CMS* V.1, no. 201), also made by the Palaikastro statuette. One of the two bronze figurines is Verlinden no. 93, a male bronze from Katsambas. This is one of only two bronze males that wears headgear.[4] It wears a tall, conical cap. The other male bronze figurine is from the sacred enclosure at Kato Syme (Lebessi and Muhly 1990, fig. 14; see also, Hitchcock 1997). The seal, carved from Lapis Lakedaimonius, depicts a man standing between horns of consecration, and flanked by a winged goat and a Minoan genius (*CMS* V.1, no. 201; Rehak 1995, 227–228; Hitchcock 1997, 125). The other gesture that we assign high status to is Verlinden's gesture 3, the hands-on-hips gesture made by just one female figurine that is the subject of this contribution. We make this assessment based primarily on the rarity of the gesture among female bronze figurines and based on its context as depicted on seal iconography. In seal iconography this suggestion is further supported by its depiction on centrally placed females in hierarchic scale as discussed below.

The Figurine

Verlinden stylistically dates the Palaikastro figurine (Fig. 1) to the "Classic" Neopalatial period. The eyes and ears are rendered, although other facial details are not noticeable. The skirt has unusual horizontal folds, and the hair is in a great curl on top of the head and falls down the back (see also Verlinden 1984; Bosanquet and Dawkins 1923, 122–123, fig. 103B). The figurine wears a necklace and is one of only two female bronze figurines wearing jewellery.[5] Depictions of jewellery were more common on male figurines, in contrast to other media such as fresco paint-

---

[3] These were out of a total of 287 figurines published by Verlinden (1984), which included earlier and later figurines as well as pieces too fragmentary to be included. See also Hitchcock 1997.

[4] The Katsambas figurine was presented in detail, and interpreted as exemplifying youth, strength, and power at these proceedings by Alexia Spiliotopoulou. In addition, it was discussed by Hitchcock along with the Kato Syme figurine in more detail than is possible here at the 13th International Congress of Cretan Studies, 5–9 October 2022, Agios Nikolaos (Crete), at the American Society of

Overseas Research Annual Meeting 2022, and in a longer presentation presented as NEH Fellow Lecture at the Albright Institute for Archaeological Research, 1 December 2022, see https://youtu.be/b0TCHuZbxIw.

[5] The other, in the Fogg Art Museum, wears bracelets. The excavations at Ayios Yeorgios sto Vouno, Kythera have increased the corpus of Minoan bronze figurines by forty per cent (see Banou 2018). The final publication of the figurines from Kythera will invariably change the statistics and it is hoped they inspire a reconsideration of the overall corpus of Minoan bronzes.

ing. The rarity of gesture 3 led to the conclusion that it indicated high status, perhaps divinity (Hitchcock 1997). Based on the gesture, Verlinden (1984, 52, n. 119) suggested that she might represent a priestess.

Context One: Seal Iconography

Although the facial features of the Palaikastro figurine were not well defined to the point of being barely visible and she is tiny, the hands-on-hips gesture she makes is associated with status in at least four instances on seals and sealings (*CMS* I, nos. 126, 159;

Fig. 2: Gold Ring, Mycenae (redrawn by Hitchcock after CMS *I, no. 126).*

II 3, no. 3; II 6, no. 1). In one instance, *CMS* II 3, no. 3 from Agia Triada, the figure is isolated except for what may be two trees. On the other three, the figure making the hands-on-hips gesture is centrally placed between two other figures. In two instances, the central figure is rendered in hierarchic scale, which appears exaggerated and indicates that the accompanying females were of lower status. The flanking female figures might have been attendants, priestesses, worshippers, young female children or minor deities who are also making gesture 3. In the case of *CMS* I, no. 159, a lentoid seal-stone from Mycenae, the breasts are more fully developed in the central figure than in the flanking figures, convincingly indicating age difference. In addition to the central female and the two small flanking figures, the sealing from Agia Triada includes a built structure with an associated tree (Nilsson 1927, 231, fig. 75; *CMS* II 6, no. 1; Hitchcock 1997; Tully 2018). A similar, network of relationships can be observed in a famous gold ring from Mycenae (Fig. 2; *CMS* I, no. 126; Hitchcock 1997; Tully 2018). Although the flanking figures in this seal are not rendered in hierarchic scale and are engaged in what appears to be tree shaking activity, they are both bent over in a subordinate position to the central figure who is positioned above them by virtue of her upright posture. Both flanking figures are associated with built structures, probably altars, and both built structures have free-standing columns, probably baetyls, and vegetation associated with them. In addition, the left structure associated with the female who is bent over, also has a small object below it to the left of the column which may be an eight-shield (also Rehak 1992). While this comparison is a chronological jump, it demonstrates a similar configuration in the use of a particular gesture employed by a female in a dominant position, depicted in Minoan style, and in the use of a precious material.[6]

Context Two: Kea Statues

Most of the fifty terracotta statues in the Temple at Agia Irini on Kea are preserved well enough to be seen also making gesture 3. Miriam Caskey (1986, 36; more recently Gorogianni 2011) interpreted them as ritual dancers rather than divinities because none of them stand out "in size or any other observable way, such as to suggest that they might have been set apart as a representation of a divinity." It is possible that the statues may represent worshippers because they were placed in a temple context, a practice common throughout antiquity. We agree, however, with Evi Gorogianni (2011) who argues that they might also represent deities. Louise Hitchcock's perception is based on the belief in hundreds of deities from the Near East known collectively from Near Eastern textual sources and from art as the *Anunnaki* as dispensers of justice and the *Igigi* as servants, and well represented by the 13th century relief of minor underworld deities at the Hittite open air shrine at Yazılıkaya near the Hittite capital at Hattusas in Anatolia.[7] The analogy with the Near

---

6 While we acknowledge the geographic and chronological differences in the provenience of the gold ring from Mycenae, addressing these issues is beyond the scope of this paper.

7 The *Anunnaki* had the power to decree the fate of humankind, and were characterized differently in Sumer-

ian, Akkadian, and Hittite texts that span the entire period of the Bronze Age, and may or may not be synonymous with *Igigi* (servant deities). By the late Babylonian period, they numbered in the hundreds, both in heaven and in the Netherworld, see Puhvel 1987 and Pritchard 2010. For a brief definition, see Leick 1998, 85.
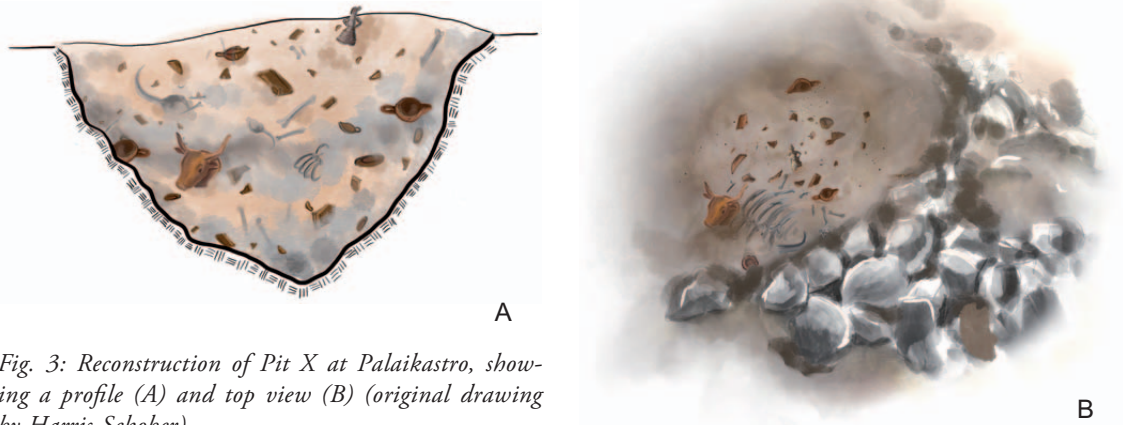
Fig. 3: Reconstruction of Pit X at Palaikastro, showing a profile (A) and top view (B) (original drawing by Harris-Schober).

East is made based on similar economic systems, the long history of interactions accelerated by the quest for metals whereby the Aegean participated in a globalized Mediterranean world system, and evidence for a strong Aegean presence in the Near East as seen at Miletus, ancient Millawanda (Hitchcock 2023). We believe it is unlikely that the Kea statues represent dancers as the depiction of movement is limited to the upper body.[8]

Context Three: Space 41, Urban Deposit

The depositional context of the Palaikastro figurine, the Most Important Minoan Woman (MIMW), seems to have been a rubbish deposit exhibiting what is known in recent times as structured deposition (discussed below). It was from space 41 either in block Pi or X, this is unclear, and both are similar Neopalatial doorless spaces, defined by LM I and Middle Minoan foundation walls.[9] The associated deposit seems to have been composed of white ashes, which included pottery, four to five clay bull heads,[10] fragments of twenty clay lamps, and bovine bones and horn cores, possibly in multiple layers (Fig. 3A–B).[11] The combined nature of these finds led Richard Dawkins (1904–05, 287), followed by Nanno Marinatos (1986, 35–40), to relate the assemblage to ritual sacrifice and cult meals. To our knowledge, there has been little recent

---

[8] Bending of the knees and/or swaying of the hips as depicted on some seals and wall paintings represents a more certain indicator of dancing *contra* German 1999; see also Tully 2018, 69–70.

[9] Dawkins (1923, 123) states "it was found in X41, a region in which there were walls not only of the earlier MM houses, but of all three periods of the later town, LM I, II, and III." The discussion of the figurine does not reference the ashy deposit. Earlier in the report, Dawkins (1923, 21) notes a "similar (to Kato Zakro) but stratified deposit in Block Pi at Palaikastro seems to have accumulated year by year within a sanctuary, the Minoan forerunner of the Temple of Zeus Diktaios which stood almost on the same spot in Hellenic times." He describes this area as containing white ashes, horn cores, oxen bones mingled with pottery which he suggests indicates a place of sacrifice near-by. In an earlier report, under the heading of Block Pi, Dawkins (1904–05, 287) describes a similar deposit of white ashes, horn cores, a great number of oxen bones, some twenty clay lamps, and fragments of four or five clay bull heads, one of which was restorable, denoting a place of sacrifice in 41. The plan (Dawkins 1904–05) indicates MM and LM I walls surround a space

designated as X 41, in building Pi, while MM, LM I, and LM III walls surround X41 in Block X. In either case, the meaning of the figurine would be much the same, even if the process of deposition was different.

[10] On clay bulls in Neopalatial domestic shrines, see Sikla 2011. The integrity of the deposit can be questioned based on Hutchinson (1939–1940, 39), while the context is difficult to understand as objects were categorized by material rather than by context, and not always in accurate numbers as discussed by Chamberlain-Heslop (2019, esp. 19, 28).

[11] The pit profile is based on profiles found at Thronos-Kephala (D'Agata 1997–2000) while the top view is based on a pit from the same era found at Tell es-Safi/Gath (Hitchcock et al. 2015). The depiction of the contents is based on the description from the BSA report, however, we assume that the bronze figurine was found at or near the bottom. The purpose of the illustration as presented is to provide the reader with a maximum amount of visual information as to what such an assemblage might look like rather than to provide a scientific representation of the pit as discovered.

discussion of the figurine, its significance, or the importance of such a deposit although the seals including trees and altars have been well studied by Caroline Tully (2018).

If the figurine is so important, then why is she so plain in terms of facial details? One explanation for its plainness might be linked to the skill of the sculptor however, it is possible to propose a different explanation. Hitchcock (2020) has proposed that Crete was administered by a "deep state," that is, a faceless administrative bureaucracy of elites that belonged to "secret societies" as categorized by Brian Hayden (2018). In this scheme, Minoan elites maintained their power through the possession of special knowledge in the form of obscure writing systems, rituals, initiations, clothing, and other manipulation of symbolisms and behaviours. These individuals met in the segmented spaces provided by benched rooms and meeting halls in monumental buildings in the palaces and villas. The absence of individuality in many of their representations marked both their absence from the mundane world through membership in an exclusive corporate group as well as their ability to attain an ecstatic state in communication with the divine realm as argued by Morris (2004).

Discussion and Conclusions

To recapitulate, gesture 3, the hands-on-hips gesture, belonged to a repertoire of symbolism in Minoan society that was the exclusive domain of females of high status, whether political, religious, divine or a combination of these things. Rather than being diminished by her context in a pit full of ash, bones, lamps,[12] and ritual items such as ceramic bull heads, we believe that this context amplified her importance (Fig. 3). It constituted what is known today as special or structured deposition, the recognition of ritual behaviour through the detection of deliberate patterns in the deposition of archaeological remains, that might appear to the modern eye as rubbish. It fits a pattern of feasting debris, ritual items, and symbolic images that indicate formalized actions by those who created the deposit (as discussed by Richards and Thomas 1984; Hill 1996). The fragmentary aspect of some of the deposited remains, such as the bull heads, may be indicative of the participants in a ritual activity of keeping tokens or mementoes of the event. People still do such things today when they keep a matchbook or swizzle stick to trigger nostalgic memories of a significant occasion (Hitchcock *et al.* 2019). The practice of symbolic deposition and memorialization is also known as *enchainment,* a feature that characterizes pits in post-palatial Crete (D'Agata 1997–2000; Driessen *et al.* 2008, esp. 7–8) and in Philistia (Hitchcock *et al.* 2015).

We would suggest that the significance of this deposit goes much further than the depositional activities just referred to, in that it possibly represents a foundation, repair, or termination event connected with the associated architectural remains. Foundation deposits took many forms in the ancient Mediterranean, with respect for them being held in such esteem, that Mesopotamian and Egyptian kings went so far as to rebury older deposits with their own (Hunt 2006, 191–196; also Levtow 2013). In the Aegean, the composition of building deposits does not follow a pattern but is heterogeneous (detailed by Herva 2005, 216).

Vesa-Pekka Herva (2005; also Hunt 2006, 190–197) argues that foundation deposits represented the beginning of a new phase in the significance of a deposit's history. Rather than indicating the end of its life, it marked the beginning of a new, more important, and vastly more powerful existence for the objects forming part of the deposit. Through establishing and maintaining positive relations with ancestral and/or underworld spirits or deities that resided in the site the act of deposition communicated and promoted an ongoing positive link between the building and those who deposited the figurine. What is more, depositing an unbroken object in an elite material, namely bronze, that required importation from abroad and special knowledge to craft, the figurine references the power and prestige of the individual offering such a gift to insure ongoing benefit and stability. It calls to mind the practice of the wealthiest and most powerful chiefs among the Pacific Northwest Indigenous tribes who might destroy

---

12 On lamps as a typical Canaanite foundation deposit, see Bunimovitz and Zimhoni 1993.

through sacrifice an entire ornamental copper in the competitive feasting activity known as potlatch (Hitchcock 2013).

The ethnographic parallels and analogies presented here, were not to suggest that the Minoan culture was identical to Hittites, Mesopotamians, or First Nations Peoples. Rather, these parallels were presented to show how the material can be interpreted. It can be concluded that it was through her anonymity, combined with the power of her position and knowledge as marked by the rarity of her gesture, materiality, and context that our humble looking figurine represented the Most Important Minoan Woman.

References

Alexandri, A. 1994. "Gender symbolism in Late Bronze Age Aegean glyptic art." PhD. diss., University of Cambridge.

Banou, E. 2018. "Minoans overseas: the peak sanctuary at Ayios Yeorgios sto Vouno, Kythera." In *Proceedings of the 12th International Conference of Cretan Studies, Heraklion, 21–25 September 2016,* Heraklion: Cretan Historical Society Vol. A: 1–12.

Bosanquet, R. C. and R. M. Dawkins. 1923. *The unpublished objects from the Palaikastro excavations, 1902–1906.* London: Macmillan and Co.

Bunimovitz, S., and O. Zimhoni. 1993 " 'Lamp-and-bowl' foundation deposits in Canaan." *IEJ* 43.2/3: 99–125.

Caskey, M. E. 1986. *Keos II. Vol. II, Pt. I: the temple at Ayia Irini. The statues.* Princeton: American School of Classical Studies.

Chamberlain-Heslop, S. 2019. "Was society organised heterarchically or hierarchically in Palaikastro during the Neopalatial period?" M. A. diss., Newcastle University.

D'Agata, A. L. 1997–2000. "Ritual and rubbish in Dark Age Crete: the settlement of Thronos/Kephala (ancient Sybrita) and the Pre-Classical roots of a Greek city." *Aegean Archaeology* 4: 45–59.

Dawkins, R. M. 1904–1905. "Excavations at Palaikastro." *BSA* 11: 258–292.

Driessen, J., A. Farnoux, and C. Langohr. 2008. "Favissae: feasting pits in LM III." In *DAIS. The Aegean Feast. Proceedings of the 12th International Aegean Conference, University of Melbourne, Centre for Classics and Archaeology, 25–29 March 2008,* edited by L. A. Hitchcock, R. Laffineur, and J. Crowley, 197–206. *Aegaeum* 29. Liège and Austin: Université de Liège and University of Texas.

German, S. C. 1999. "The politics of dancing: a reconsideration of the motif of dancing in Bronze Age Greece." In *Meletemata. Studies in Aegean Archaeology Presented to Malcolm H. Wiener as he enters his 65th Year,* edited by Ph. P. Betancourt, V. Karageorghis, R. Laffineur, and W.-D. Niemeier, 279–282. *Aegaeum* 20.2. Leuven and Liège: Peeters.

Gorogianni, E. 2011. "Goddess, lost ancestors, and dolls: a cultural biography of the Ayia Irini terracotta statues." *Hesperia* 80.4: 635–655.

Hayden, B. 2018. *The power of ritual in prehistory: secret societies and origins of social complexity.* Cambridge: Cambridge University Press.

Herva, V.-P. 2005. "The life of buildings: Minoan building deposits in an ecological perspective." *OJA* 24.3: 215–227.

Hill, J. D. 1996. "The identification of ritual deposits of animals. A general perspective from a specific study of the Southern English Iron Age," In *Ritual treatment of human and animal remains. Proceedings of the first meeting of the Osteoarchaeological Research Group held in Cambridge on 8th of October 1994,* edited by S. Anderson and K. Boyle, 17–32. Oxford: Oxbow Books.

Hitchcock, L. A. 1997. "Engendering domination: a structural and contextual analysis of Minoan Neopalatial bronze figurines." In *Invisible people and processes: writing gender and childhood into European archaeology,* edited by E. Scott and J. Moore, 113–130. Leicester: Leicester University Press.

Hitchcock, L. A. 2009. "Knossos is burning: gender bending the Minoan genius." In *FYLO: Engendering prehistoric 'stratigraphies' in the Aegean and the Mediterranean, Proceedings of an International Conference, University of Crete, Rethymno 2–5 June 2005,* edited by K. Kopaka, 97–102, *Aegaeum* 30. Leuven: Peeters.

Hitchcock, L. A. 2014. "Conspicuous destruction and the economy of sacrifice in the Bronze and Early Iron Age East Mediterranean." In *The actuality of sacrifice past and present,* edited by A. Houtman, M. Porthuis, J. Schwartz, and J. Turner, 9–33. *Jewish and Christian Perspectives Series* 28. Leiden: Brill.

Hitchcock, L. A. 2020. "The deep state in the ancient world: bureaucracies as constraining and enabling socio-political structures." Poster presented at the American Society of Overseas Research Virtual Annual Meeting, 12–15 and 19–22 November 2020, USA.

Hitchcock, L. A. 2023. "Millawanda: Minoans and Mycenaeans in Anatolia," *Ancient History Magazine* 44: 24–27.

Hitchcock, L. A., L. Kolska Horwitz, A. M. Maeir, and E. Boaretto. 2015. "One Philistine's trash is an archaeologist's treasure." *NEA* 78.1: 12–25.

Hitchcock, L. A., A. M. Maeir, and M. Harris-Schober. 2019. "Tomorrow never dies: Post-palatial memories of the Aegean Late Bronze Age in the Mediterranean." In Μνήμη / Mneme. Past and Memory in the Aegean Bronze Age, Proceedings of the 17th International Aegean Conference, University of Udine, Department of Humanities and Cultural Heritage, Ca' Foscari University of Venice, Department of Humanities, 17–21 April 2018, edited by E. Borgna, I. Caloi, F. M. Carinci, and R. Laffineur, 543–550. Aegaeum 43. Leuven: Peeters.

Hunt, G. R. 2006. "Foundation rituals and the culture of building in ancient Greece." Ph.D. diss., University of North Carolina at Chapel Hill.

Hutchinson, R. W. 1939/1940. "Unpublished objects from Palaikastro and Praisos." BSA 40: 38–43.

Lebessi, A., and Muhly, P. 1990. "Aspects of Minoan cult: sacred enclosures. The evidence from the Syme sanctuary (Crete)." AA 1990: 315–336.

Leick, G. 1998. A dictionary of ancient Near Eastern mythology. New York: Routledge.

Levtow, N. B. 2013. "Artifact burial in the ancient Near East." In The one who sows bountifully: essays in honor of Stanley K. Stowers, edited by C. J. Hodge, S. M. Olyan, D. Ullucci, and E. Wasserman, 141–152. Brown Judaic Studies. Atlanta: SBL.

MacGillivray, J. A., L. H. Sackett, and J. M. Driessen, eds. 2000. The Palaikastro Kouros. A Minoan chryselephantine statuette and its Aegean Bronze Age context. BSA Studies 6. London: The British School at Athens.

Morris, C. 2004. "'Art makes visible:' an archaeology of senses in Minoan elite art." In Material engagements: studies in honour of Colin Renfrew, edited by N. Brodie and C. Hills, 31–43. Cambridge: Cambridge University Press.

Morris, C. 2009. "The iconography of the bared breast in Aegean Bronze Age Art." In FYLO: Engendering prehistoric 'stratigraphies' in the Aegean and the Mediterranean, Proceedings of an International Conference, University of Crete, Rethymno 2–5 June 2005, edited by K. Kopaka, 243–252, Aegaeum 30. Leuven: Peeters.

Nilsson, M. P. 1927. The Minoan-Mycenaean religion and its survival in Greek religion. Lund: C. W. K. Gleerup.

Pritchard, J. B. 2010. The ancient Near East in text and pictures. Princeton: Princeton University Press.

Puhvel, J. 1987. Comparative mythology. Baltimore: John Hopkins University Press.

Rehak, P. 1992. "Minoan vessels with figure-eight shields: antecedents to the Knossos throne room alabastra." OpAth 19.9: 115–124.

Rehak, P. 1995. "The 'genius' in Late Bronze Age glyptic: the later evolution of an Aegean cult figure." In Sceaux Minoens et Myceniens. IVe symposium international, 10–12 septembre 1992, Clermont-Ferrand, edited by I. Pini and J.-C. Poursat, 215–231. CMS Beiheft V, Berlin: Gebrüder Mann Verlag.

Richards, C. C., and J. S. Thomas. 1984. "Ritual activity and structured deposition in later Neolithic Wessex." In Neolithic studies, edited by R. J. Bradley and J. Gardiner, 189–218. BAR 133. Oxford: BAR Publishing.

Sikla, E. 2011. "The elusive domestic shrine in Neopalatial Crete: on the archaeological correlates of domestic religion." In STEGA. The archaeology of houses and households in ancient Crete, edited by K. T. Glowacki and N. Vogeikoff-Brogan, 219–231. Hesperia Supplement 44. Princeton: American School of Classical Studies at Athens.

Tully, C. 2018. The cultic life of trees: in the prehistoric Aegean, Levant, Egypt and Cyprus. Aegaeum 42. Leuven: Peeters.

Verlinden, C. 1984. Les statuettes anthropomorphes crétoises en bronze et en plomb, du IIIe millénaire au VIIe siècle av. J.-C., Archaeologia Transatlantica IV. Louvain-la-Neuve: Art and Archaeology Publications, Collège Erasme.

The Iconography of the Knossos Snake Goddesses Based on Their Gestures, Stances, Movements and Attributes

Bernice R. Jones

Abstract   *Among the major works of art from Bronze Age Crete, none epitomize the Minoan civilization more than the three faience statuettes, HM 65, HM 64, and HM 63, known as the Snake Goddesses and none have more intriguing gestures, stances, movements, and attributes. With its arm (HM 66) re-restored to HM 64, it and HM 63 thrust their arms forward on a downward diagonal with elbows locked and snakes virtually identical. New evidence is given for HM 64 holding a single snake with its head in one hand and tail in the other, echoing the gesture of HM 63.*

The only parallel for snake handlers appears on an Egyptian statuette of Beset (protector of pregnant women, childbirth and babies), with moveable arms holding two snakes, one in each hand. This differs from HM 63 and HM 64, where each holds a single snake. Nevertheless, since Beset appears in Crete already in MM II, it is possible that HM 63 and HM 64 adopted and adapted her snake attributes and iconography. I further suggest that they are possibly the Minoan precursors of Eileithyia, the historical goddess of childbirth who appears at Knossos in Linear B as e-re-u-ti-ja *of Amnissos, the cave where she was worshipped from Neolithic through Classical times.*

The smaller statuette, HM 65, gestures differently. With upper arms stretched at shoulder level to the sides and forearms raised upward holding snakes(?), she gestures as a Mistress of Plants and Animals. Evans' snake reconstructions on HM 65 have been questioned and this study considers their pros and cons. Evidence is put forth for her having hairlocks in front of her ears. It argues for the dismissal of her modern crown as well as a suggestion for its prototype. The study considers previous scholars' alternative suggestions for the snakes including a rope and carries that through with a reconstruction of the figure including a suggestion for its headdress.

Introduction

Among the major works of art from Bronze Age Crete, none epitomize the Minoan civilization more than the three faience statuettes found in the Temple Repositories at Knossos, known as the Snake Goddesses, and none have more intriguing gestures, movements, attributes and, above all, questions (Fig. 1). All three, referred to here with their Heraklion Museum accession numbers, HM 65, HM 63 and HM 64, have hourglass figures and erect stances with swayed backs and exposed and pronounced breasts. The two large figurines, HM 63, and HM 64, the latter recently reconstructed with the arm of HM 66 (Jones 2016, 104–109, fig. 8.14), thrust their arms forward on a downward diagonal with elbows locked. The smaller figurine, HM 65, that Evans considered a votary, gestures somewhat as a Mistress of Plants and Animals, but with upper arms stretched at shoulder level to the sides and forearms raised upward. Their gestures, comportment and snake attributes are unique in MM III B, ca. 1640/1630–1600.

Statuette HM 63

HM 63 was found without its left arm beneath the sleeve and without its skirt which were reconstructed by Arthur Evans and recently re-evaluated (Jones 2016, 96–105). Most important for our topic, however, is the gesture of her forward thrusting arm with its slithering snake. Evans

Fig. 1: Faience statuettes from Knossos: front views of HM 65, HM 63, and HM 64 (courtesy Heraklion Archaeological Museum, Hellenic Ministry of Culture and Sports; photo of HM 64 by Ch. Papanikolopoulos, INSTAP-SCEC).

described the figure as having three snakes that I have colored for clarity (Jones 2016, fig. 8.6): the red one, with head (restored) at the top of her headdress moves down her bosom and wraps its tail around her abdomen. The blue one coils its tail around her right ear, moves down her chest and winds its head around her abdomen. The purple one is the most important to us. Evans (1921, 501), described it as follows "The head … she holds out in her right hand, its body follows the arm upwards, then descends behind the shoulders, and ascends again to the left arm, which held the tail." Although we give Evans the benefit of the doubt, we must remember that the figure's right arm below the sleeve was missing and is restored. Also missing at the figure's back was the part of the purple snake below the waist that he restored as one continuous curve. Thus, she holds the head of a snake in her right hand and its tail in her left. The snake follows the forward thrust of the arm with its head lying at her fingertips.

Statuette HM 64

Statuette HM 64 is comprised of a well-preserved skirt with the lower part of a striped bodice and a disassociated arm, HM 66, that Evans attributed to it, based on its size (Figs. 1 right and 2; Evans 1902/3, 79–80, 92, fig. 63; also Panagiotaki 1993, 58–89, fig. B; 2:c above). I had reconstructed it digitally, to scale, based on the size and shape of that of the upper part of HM 63 and the similar striped motif on the bodice of HM 65 (Jones 2016, 104–109, fig. 8.14). Preserved from the sleeve edge to the fingers, the arm is virtually identical to that of HM 63 in its outstretched position with locked elbow and slithering snake (Fig. 2). A bit less curvy, the snake is preserved from the sleeve band to the hand where it lies across the knuckles of the figurine's clenched hand. Evans (1902/3, 79–80), described the arm as having, "the tail section of a

spotted snake curving along it. The end of this is held in the clenched hand and a bracelet is visible about the wrist." Later, Marina Panagiotaki (1999, 98–101) described it as "the snake's head passes into the oddly truncated hand, which is partly closed with only the thumb properly distinguishable." Based on her description and the fact that there are no snakes indicated on the preserved part of her bodice and the belt both in front and back, I restored the snake as continuing over her shoulder to her back and ending at the break at the sleeve band. I restored the other arm as a mirror image, resulting in the figure holding two snakes with heads in fists (Jones 2016, 108, fig. 8.14).

Fig. 2: Faience left arm from Knossos, HM 66 (photos by Ch. Papanikolopoulos, courtesy INSTAP-SCEC and Heraklion Archaeological Museum, Hellenistic Ministry of Culture and Sports).

While focusing on gestures for this paper, I took a closer look at the knuckles and snake of HM 66 (Fig. 2). I realized then with Evans, that there is no discernible snake's head there, in contrast to what Panagiotaki suggested. The tail of the snake simply lies across her knuckles at front, around the side and ends at the back.

This important observation of the snake's tail in the preserved left hand of HM 64 necessitated a new reconstruction of HM 64's right hand to hold the snake's head and to have her hold one snake instead of two. As it turns out the same situation existed with HM 63 with her purple-colored snake, albeit their opposite arms are preserved. Thus, the right arm of HM 63 is preserved with the snake's head whereas the left arm with the tail of the snake is preserved on HM 64. HM 63's preserved right hand holds the head of a snake whose body winds over her shoulder and down her back to rise up on the other shoulder over to her left sleeve. Evans reconstructed HM 63's missing left arm and hand to hold its tail in front and its body at back to curve around her buttocks. In order to reconstruct HM 64's snakes, I based her snake's head and hand on the preserved one of HM 63 and followed its body around her shoulders to the back. I performed two experiments to deal with the snake at her back. Experiment 1 follows the snake at the back

Fig. 3: Digital reconstructions of upper parts of faience statuette from Knossos, HM 64 with HM 66, front (a), back (b) and side (c) views by C. Mao and B. Jones (photos by Ch. Papanikolopoulos; courtesy INSTAP-SCEC and Heraklion Archaeological Museum, Hellenic Ministry of Culture and Sports).

Fig. 4: Digital reconstructions of upper parts of faience statuette from Knossos, HM 64 with HM 66, front (a), back (b) and side (c) views by C. Mao and B. Jones (photos by Ch. Papanikolopoulos; courtesy INSTAP-SCEC and Heraklion Archaeological Museum, Hellenic Ministry of Culture and Sports).

Fig. 5: Cretan cat snake, Telescopus Fallax *(after Sakoulis 2008, 31).*

of HM 63 but curves the snake across the small of HM 64's back, under her long hair, because there are no snakes indicated on her preserved belt and skirt (Fig. 3). Experiment 2 offers an alternative at the back by having the snake move across her shoulders and over her hair (Fig. 4). Thus, the gestures of statuettes HM 63 and HM 64 are virtually identical. Both figures gesture with snakes coiled around arms pointing diagonally forward.

A close look at the snakes on HM 63 and arm HM 66 (restored to HM 64) reveals the same mottled spotted markings that indicate the same species of snake. Luckily, the species is easily found, even close to Knossos today, namely the Cretan cat snake (*Telescopus Fallax*), that is marked with the same mottled spots (Fig. 5; Sakoulis 2008, 31). It is the only Cretan snake with venom although the poison, effective on small creatures and lizards, is too weak to significantly affect humans. Nevertheless, the intensity of the stance of the figures, the wide-eyed gaze inherent in the preserved right eye of HM 63, their locked arms, outstretched in front of them with snakes pointed forward surely are not weak, neutral gestures. Lacking parallels in the Aegean and Near East for earlier or contemporary snake wielding figures, we turn to Egypt where snakes are ubiquitous, particularly the cobra, frequently portrayed on headgear as on the diadem of Princess Sit-Hathor-Yunet, daughter of Sesostris II (Aldred 1971, pl. 20; on the Uraeus see Johnson 1990, 5–28). Evans had already connected the restored snake head on HM 63 with the Uraeus on the heads of Egyptian divinities and regarded the Snake Goddesses as taken over from the service of Hathor. He further connected them with the cave of the Goddess of Childbirth, Eileithyia at Amnissos and others. He concluded that the faience figurines' snakes associated them with a chthonic cult (Evans 1902/3, 84–88; 1921, 500).

The rearing Egyptian cobra is a female divine force with powers against the enemies of the pharaoh and malevolent demons (Weingarten 2015, 187). It is in the Middle Kingdom that well over twenty images of a figure labeled ('s3w'), "the one who protects", appear (Wegner 2009, fig. 10; Weingarten 2015, 183, fig. 2a). She is identified as Beset the female counterpart of Bes. Among the finest representations of the Egyptian lioness demon Beset, is the wooden one with moveable arms that hold a bronze cobra in each hand with tail facing backward and head forward (Fig. 6; Quibell 1898, 3, pl. III, no. 12). The 13th Dynasty statuette was discovered along with a magician's box in a shaft beneath the storeroom at the Ramesseum at Thebes, near the reign of Sobekhotep III dated either 1740 or 1700 BC. In the box was a papyrus with a medical magical text with a collection of spells connected with

Fig. 6: Wooden statuette of Beset, MM 1790, from Thebes. Views of front, front with arms raised digitally by author, and rear (credit Manchester Museum, University of Manchester).

pregnancy, childbirth and the protection of young children, all part of the role of Beset (Quibell 1898, 3, pl. III, no. 12; Weingarten 2015, 185 with bibliography). Beset and her snakes are the only parallels for our faience figurines, although they differ in that HM 63 and HM 64 hold only one snake in their hands.

Beset's arrival on Crete was documented in 2015 by Judith Weingarten who discovered a Minoanized Beset on contemporary MM II seals from Petras and Malia with humanoid faces and lion ears (Weingarten 2015, 189–192, figs. 1 and 5). Dated by Weingarten to the end of MM II B (ca. 1700–1650 BCE), the Petras example wears a short skirt covering her abdomen. Weingarten identified a snake's head at her left armpit with its body descending below it. The Malia example, dated earlier in MM II, squats in the universal birth-giving position on one side of the prism seal, another side depicts a lion or dog), and the third side portrays her snakes flanking a pithos as if protecting its contents. Both have their arms upraised in the Mistress of Animals gesture, although here with their frontal pose, Weingarten rightly emphasized, they are apotropaic.

Weingarten further pointed out the greater apotropaic effect of the raising of the movable arms of the wooden Beset in front of her in protection with the head of the snake in front. Although Weingarten correctly notes that the Middle Minoan "naked frontal female demon leaves no enduring mark on Minoan art or cult", and wonders whether the Temple Repository figurines "hark back to the snake – handling skills of imported Beset?" (Weingarten 2015, 193, n. 13; see also Witcombe 2000 who already likened the moveable arms of Beset with the gestures of the Minoan snake goddesses).

In answer to this, I would like to suggest that since the Minoans already had their own goddess of childbirth, historical Eileithyia, who had a cave at Amnissos since the Neolithic period (*Odyssey* XIX, 188; Nilsson 1950, 518, n. 36), and another at Inatos dated to before 2000 BC (Kanta and Davaras 2011), she took precedence over images of the imported demon Beset. Indeed, it is not until the 7th–6th century BC that faience figurines of the Egyptian god Bes, the male equivalent of Beset appear in the cave at Inatos (Kanta and Davaras 2011, 179). Thus, I propose that we consider that the Minoan ancestor of Eileithyia may have adopted Beset's apotropaic snakes and may be alluded to in faience figurines HM 64 and 63 from Knossos.

Further, on a Linear B tablet dated to LM III A from Knossos, KN Od (2) 714, 715, a Mycenaean scribe recorded wool offerings to *e-re-u-ti-ja* of Amnissos, the Cretan cave where she was worshipped from Neolithic through Classical times (Fig. 13; Chadwick et al. 1986, 271–272; Boloti 2018, 89–90, fig. 3, 98, n. 5, Hiller 1992, 40, 49–50). This was one of four tablets listing *e-re-u-ti-ja*. Tablet KN 206=Gg705 shows her as the recipient of a jar of honey at Amnissos (Hiller 1992, 49–50; Rougement 2005, 332, 365–366; Weilhartner, 2005, 100–102, 183; Ventris and Chadwick 1973, 127, 310). John Killen interpreted the wool as an expression of gratitude of female weavers to Eileithyia, the historical goddess of childbirth, for successful delivery in childbirth (Killen 1964, 1–15; Boloti 2018, 98, n. 5; Weilhartner 2005, 64, n. 136). Is it indeed possible then, that the Mycenaeans at Knossos adopted the Minoan name of the goddess and that the snake wielding figurines from Knossos were indeed *e-re-u-ti-ja,* the Minoan goddess of childbirth? Walter Burkert (1985, 26) believes that Eileithyia was at least a partial continuity from Minoan to Greek. Pausanias (6.19.2), in the 2nd century AD, documents the cult of Eileithyia throughout the Greek world including the sanctuary of Olympian Eileithyia in Elis. There, her infant son Sosipolis, who turned into a snake and frightened off the Arcadian army is worshipped as savior of the state. Although it is a very far cry from the 2nd century AD to the Minoan figurines, Andras Zeke (2010) finds it tempting to connect the two and believes that the association of snakes with childbirth seems a genuinely Minoan concept. But, as we have seen, it was initially an Egyptian concept with Beset who arrived with her snakes on Crete, where I propose that they were adopted by the Minoan goddess of childbirth.

I believe that if there are threads that connect Olympian Eileithyia to the Minoan goddess, one, of course, is that both are the goddess of childbirth, another of equal importance, especially for our topic is that Eileithyia's snake/son at Olympia was apotropaic, that he warded off her ene-

mies, the Arcadian army. This goes hand in hand, as it were, with the apotropaic nature and gestures of our Minoan figurines as the goddess *e-re-u-ti-ja* who, I propose, thrusts the heads of the serpents forward to spit their venom and odorous fluid at the evil demons that threaten pregnant women and newborns.

Statuette HM 65

When we turn to statuette HM 65, we are confronted with a multitude of problems. Although also made of faience and proportionately similar to HM 64 and HM 63, it is much different. By contrast, it is around one third smaller, it wears a flounced skirt, and its gesture with forearms extended laterally, elbows bent and forearms raised is that of a Mistress of Plants and Animals. In its preserved right hand it holds part of a curved object decorated in a spiraling stripe that Evans restored as a snake. In the case of this figure it is essential to include its attribute and headdress under the aegis of gesture. We begin by reviewing its preservation and the stages in which Evans published its reconstruction.

History of Evans' Publication of HM 65

Fig. 7 illustrates its earliest publication at the top row, A–B (Evans 1902/3, figs. 56, 83); to its next publication 18 years later in the center row, C–F (Evans 1921, figs. 360, 377, 362); to its final publication, 9 years later, at the bottom row, G (Evans 1930, fig. 306). The statuette was found with it body largely preserved wearing a flounced skirt costume and holding a curved object above the wrist in its raised right hand. The figure was missing its head, missing its left forearm and missing the lower part of the object under its right wrist. When first published (Fig. 7 A–B), Evans interpreted the curved object preserved in its right hand as a snake's tail and already created the front of a snake beneath her wrist. It is only in the drawing (Fig. 7 E–F) that
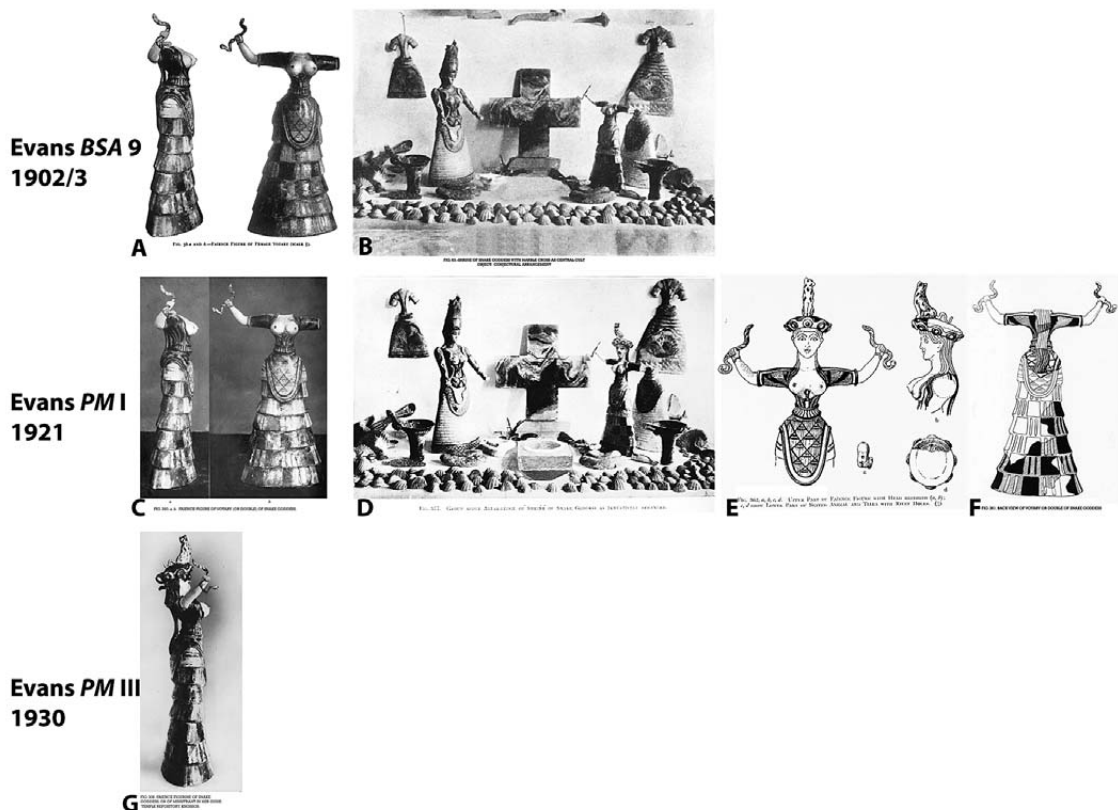

Fig. 7: Chronological publications of statuette HM 65 by A. Evans (after Evans 1902/3, figs. 56, 63; 1921, figs. 360, 377, 362, 361; 1930, fig. 306).

Evans drew the missing parts in lighter lines. The drawing of the back view of the figurine also reveals that the figure had long hair (Fig. 7 F). Some clarifications of Evans' reconstructions are given in the radiography published by Walter Müller (2003, pl. XXXV a–b). It clearly reveals the wires that Evans used to restore the figure's left forearm with its snake and the front of the "snake" held in her right wrist. The only authentic element is the curved striped one above the right hand that Evans interpreted as the tail of a snake. The radiography however, is unable to distinguish ancient faience from modern plaster so the modern head is indistinguishable from the ancient torso as is the curved snake tail in the figure's right hand.

Headdress

Because the feline atop the crown is omitted in the radiography and not discussed by Müller, I would like to take this opportunity to evaluate the headdress, which as Diane Boze (2016, 18) correctly observed, "should receive more scrutiny and scepticism than it usually does". I have thus gathered Evans' descriptions of the headgear in chronological order:

a) Evans 1902/3, 78: "The … Votary had unfortunately lost its head, and it is doubtful whether it was surmounted by a tiara like the Goddess." (Fig. 7 A–B)

b) Evans 1921, 503–504: "This votary … in its headless state, was eventually found capable of complete restoration. Part of a headpiece had already been brought into connexion with it, showing a series of raised medallions, forming perhaps a conventional rendering of an original crown of roses. A small circular rivet hole on the flat upper surface of this (see fig. 362 d [here Fig. 7 E.d]) was further found to answer to a similar feature on the base of a miniature lioness or spotted pard from the same Repository[1] suggesting the almost certain restoration seen in fig. 362 a–b [here Fig. 7 E]."

c) Undated notes, obviously after 1903: "Bagge restores with other snake on missing arm & tiara on head" (Panagiotaki 1993, 56–57).

d) Evans 1930, 440: "… the faience statuette – from the Temple Repository at Knossos, here for the first time reproduced in Fig. 306 as fully restored, with the pard seated on the crown of the head."

Fig. 8: Faience statuette, HM 65, from Knossos altered by author (courtesy Heraklion Archaeological Museum, Hellenic Ministry of Culture and Sports).

In sum, headless in its earliest publication (Fig. 7 A–B), the figure's headdress creation is first published a full nineteen years later (Fig. 7 C–E). At that time, Evans attributed the reconstructions to Halvor Bagge, the creator of the snake front and said that the feline was found in the Temple Repository and that a headpiece fragment was brought into connection with it. The vague description does not even mention its material. Was it faience? The curved fragment with three medal-

---

[1] "This observation was first made by the artist, Mr. Halvor Bagge, to whom the restored drawing in Fig. 362 is due." See Fig. 7 E for Bagge's drawing. Evans 1921, 518, Fig. 377 [7 D]), also published a photo of the recreated head and snake head in a montage of the Temple Reposi-

tory finds. Except for the additions of the Votary's head and snake and object in front of the cross, the photo is virtually identical, even to the shadows, with the one published in Evans 1903, 92, Fig. 63 (Fig. 7 B).

Fig. 9: (A) Terracotta head from Petsofas, HM 4842; (B) head of statuette HM 65 from Knossos, detail (photos by Ch. Papanikolopoulos; courtesy INSTAP-SCEC and Heraklion Archaeological Museum, Hellenic Ministry of Culture and Sports).

lions in front and a dowel hole as seen in the drawing (Fig. 7 E, b–d), is interpreted as the front of a crown with the rest recreated. The feline was said to fit directly into it. Bagge's 1921 drawing shows a wavy tail on the feline, missing in the 1921 photo at center (Fig. 7 D) but present in the 1930 photo in the bottom row (Fig. 7 G). There is no tail today. Because neither the headpiece fragment nor the feline was mentioned by Evans or Duncan Mackenzie in their earlier notes and descriptions of the finds from the Temple Repositories (Mackenzie 1903), both are highly suspect, and were thus removed (Fig. 8).

I would like, however, to propose a possible prototype for Evans' headdress. A terracotta head from Petsophas, published by John Myres in the same *BSA* volume as Evans's publication of HM 65 (Myers 1902/3, pl. XI, top row second from left; Evans 1902/3, fig. 56), was likely known to Evans. With its brim decorated with roundels, the Petsophas crown (Fig. 9 A) bears a striking resemblance to Evans' headdress (Fig. 9 B). The Petsophas example interestingly has three roundels decorating the front, one at the center with two flanking it, none at the back. Evans' so-called preserved crown fragment has three similar roundels in the front, one at the center with two flanking it. The rest he added and illustrated with lighter lines as additions (Fig. 7 E). The Petsophas crown, moreover, has a crudely carved object at its top thought to be a plume by Myers (1902/3, 371–372) and a handle by Bogdan Rutkowski (1991, 89). Whether Evans interpreted it as a couchant animal that led to his feline invention we will never know.

Hairlocks

Careful scrutiny of the figure shows thick raised stripe-like elements next to the thin slightly raised stripes at the front edges of her bodice (Fig. 10 A marked with X). These are differentiated from the flat stripes that pattern her bodice. They are identifiable as the lower part of hairlocks that were in front of her ears, similar to those on the Dancing Girl Fresco from Knossos (Jones 2015, fig. 6.28). Thus, I have added them in front of the ears of the figure's modern head and connected them to where they lie preserved on her bodice (Fig. 10 B). These and the long tresses at her back that descend to her buttocks (Fig. 7 F), must have emanated from hair on top of her head which I have restored (Fig. 8).

250

Fig. 10. (A) Right and left side views of the upper parts of statuette HM 65 with hairlocks marked with X and arrows pointing to a repair/break. (B) right and left side views of the upper parts of statuette HM 65 with hairlocks in front of ears restored by B. Jones (photos by Ch. Papanikolopoulos; courtesy INSTAP-SCEC and Heraklion Archaeological Museum, Hellenic Ministry of Culture and Sports).
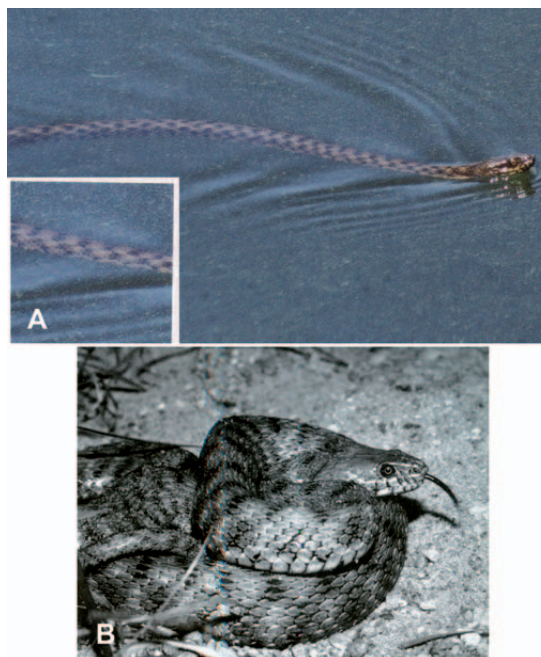
Fig. 11: Dice snake (Natrix tessellate). (A) after Sakoulis 2008, 30; (B) after Mattison 1992, pl. 85.

Attributes

Snake

Evans interpreted the curved object with spiraling stripes held above the figure's right fist as the tail part of a snake and added below the fist its extended body and head, thus creating a creature held upside down (Fig. 10; Jones 2016, 94). This is opposite from the usual depictions of animals held upright by Mistresses of Animals and Plants (Jones 2016, 95–96). Close inspection of the object reveals what looks like a break just above the curve (Fig. 10 A, marked with arrows). The surface from the hand to the 'break' is rough, whereas it is smooth above the 'break' to the rounded tip. One therefore wonders whether the smooth 'tail' was also created by Evans, prompting me to 'ghost' it in my reconstruction (Fig. 8).

Nevertheless, if HM 65's attributes are striped snakes, to what species do they belong? The dice snake (*Natrix tessellate*) is indigenous to Crete and although it has checkerboard markings, when it is seen from above it somewhat resembles the bands on HM 65 (Fig. 11 A: Sakoulis 2008, 30; Fig. 11 B: Mattison 1992, 153, pl. 85). It is, by no means, a perfect parallel as the Cretan cat snake (*Telescopus Fallax*) is to HM 63 and HM 64.

The Egyptian banded cobra (*Naja Annulifera*) comes to mind in association with Beset but that snake is indigenous to Southern Africa (https://en.wikipedia.org/wiki/Snouted_cobra), not Egypt where the cobras are not banded, and thus unlikely to have reached Crete. Thinking that the 'snake' of HM 65 has a "paddle-shaped tail", Anne Chapin and Marie Pareja (2020, 219) have compared it with the bands and paddle-tails of the yellow-lipped sea krait (*Laticauda Colubrina*) and Persian Gulf sea snake (*Hydrophis Lapemoides*). However, their habitats are even much further afield in the Indian and Western Pacific Ocean, and, as the authors admit, would be "an intrepid traveler" that found "its way to the Aegean as an exotic import."

Fig. 12: Sealing from Ugarit, R. S. 9.889 (after Schaeffer 1983, 37).

Fig. 13: Gold finial on silver pin from Shaft Grave III, Mycenae (courtesy National Archaeological Museum, Athens).

Despite all of these problems, there is no way of dismissing the possibility of Evans' snake attribution. Although HM 65's "striped snakes" have no contemporary parallels, conjectured prototypes appear on an EM II figurine from Koumasa (Jones 2015, 14), and two striped snake successors slither on an LH III C anthropomorphic ring rhyton from Tiryns with Minoan prototypes, one from Myrsini-Aspropilia possibly also having a striped snake (Kardamaki et al., 2023, 211, 215). If she wielded snakes, HM 65 would presumably share the iconography of HM 63 and HM 64/ HM 66 discussed above.

Rope and other possibilities
MacGillivray (2000, 223) was the first to question Evans' identification of the striped element as a snake's tail, noting that "no natural snake has peppermint stripes, which should have been well known to Evans, who had played with the reptiles since childhood." He suggested that the figure "held a curling length of twine in her right hand." Lapatin (2002, 62, 87) followed, calling it the head of a "snake" with "candy cane" stripes or grain or necklaces. Dated later and lacking stripes, they are unrelated. Although similarly curved, the king's attribute on a Ugaritic seal (Fig. 12; Schaeffer 1983, 35, 37) lacks stripes and is thus discarded.

Bonney followed MacGillivray's suggestion of rope or cord. She suggested that HM 65's prototype is the U-shaped rope-like object held by the Old Syrian naked goddess that is usually interpreted as a cloak or skirt-lifting gesture meant to expose her sexuality (Bonney 2011, 180, fig. 10 right; Winter 1983, fig. 271). Bonney concurred with early writers who believed that the Syrian naked goddess's U-shaped garment border survived in the double U-shaped object held by the gold female figurine finial on a silver hairpin from Shaft Grave III at Mycenae (hereafter SG finial goddess), dated LH I (Fig. 13: Karo 1930, 54–55, pl. XXX), but became thereon a "ritual decoration" that "lost its meaning" and "represents nothing" (Bonney 2011, 180–181; Holland 1929, 195–196). Bonney stated, "The Votary also likely held 'something like a rope' or a garland, because the artisan, like the goldsmith who made the pin, modified the motif of the goddess opening her skirt. Since Cretan women are never depicted nude, the artist could have felt compelled to clothe the figure completely, thereby obscuring the source for the image" (Bonney 2011, 180–181).

These arguments are untenable for the following reasons. One is that the meaning of any work of art is never lost to the artist. It can and very often is, however, lost to those looking

back through millennia and vast space. Another is that although both the nude Old Syrian goddess and the SG finial goddess gesture with arms extended holding curved tubular objects, their narratives and objects are completely different. The nude old Syrian goddess exposes the front of her body by opening her skirt, indicated by tubular borders, as she holds its corners in her hands so that its upper and/or lower borders curve behind her (Winter 1983, 272–283, figs. 268–295 and more naturalistic renderings on figs. 273 and 297). By contrast, the SG finial goddess is clothed, and her hands overlap the tapered ends of a double tubular object that curves in front of her.
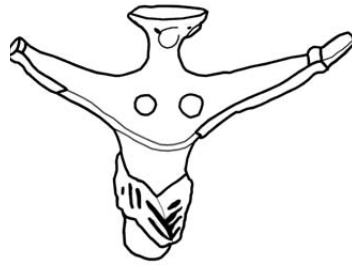

Fig. 14. Terracotta female figurine from Vrysinas, Rethymnon Museum no. 26 (drawing by author).

Fig. 15: Faience statuette from Knossos, HM 65, altered by author (courtesy Heraklion Archaeological Museum, Hellenic Ministry of Culture and Sports).

Although I had previously doubted the rope theory (Jones 2016, 96), an unpublished MM II terracotta female statuette, kindly brought to my attention by Robert Koehl and excavated by Iris Tzachili from the peak sanctuary of Vrysinas, Rethymnon Museum no. 24, provides new evidence that allows us to reconsider Bonney's suggestion that connects HM 65's gesture and attribute with that of the SG finial goddess. With the kind permission of Dr. Tzachili, I describe the statuette as follows and await its full publication and photo, forthcoming in the Vrysinas volumes (Fig. 14). The upper part of the once standing figure is preserved from its flat cap to its wide belt, decorated with diagonal incisions with its right side overlapping its left, a slight part of an underlying skirt and a tenon that would have fit into its otherwise missing skirt. Two round pellets mark its breasts and there is no indication of an upper garment. A blob nose, hollowed eyes, and a flat pellet left ear, mark its features. Both arms and left hand are fully outstretched laterally and slightly raised, spanning a width of 8 cm. With its missing right hand, presumably also extended laterally, it would have reached a span of 8.5 cm. A raised bracelet decorates each wrist. The figure's height from cap to tenon is 5.7 cm and the museum estimates its original height at ca. 8.5 cm, making it among the largest statuettes from the site. Most important for our topic, however, is the undecorated raised tubular object that extends across the figure in a crescent-shaped curve from one hand to the other, a prototype for that of the SG finial goddess and possibly for HM 65. The object abuts and follows the curves of the figure from one hand to the other except for a missing part, curved across and beneath the breasts, indicated by a white u-shaped stripe. The raised part extends from over the bracelets to below the armpit at the torso on the figure's left side and to the elbow area on its right. The white curved stripe marks the line across the chest where the object once was. Although the raised part is not preserved beyond the bracelet, a line that extends to the end of the figure's left hand suggests that it once existed there. Nevertheless, it provides a fine, albeit single prototype for the double tubular object held with overlapping hands by the SG finial goddess. It also offers some degree of confidence for something similar held by HM 65, although clenched in her hands. Thus, to envision the possibility of HM 65 holding a single object, I have reconstructed it accordingly and ghosted the ques-

tionable tip of the object (Fig. 15). Buttressing this evidence is that the surface of HM 65's apron was broken and repaired, missing its cross-hatched decoration, exactly where the tubular object lands (Figs. 8, 15), suggesting that it was broken away from it.

That the SG finial goddess and HM 65 shared a similar attribute would be fitting since they have everything in common except for the apron. They are proportionately similar and take the same upright stance. They wear the same Minoan heanos and flounced skirt costume. Both skirts have seven flounces. They, alone in the Aegean, wear flounces decorated with the distinct "metope and triglyph" pattern, that is, alternating triple striped and plain blocks of cloth (Jones 2015, 168–171). The pattern, particular to Syrian deities as the goddess on an old Syrian seal from Ugarit, c. 1900–1750 (Fig. 12; Schaeffer 1983, 34–37) and the god on an Old Syrian seal (Jones 2015, fig. 5.21 a–b), was ultimately adopted by the Minoans and identify the wearers as divinities or priestesses. Both have hair cascading down their backs reminiscent of Mesopotamian coiffures (Babcock and Tamur 2022, 170–173, 219). Both gesture with arms outstretched laterally from the shoulders. Most important for our topic are their comparable attributes, tubular with similar designs: stripes painted on HM 65 and incised on the pin figure.

What these attributes are remains a mystery. Tzachili believes that the Vrysinas object is a snake while her collaborators interpret it as a belt (Pers. comm. 23 Sept. 2023). Without its ends preserved however, its identity remains an open question. The SG finial goddess's attribute has been interpreted by Karo as a double chain or garland (Karo 1930, 54–55, pl. XXX). With its tapered tips, it is clearly not a snake. Because her headdress that comprises papyrus plants sprouting from volutes appears to mark her as a vegetation goddess, we might consider that her double attribute is related to papyrus. Indeed, recent evidence proves that ropes from the 12th dynasty "Rope Cave" at Mersa/Wadi

Fig. 16. The left sphinx of the Sphinx Gate, Hattusa, Turkey, detail (photo by Bernard Gagnon, CC BY-SA 3.0, via Wikimedia Commons: https://commons.wikimedia.org/wiki/File:Sphinx_Gate,_Hattusa_03.jpg).

Gawass were made of papyrus so strong that they were used in ship building (Borojevic and Mountain 2011, 131–141). Thus, I would like to suggest that she holds a double rope made of papyrus. In this reading, the SG finial goddess with her papyrus headdress holding papyrus ropes compares well with other vegetation goddesses such as the one from Xeste 3, Thera who holds saffron and is seated in a field of saffron crocuses, and the goddess on the Mochlos pyxis who is seated by an olive tree and appears to hold an olive branch as I have argued (Jones 2023, 484).

Furthermore, if HM 65's attribute was a rope that echoed both the Vrysinas figurine and those of the SG finial goddess we should consider their corresponding headdresses for HM 65. If, on the one hand, she follows the Vrysinas figurine, HM 65 could have worn a flat cap, which brings us back to Evans' recreated headdress, possibly dependent on the one from Petsofas (Fig. 9). If, on the other hand, she wore a papyrus/volute headdress as the SG finial goddess, we might consider that she wore a similar crown, simplified here with only three vertical papyrus stalks emerging from the volutes, although lateral ones are also possible (Fig. 15). The Ugaritic goddess, already likened in her flounced garment to that of the SG finial goddess and to HM 65, also shares a volute attribute in the stylized tree in front of her. The volute crown also appears a bit later, on the Sphinx from Bogazköy (Fig. 16; Orthmann 1975, pl. 338 a, c. 1400–1200).

Conclusion

In sum, the paper provides new evidence that the gesture and attribute of statuettes HM 64/ HM 66 and HM 63 are the same: both hold a single snake with tail and head in each hand. As a result, it presents a new reconstruction of HM 64/HM 66. With identical mottled markings, the snakes are identifiable as the indigenous Cretan cat snake (*Telescopus Fallax*). Based on the presence of Egyptian snake wielding Beset on Crete and her iconography, it suggests that they are possibly the Minoan precursors of Eileithyia, the historical goddess of childbirth. Indeed, Geraldine Gesell (1985, 43–44, fig. 43) noted descendants of HM 63, especially in the statuette from Kannia (ca. LM III B?) with snakes slithering on both arms and on her tiara.

For statuette HM 65, the paper has evaluated the evidence for its gesture with Evans's snake attribute and has pointed out problems with its possibly restored tip, for its headdress, and for finding ancient and live parallels for the striped "serpent". It has discovered evidence for it having hairlocks in front of its ears. It has considered several scholars' alternative suggestions for the figure holding a rope instead of a snake. It has explored and connected it to its nearest relative, the SG finial goddess and has identified that figurine's tubular striped attribute as a double rope made of papyrus that echoes the material of its volute/papyrus crown. Indeed, Nanno Marinatos (2023, 77–85) has associated the huge depictions of papyrus volutes (called waz, sacred to the Egyptian goddess Wazet, by Evans) on Thera with the Thera goddess. It has carried the idea of HM 65 holding a single object, a rope in both hands to its ultimate end in a reconstruction based on a prototype from Vrysinas and primarily on the papyrus goddess on the Shaft Grave finial. In the end, both conclusions are possible and are open for consideration. I look forward to new evidence appearing in the future to shed more light on this subject.

Acknowledgments

References

Aldred, C. 1971. *Jewels of the pharaohs: Egyptian jewelry of the Dynastic period.* London: Thames and Hudson.

Babcock, S., and E. Tamur. 2022. *She who Wrote: Enheduanna and women of Mesopotamia, ca. 3400–2000 BC.* New York: Morgan Library & Museum.

Boloti, T. 2018. "Offering of cloth/clothing and wool to divinities: the Linear B data." *Arachne* 5: 88–99.

Bonney, E. M. 2011. "Disarming the Snake Goddess: a reconsideration of the faience figurines from the Temple Repositories at Knossos." *JMA* 24: 2: 171–190.

Boze, D. 2016. "Creating history by re-creating the Minoan Snake Goddess." *Journal of Art Historiography* 15: 1–31.

Burkert, W. 1985. *Greek religion.* Cambridge: Harvard University Press.

Chadwick, J., L. Godart, J. T. Killen, J.-P. Olivier, A. Sacconi, and I. A. Sakellarakis. 1986. *Corpus of Mycenaean Inscriptions from Knossos* 1. Cambridge: Cambridge University Press; Rome: Edizioni dell'Ateneo.

Chapin, A., and M. Pareja. 2020. "Peacock or poppycock?" In *Neôteros. Studies in Bronze Age Aegean art and archaeology in honor of Professor John G. Younger,* edited by B. Davis and R. Laffineur, 215–225. *Aegaeum* 44. Leuven and Liège: Peeters.

Evans, A. J. 1902/3. "The Palace of Knossos. Provisional report for the year 1903." *BSA* 9: 1–153.

Evans, A. 1921. *The Palace of Minos at Knossos,* Vol. I. London: Macmillan.

Evans, A. 1930. *The Palace of Minos at Knossos,* Vol. III. London: Macmillan.

Frankfort, H. 1954. *The art and architecture of the Ancient Orient.* London and Baltimore: Penguin Books.

Gesell, G. C. 1985. *Town, palace, and house cult in Minoan Crete. SIMA* 67. Göteborg: Astroms Förlag.

Goodison, L., and C. Morris. 1998. *Ancient goddesses: the myths and the evidence.* Madison: University of Wisconsin Press.

Higgins, R. 1979. *The Aegina Treasure: an archaeological mystery.* London: British Museum Publications Ltd.

Hiller, S. 1992. "Amnisos in den Tontafelarchiven von Knosos. Neolithikum und Bronzezeit." In *Amnisos: Nach den archäologischen, historischen und epigraphischen Zeugnissen des Altertums und der Neuzeit,* edited by J. Schäfer, 18–50. Berlin: Gebr. Mann Verlag.

Holland, L. B. 1929. "Mycenaean plumes." *AJA* 33: 173–205.

Jones, B. 2001. "The Minoan Snake Goddess: new interpretations of her costume and identity." In *Potnia: deities and religion in the Aegean Bronze Age. Proceedings of the 8th International Aegean Conference, Göteborg, Göteborg University, 12–15 April 2000,* edited by R. Laffineur and R. Hägg, 259–269, *Aegaeum* 22. Liège and Austin: Université de Liège and University of Texas.

Jones, B. R. 2015. *Ariadne's threads: the construction and significance of clothes in the Aegean Bronze Age.* Leuven and Liège: Peeters.

Jones, B. R. 2016. "The three Minoan 'Snake Goddesses'." In *Studies in Aegean art and culture: a New York Aegean Bronze Age colloquium in memory of Ellen N. Davis,* edited by R. Koehl, 93–112. Philadelphia: INSTAP Press.

Kanta, A., and K. Davaras 2011. *The sacred cave of Eileithyia in Tsoutsouros.* Heraklion.

Kardamaki, E., M. Kostoula, J. Maran, and A. Papadimitriou. 2023. "The Creature of the Rings: An unusual jug rhyton from LH III C Tiryns." In *Processions: Bronze Age ceremonial studies presented to Robert B. Koehl,* edited by J. Weingarten, C. Macdonald, J. Aruz, L. Fabian, and N. Kumar, 203–221. Oxford: Archaeopress.

Karo, G. 1930: *Die Schachtgräber von Mykenai.* Munich.

Killen, J. T. 1964. "The wool industry of Crete in the Late Bronze Age." *BSA* 59: 1–15.

Koehl, R. 2006. *Aegean Bronze Age rhyta.* Philadelphia: INSTAP Academic Press.

Lapatin, K. 2002. *Mysteries of the Snake Goddess: art, desire, and the forging of history.* Cambridge: Cambridge University Press.

Levi, D. 1976. *Festòs e la civiltà minoica.* Rome: Edizioni dell'Ateneo.

MacGillivray, J. A. 2000. *Minotaur: Sir Arthur Evans and the archaeology of the Minoan myth.* New York: Hill and Wang.

Mackenzie, D. 1903. *Day-book of the excavations at Knossos for 1901–1903,* II, Ashmolean Museum Microform, University of Virginia.

McLaren, J. 2005. "The snakes of Crete." *Crete Gazette.* https://www.cretegazette.com/archive/2005-11-snakes/.

Marinatos, N. 2018. "The waz-spirals of Xeste 3, Thera: regeneration and solar symbolism." In *Χρωστήρες / Paintbrushes: Wall-Painting and Vase-Painting of the Second Millennium BC in Dialogue. Proceedings of the International Conference on Aegean Iconography Held at Akrotiri, Thera, 24–26 May 2013,* edited by A. G. Vlachopoulos, 77–85. Athens: University of Ioannina/Hellenic Ministry of Culture and Sports-Archaeological Receipts Fund.

Mattison, C. 1992. *Snakes of the world.* London: Wellington House.

Müller, V. 1917. *Die monumentale Architektur der Chatti von Boghaz-Köi. AM* 37: 7–170.

Müller, W. 2003. "Minoan works of art – seen with penetrating eyes: X-Ray testing of gold, pottery and faience." In *METRON. Measuring the Aegean Bronze Age. Proceedings of the 9th International Aegean Conference, New Haven, Yale University, 18–21 April 2002,* edited by R. Laffineur and K. Foster, 147–154. *Aegaeum* 24. Liège and Austin: Université de Liège and University of Texas.

Myres, J. L. 1902/3. "Excavations at Palaikastro, II: the sanctuary site of Petsofa." *BSA* 9: 356–386.

Nilsson, M. P. 1950. *The Minoan-Mycenaean religion and its survival in Greek religion.* Lund: Glerup.

Panagiotaki, M. 1993: "The Temple Repositories of Knossos: new information from the unpublished notes of Sir Arthur Evans." *BSA* 88: 49–91.

Panagiotaki, M. 1999. *The Central Palace Sanctuary at Knossos.* London: The British School at Athens.

Quibell, J. E. 1898. The Ramesseum. *Egyptian Research Account* 2. London: B. Quaritch.

Rougement, F. 2005. "Les noms des dieux dans les tablettes inscrites en Linéaire B." In *Nommer les dieux. Theonymes, épithètes, épiclèses dans l'antiquité,* edited by N. Belayche, P. Brulé, G. Freyburger, Y. Lehmann, L. Pernot, and F. Prost, 325–388. Turnhout: Brepols.

Rutkowski, B. 1991. *Petsofas: A Cretan peak sanctuary.* Warsaw: Art and Archaeology.

Sakoulis, A. 2008. *Amphibians, reptiles and mammals of Crete.* Heraklion: Mystis.

Schaeffer, C. F.-A. 1983. *Corpus des Cylindres-Sceaux de Ras Shamra-Ugarit et d'Enkomi-Alasia.* Paris: Éditions Recherche sur les Civilisations.

Velsink, J. G. 2016. "Two Minoan moulds for small cult objects reconsidered." *BABesch* 91: 17–27.

Ventris, M., and J. Chadwick. 1973. *Documents in Mycenaean Greek.* 2nd ed. London: Cambridge University Press.

Wegner, J. 2009. "A decorated birth-brick from South Abydos: New evidence on childbirth and birth magic in the Middle Kingdom." In *Archaism and innovation: studies in the culture of Middle Kingdom Egypt,* edited by D. P. Silverman, W. K. Simpson, and J. Wegner, 447–496. New Haven and Philadelphia: Yale University and Philadelphia University Museum.

Weilhartner, J. 2005. *Mykenische Opfergaben nach Aussage der Linear B-Texte.* Vienna: Verlag der Österreichischen Akademie der Wissenschaften.

Weingarten, J. 2015. "The arrival of Bes[et] on Middle-Minoan Crete." In *There and back again – the crossroads II. Proceedings of an international conference held in Prague, September 15–18, 2014, edited by* J. Mynářová, P. Onderka, and P. Pavúk, 181–196. Prague, Charles University of Prague.

Witcomb, C. L. C. E. 2000. "Women in the Aegean: Minoan Snake Goddess. 8. Snakes, Egypt, Magic & Women." http://arthistoryresources.net/snakegoddess/snakesegypt.html.

Zeke, A. 2010. "Goddess Eileithyia and her snakes." In *Minoan Language Blog,* Wednesday, September 29, 2010. https://minoablog.blogspot.com/2010/09/goddess-eileithyia-and-her-snakes.html.

Did the Goddess with Upraised Arms Have a Bench Shrine in the Inatos Cave?

Philip P. Betancourt

Abstract   *The arm gesture of the figure conventionally known as the Goddess with Upraised Arms creates one of the most striking poses in Late Bronze Age Cretan art. The arm placement is the most recognizable feature for a group of female figurines found primarily in bench shrines from settlements dated from LM III B to LM III C. New information on this dynamic female gesture comes from the figurines excavated from the cave shrine of Eileithyia at Inatos, in south-central Crete. The new information is available because the objects from the shrine, excavated over 50 years ago by Nikolaos Platon and Costis Davaras, are now being studied in detail in preparation for publication. Among the objects from the shrine are standing female figures with upraised arms, cylindrical stands, kalathoi of the proper size to fit on the stands, and a fragment of a clay plaque with a raised border. These artefacts are the principal objects found in the bench shrines dedicated to this deity.*

Groups of female figurines depicting the Goddess with Upraised Arms can be studied from several Minoan settlements in east Crete and central Crete. The figures are often accompanied by bowls supported on tubular stands called 'snake tubes', and sometimes by clay plaques. The bibliography on this group of shrines and their contents is extensive (Alexiou 1958; Levi 1959, 245–249; Gesell 1976, 1999, 2001, 2004, 2006, 2010; Eliopoulos 1998, 2018; Day et al. 2006; D'Agata and Van de Moortel, eds., 2009; Day 2009; Tsipopoulou 2009; Gaignerot-Driessen 2014, 2016). The most important sites are Gazi, Gournia, Kannia, Kavousi, Kephala Vasiliki, Karphi, and Chalasmenos, and additional discoveries, including figurines or snake tubes, also come from Kommos (Shaw 1996), Knossos (Hallager 2009, 113), and Kephala Chondrou (Gesell 1985, 42; Platon 1997). Broken fragments of Goddesses have been noted from Karphi, Chania, Kommos, Agia Triada, Juktas, Chamalevri, Kipia/Kalamafki, Agios Ioannis, and Ephendi Christos (for individual references, see Hallager 2009, 208–209).

The arm gesture for the Goddess with Upraised Arms is the essential part of the female figure's posture, but the stance is canonical as well, creating a compelling pose. The figure always stands frontally. The skirt is cylindrical, and in the principal clay figures it is manufactured on a potter's wheel. The entire body, like the head, faces directly to the front. The upper parts of the arms extend horizontally either toward the sides or diagonally toward the front with the elbows bent and the hands raised. The hands are open with the fingers extended to point upwards. The palms can face forward (Tsipopoulou 2009, 125) or they can be turned sideways so that the small finger is forward (Zervos 1956, figs. 805–806) or the hands can be different using both positions (Zervos 1956, figs. 767, 804). The face is neutral without any emotion, and the hair is usually long.

Great variety exists in the crowns worn by the figurines. This feature can either have the appearance of a hat, or it can be a simple band around the head. Several symbols can be present on the crown, rendered either in relief or rising from the band as plastic attachments (Gesell 1985, 41–54; 2004, 133–144; Marinatos 1993, 225–227; Rethemiotakis 2001, 130–134). Crowns can include snakes (Marinatos and Hirmer 1976, pl. 133), horns of consecration (Zervos 1956, fig. 803), circular disks (Zervos 1956, figs. 804–805), poppies (Zervos 1956, fig. 774), one or more birds (Zervos 1956, figs. 771–773), or items of uncertain identification (Zervos 1956,

Fig. 1: Bench or platform at the north of the Inatos Shrine during excavations in 1962 (after Kanta and Davaras, eds. 2011, 20, fig. 11).

fig. 771). All of these images can be regarded as part of the religious iconography of Late Minoan Crete. The large variety of symbolic attributes suggest that the figure has many aspects.

For the origin of the Cretan gesture, two suggestions have been made. Some writers have proposed an ancestor in a faience figure from the Temple Repositories at Knossos who raises her arms and holds what have identified as snakes (for the figure and its context, see Panagiotaki 1999; for the possible connection to the later images, see Gaignerot-Driessen 2014, 489; for a color image see Marinatos and Hirmer 1976, color pl. XXV). Other writers have preferred an inspiration from figurines with raised arms from the Greek mainland where similar images begin earlier than they do in Crete (Kanta 1998, 51; Karageorghis 2001, 325). Both comparisons are with figurines that occur in religious contexts, strengthening the possibility of the relationships.

The parallel from the Temple Repositories at Knossos is an example of a female figure with raised arms found with many other symbolic objects in a shrine context at the west of the central court at Knossos. Manufactured from faience, it depicts a female figure who wears a flounced skirt and an open bodice and holds two cylindrical items above her head, restored as snakes by analogy with another figurine from the same context who has snakes entwined around her body (Marinatos and Hirmer 1976, pl. 70). The date is MM III to LM I A. The analogy with the later figurines is weakened by the fact that the early figure raises her arms to display the snakes, which is a very different gesture from the act of raising the hands by themselves because in the earlier figurine it is the items that are raised that are on display, not the gesture itself. In addition, the arms on the figurine from Knossos are not straight up: they are near a 45 degree angle. It is a unique example that is near but not exactly the same as the later gesture, and, of course, the artefact was buried and not visible to inspire later generations.

The more likely scenario is that the immediate inspiration for the LM III gesture came from Mycenaean Greece (Kanta 1998, 51–52; Karageorghis 2001, 325). In Mycenaean Greece the 'psi' figurines and larger figures with raised arms begin earlier than in Crete, and Mycenaean influence in LM III is present throughout Crete in many other venues, including the Linear B texts (Chadwick 1976).

The Goddesses with Upraised Arms are mostly associated with bench shrines. The shrines are typically small chambers built within settlements. They are equipped with benches to support the female figurines. Associated cult equipment includes cylindrical stands (often called 'snake tubes') to support conical bowls called kalathoi. Usually, the kalathos is a separate piece, but in a few examples bowl and stand were manufactured as a single object. At Kavousi, the figurines and the cylindrical stands and their kalathoi were made as matched sets (Gesell 1999), a clear proof that they were intended to be used together. Other items in the shrines can include plaques, pithoi, and other vessels. The sharing of similar symbols between different communities suggests that by LM III C the religious elites on the island of Crete had managed to develop a shared ideological belief-system that was focused on common symbolic images.

Because of the ambiguity in the visual style used in Crete at this time, the identification of the female figure or figures represented by these clay sculptures has not been completely obvious. The issue has been discussed in detail by Florence Gaignerot-Driessen (2016, 21–22), who

points out several factors in favor of their identification as worshippers rather than divinity. She makes four key arguments against divinity:

1. Because the Minoans had both male and female deities, and male cult figures are missing, the female ones should be missing also.
2. The symbolic images on the tiaras are extremely varied, and they do not suggest any one specific deity.
3. The clay fabrics, which are similar to those used for cooking pots and storage vessels, are not aesthetic enough for cult images.
4. The appearance of the figurines in groups rather than as single images suggests that they were votives rather than cult images.

These are all valid points, and they properly call attention to the ambiguity present in archaeological material in the absence of sufficient written records to explain what is being portrayed. New information on this issue is now available from the detailed study of the finds from the shrine of Eileithyia in a small natural cavern in south central Crete at modern Tsoutsouros, the ancient settlement of Inatos. This site is particularly pertinent both because it contained benches (Fig. 1) along with four of the artefacts that are regularly present in the bench shrines with the female figures with upraised arms: the female figurines themselves (Figs. 2–3), cylindrical stands of the 'snake tube' class (Fig. 4), kalathoi to place on the stands (Fig. 5), and a plaque (Fig. 6). What is different is that images of women with upraised arms continued to be placed in the cave in later times, during the Early Iron Age. One of them is even shown riding on a horse or donkey (Kanta and Davaras, eds., 2011, 123).

In 1962, after a police investigation in which Costis Davaras pretended to be a German antiquities buyer in order to gain the confidence of looters, an official police raid confiscated 600 looted objects from a major shrine in a cave dedicated to Eileithyia and arrested the culprits. A rescue excavation followed, and the objects from the cave shrine were placed in the Archaeological Museum in Heraklion.

This is a remarkable assemblage of objects. Eileithyia was a goddess of childbirth and motherhood. The objects in her shrine include a long series of items in many classes. Over a hundred pieces are made of gold. Many are also made of silver, bronze, and copper. The shrine was
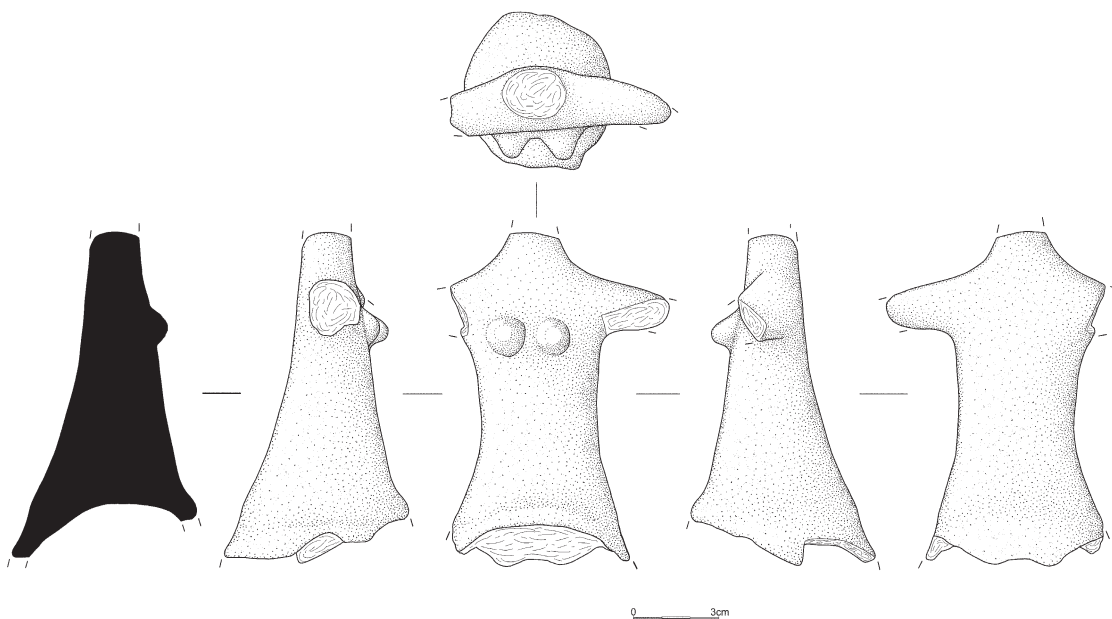

Fig. 2: Broken clay female figurine wearing a garment with open bodice, with upraised arms, LM III B – III C, HM P13290; ht. 11.5 cm (drawing by Doug Faulmann).

Fig. 3: Bowl with a clay figurine of the Goddess with Upraised Arms from the Inatos Shrine, Early Iron Age, HM unnumbered; ht. 10.2 cm (after Kanta and Davaras, eds. 2011, 124, no. 120).
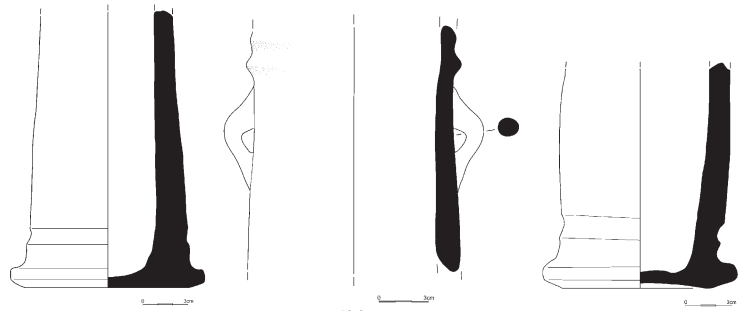
Fig. 4: Three sherds of cylindrical stands of the snake tube type from the Inatos Shrine, Early Iron Age, HM unnumbered; preserved hts. 19, 19, and 16 cm (drawing by Doug Faulmann).

Fig. 5: Kalathos from the Inatos Shrine, mended from sherds and partly restored, Early Iron Age, HM unnumbered; ht. 7.2 cm (photo by Yiannis Papadakis-Ploumidis).

Fig. 6: Corner of a clay plaque with a raised outer border from the Inatos Shrine, Early Iron Age, HM unnumbered; preserved width 5.5 cm (photo by Yiannis Papadakis-Ploumidis).

visited by all levels of society, including the elite. It also had international connections, and almost a hundred objects are in an Egyptian style. The earliest date is in the Early Bronze Age, and the sacred cave continued to be used until the time of Imperial Rome. Finally, the shrine was ruthlessly destroyed, and the offerings were smashed and left in the cave.

Most of the objects deposited in the cave would have been gifts from expectant mothers hoping for a safe childbirth. The large tradition of clay figurines from the shrine illustrates all stages of motherhood. It includes the image of a man pursuing a woman as a metaphor for courting, couples engaged in sex, pregnant women, female figures reclining in preparation for childbirth and supported by a second female figure (presumably the goddess or a midwife), an unborn child symbolically arriving on board a ship, mothers holding their young baby, and an older child in a crib. The figurines present positive images, with illustrations of the hopes and prayers of the worshippers for a happy and healthy mother and child.

Beginning in LM III B, the shrine had a section devoted to the Goddess with Upraised Arms (Figs. 2–6). It had figurines of the female figure along with her snake tubes, the kalathoi they supported, and even one example of the clay plaque with its typical raised border. The cave also contained benches at both the north and the south side of the underground room. The remains of the bench on the south side were not photographed or described, but the one at the north side of the room was in better condition, and it was photographed (Fig. 1). It consisted of a low, level platform. It was empty at the time of excavation in 1962.

Several examples of a female figure with raised arms were discovered in the shrine. The earliest clay figurine in the series is unfortunately badly broken, and the lower part is missing

(Fig. 2). Its garment with the open bodice shows that it is no later than LM III B. The skirt is hollow, and it widens at the preserved lower part, as on the figurines from the bench sanctuaries. The upper arms are extended laterally, which is similar to the gesture of other Goddess with Upraised Arms figures. The date fits with the snake tubes and kalathoi. Later figures added to the shrine are more complete, and they show the complete gesture (Fig. 3). The figure with the raised gesture stands in a bowl, and a scar on the clay indicates that a second figure, now missing, once stood in front of her. The style suggests that this pair of figures comes from the Late Geometric period.

The fact that, in addition to the figurines, the assemblage also included the other objects usually associated with the bench shrine tradition, including the cylindrical stands (Fig. 4), their kalathoi (Fig. 5), and a clay plaque (Fig. 6), suggests that the items were placed in the shrine as a set. All of the main cult furniture associated with the bench shrines that existed above ground in many towns and villages in Crete was also present among the objects found in the cave. The most likely scenario is that a bench shrine with Goddesses with Upraised Arms was placed in the shrine when this phenomenon was popular in Crete at the end of the Late Bronze Age. It persisted there for some time. Additional examples of the figure with the upraised arms were still being added to the shrine as late as the Geometric period. When it was excavated, the remains were broken and scattered and completely mixed, both by the destruction of the shrine and by the later illegal looting. Nothing was preserved in situ when the site was excavated.

A difference between this shrine and those above ground is that, unlike the bench shrines that were in the settlements, which went out of use at the end of LM III C, the figure with the typical gesture continued to be part of the Inatos shrine into the Protogeometric and Early Geometric periods. Another very important difference is that, unlike the situation in the aboveground bench sanctuaries, at Inatos it is very easy to distinguish between deity and worshipper. The worshippers are always pregnant. Even during the Protogeometric and Early Geometric periods, when stylistic simplification was so extreme that no signs of clothing or jewellery were depicted, pregnancy was always shown (Kanta and Davaras, eds. 2011, 28). Even with the figurine pairs engaged in sex, the female is pregnant. This fact must have been part of the essential identity of the worshipper. It was why she was offering the prayer.

The female figure with the upraised arms is never depicted at Inatos as pregnant. This must be because she is the goddess. This same iconography is present on the figurine of the female figure riding a horse or donkey, who is also not pregnant. Worshippers do not ride steeds, as is shown by a long series of parallels usually called the "Dea micenea a cavallo," a phrase used by Doro Levi (1951; see also Voyatsis 1992). In fact, strong other evidence also exists from elsewhere to show that the figure with the upraised arms is a goddess. Chief among these pieces of evidence is the scene of an enthroned female figure with this gesture depicted facing the open doorway of a small model of a building, which must be a temple or shrine (for an example from Archanes, see Marinatos and Hirmer 1976, fig. 145). The iconography is very explicit. The seated female figure with upright arms is a goddess who is depicted as the focal point of the axial orientation through the open door, as is canonical in later Greek temple arrangements (on the issue, see the recent article by Günkel-Maschek [2016]). Votaries are never shown as single figures who are enthroned facing a doorway.

With the conclusion that the figure with upraised arms must be a deity, one must still address the four objections that have been raised for this situation. For the first of the four issues against the representation of a deity (that male deities are missing from Minoan iconography), we might say that male deities are uncommon in both Mainland and Cretan iconography, but the ivory kouros from Palaikastro (MacGillivray et al. 2000) and the seal of the master impression with a male figure rising over a city from Chania (Hallager 1986) show that they do exist, so female ones could also be present. For the second objection (that many symbols are present on the tiaras), the varied symbols might mean that this was a great goddess with many aspects. For the third objection (the use of coarse clay for the large figures), the use of coarse clay was ne-

cessary for technical reasons. It was always used for large clay images with thick walls to keep them from breaking because the addition of temper allowed gases to escape with rising temperatures in the kiln. The last objection, the issue of multiple figures, is more complex, and it requires additional discussion.

If one accepts that the figure with upraised arms is a deity, this is not the end of the story. The ambiguity raised by the multiple figures still remains, and it must be explained. Several possibilities exist. The number of goddess figures varies greatly, from just a few to 30 at Kavousi. They cannot represent the number of individuals in a community, but they could be the number of families or the number of clans, or the members of some other social group who are permitted to have this particular image represent the deity for them. Another possibility is that a figurine was carried in a procession annually and then deposited in the shrine. The figurines could also represent special occasions or particular aspects of the divinity or something else. Without written records, it is difficult to assign an exact meaning.

The veneration of the Goddess with Upraised Arms at Inatos differed from her worship at the village shrines in several ways. First, the cult objects are smaller. They are never as large as the images elsewhere, and their inclusion of a second figure in the imagery placed inside a bowl (as in Fig. 3) is certainly not paralleled elsewhere. The custom of the bench sanctuaries in the settlements did not outlast LM III C except at outlying places like Inatos where the use of the gesture continued for many years. The absence of 'snake tubes' and plaques from the later periods shows that the custom had changed with time, and the symbolic meaning was being adapted to the new conditions. Whether the worshippers identified the figure as an aspect of Eileithyia or as a completely different entity is an open question that cannot be decided by the surviving evidence.

Acknowledgments

References

Alexiou, S. 1958. "Ἡ μινωϊκὴ θεὰ μεθ' ὑψωμένων χειρῶν." *KretChron* 12: 179–299.

Alram-Stern, E., F. Blakolmer, S. Deger-Jalkotzy, R. Laffineur, and J. Weilhartner, eds. 2016. *Metaphysis. Ritual, myth and symbolism in the Aegean Bronze Age, proceedings of the 15th International Aegean Conference, Vienna, Institute for Oriental and European Archaeology, Aegean and Anatolia Department, Austrian Academy of Sciences and Institute of Classical Archaeology, University of Vienna, 22–25 April 2016,* Leuven and Liège: Peeters.

Chadwick, J. 1976. *The Mycenaean World,* Cambridge, U. K.: Cambridge University Press.

D'Agata, A. L., and A. Van de Moortel, eds. 2009. *Archaeologies of cult. Essays on ritual and cult in Crete in honor of Geraldine C. Gesell. Hesperia Suppl.* 42. Princeton, N. J.: The American School of Classical Studies at Athens.

Day, L. P. 2009. "Ritual activity at Karphi: a reappraisal." In D'Agata and Van de Moortel, eds. 2009, 137–151.

Day, P. M., L. Joyner, V. Kilikoglou, and G. C. Gesell. 2006. "Goddesses, snake tubes, and plaques: analysis of ceramic ritual objects from the LM III C shrine at Kavousi." *Hesperia* 75: 137–175.

Eliopoulos, T. 1998. "A preliminary report on the discovery of a temple complex of the Dark Ages at Kephala Vasilikis." In *Eastern Mediterranean: Cyprus – Dodecanese – Crete 16th–6th Cent. B.C. Proceedings of the international symposium, Rethymnon, Crete, May 13–16, 1997,* edited by V. Karageorghis and N. C. Stampolidis, 301–303. Athens: The University of Crete and The A. G. Leventis Foundation.

Eliopoulos, T. 2018. "The 'Minoan Goddess with Upraised Arms' today." In *Popular religion and ritual in prehistoric and ancient Greece and the eastern Mediterranean,* edited by G. Vavouranakis, K. Kopanias, and Ch. Kanellopoulos, 85–95. Oxford: Archaeopress Archaeology.

Gaignerot-Driessen, F. 2014. "Goddesses refusing to appear? Reconsidering the Late Minoan III figurines with upraised arms." *AJA* 118: 489–520.

Gaignerot-Driessen, F. 2016. "The Lady of the House: trying to define the meaning and role of ritual figures with raised arms in Late Minoan Crete." In Alram-Stern et al., eds. 2016, 23–27.

Gesell, G. 1976. "The Minoan snake tube: a survey and catalogue." *AJA* 80: 247–259.

Gesell, G. 1985. *Town, palace, and house cult in Minoan Crete. SIMA* 57. Göteborg: Paul Åströms Förlag.

Gesell, G. 1999. "Ritual kalathoi in the shrine at Kavousi." In *Meletemata. Studies in Aegean Archaeology presented to Malcolm H. Wiener as he enters his 65th year,* edited by Ph. P. Betancourt, V. Karageorghis, R. Laffineur, and W.-D. Niemeier, 283–288. Liège: Université de Liège; Austin: University of Texas at Austin.

Gesell, G. 2001. "The function of the plaque in the shrines of the Goddess with Up-raised Hands." In R. Laffineur and R. Hägg, eds. 2001, 253–258.

Gesell, G. 2004. "From knossos to kavousi: the popularizing of the Minoan palace goddess." In *XAPIΣ: essays in honor of Sara A. Immerwahr,* edited by A. P. Chapin, 131–150. *Hesperia Suppl.* 33. Princeton, N. J.: The American School of Classical Studies at Athens.

Gesell, G. 2006. "Bird and snake: their use as Minoan religious symbols." In *Πεπραγμένα Θ′ Διεθνούς Κρητολογικού Συνεδρίου Α′* (3), edited by E. Tambakaki and A. Kaloutsakis, 313–324. Herakleion: Εταιρία Κρητικών Ιστορικών Μελετών.

Gesell, G. 2010. "The snake goddess of the LM III B and LM III C periods." In *Cretan offerings. Studies in honor of Peter Warren,* edited by O. Krzyszkowska, 131–139. *BSA Studies* 18. London: The British School at Athens.

Günkel-Maschek, U. 2016. "Establishing the Minoan enthroned goddess in the Neopalatial Period: images, architecture, and elitist ambition." In Alram-Stern et al., eds. 2016, 255–262.

Hallager, B. P. 2009. "Domestic shrines in Late Minoan III A2 – Late Minoan III C Crete: fact or fiction?" In D'Agata and Van de Moortel, eds. 2009, 107–120.

Hallager, E. 1986. *The Master Impression: a clay sealing from the Greek-Swedish Excavations at Kastelli, Khania. SIMA* 69. Göteborg: Paul Åströms Förlag.

Kanta, A. 1998. "Introduction." In *Eastern Mediterranean. Cyprus – Dodecanese – Crete, 16th–6th cent. B.C.,* edited by N. Stampolidis and A. Karetsou, 30–52. EPCA XXIII. Herakleion: University of Crete, Ministry of Culture.

Kanta, A., and C. Davaras, eds. 2011. *Ελονθία Χαριστήιον. Το ιερό σπήλαιο της Ειλειθυίας στον Τσούτσουρο.* Heraklion: Δήμος Μινώα Πεδιάδας.

Karageorghis, V. 2001. "The Great Goddess of Cyprus. Between the Aegeans and the 'Eteocypriots'." In Laffineur and Hägg, eds. 2001, 323–327.

Laffineur, R., and R. Hägg, eds. 2001. *POTNIA. Deities and religion in the Aegean Bronze Age. Proceedings of the 8th International Conference, Göteborg, Göteborg University, 12–15 April 2000. Aegaeum* 22. Liège: Université de Liège.

Levi, D. 1951. "La dea micenea a cavallo." In *Studies presented to D. M. Robinson,* edited by G. Mylonas, 108–125. St. Louis: Washington University.

Levi, D. 1959. "La Villa rurale minoica di Gortina." *BdA* 44, 4th Ser.: 245–249.

MacGillivray, J. A., F. M. Driessen, and L. H. Sackett 2000. *The Palaikastro Kouros. A Minoan chryselephantine statuette and its Bronze Age context.* London: The British School at Athens.

Marinatos, N. 1993. *Minoan religion: ritual, image and symbol.* Columbia, S. C.: University of South Carolina Press.

Marinatos, S., and M. Hirmer 1976. *Kreta, Thera und das mykenische Hellas.* Munich: Hirmer Verlag.

Panagiotaki, M. 1999. *The Central Palace Sanctuary at Knossos. BSA Suppl.* 31. London: The British School at Athens.

Platon, E. 1997. "Caractère, morphologie, et datation de la bourgade postpalatiale de Képhali Chondrou Viannou." In *La Crète mycénnienne: Actes de la table ronde internationale organisée par l'École française d'Athènes, 26–28 mars 1991,* edited by J. Driessen and A. Farnoux, 357–373. *BCH* Suppl. 30. Athens: École française d'Athènes; Paris: De Boccard.

Rethemiotakis, G. 2001. *Minoan clay figures and figurines from the Neopalatial to the Subminoan period. The Archaeological Society at Athens Library* 219. Athens: The Archaeological Society at Athens.

Shaw, M. C. 1996. "The terracotta sculpture." In *The Kommos region and houses of the Minoan town 2. The Minoan Hilltop and Hillside Houses,* edited by J. W. Shaw and M. C. Shaw, 282–302. Princeton: The American School of Classical Studies at Athens.

Tsipopoulou, M. 2009. "Goddesses for 'Gene'? The Late Minoan III C shrine at Halasmenos, Ierapetra." In D'Agata and Van de Moortel, eds. 2009, 139–144.

Voyatzis, M. 1992. "Votive riders seated side-saddle at early Greek sanctuaries." *BSA* 87: 259–279.

Zervos, C. 1956. *L'art de la Crète néolithique et minoenne.* Paris: Éditions Cahiers d'art.

V. Communication in Ritual Action

Too Hot to Handle? Vessel-Based Gestures in Aegean Bronze Age Iconography

Stephanie Aulsebrook

Abstract   *The use of vessels was a fundamental aspect of life in the Aegean Bronze Age. Necessary for many essential day-to-day activities, as well as within the religious and elite ceremonial spheres, their associated practices required specific gestures and precise engagement, in a manner considered culturally correct. The wide role of vessels and their presence within socially significant arenas of commensality and religious ceremonies encouraged them to be conceptualised as extensions of the body, facilitated by affordances such as handles and stems. Yet only a small subset is depicted, and the variety of associated gestures is equally limited. Why were particular aspects of use emphasised and what meaningful information was conveyed by the repetition of certain gestures? Applying a practice-orientated approach as part of a preliminary survey of the available material, this paper identifies some key themes worthy of further investigation.*

Introduction

Vessels were an important tool in Aegean Bronze Age societies for many daily activities, including the storage, transportation, preparation, presentation and consumption of foodstuffs, industrial processes, washing, ritual actions and lighting. Specialised forms were developed to fulfil these essential functions. It is therefore unsurprising that vessels appear in contemporary iconography, forming an important body of evidence for investigating their use. This paper presents some preliminary observations, taking a practice-orientated approach[1] to the surviving corpus of gestures,[2] whilst highlighting the selectiveness of the iconographical record.

The Presentation Gesture

The most common vessel-holding gesture involves the entire body. The vessel-carrier always stands in profile, often with their upper body thrown back away from the vessel which, in most cases, is a jug gripped at two points: one hand with a bent arm is positioned high on the handle, the other with a straight arm beneath the base. Used by both humans and supernatural beings, specifically the so-called 'genius', the pose is recreated on seals (*e.g.* from Tiryns: *CMS* I, no. 179 [Fig. 1]; Vapheio: *CMS* I, nos. 231–232; Karpophora: *CMS* V, no. 440; Knossos: *CMS* II 8, no. 268[3]) and in frescoes at Akrotiri[4] (Immerwahr 1990, 188, no. 10) and probably also Knossos[5] (Immerwahr 1990, 174, Kn No. 22). One vessel-carrier on the Kamilari Tholos A model also appears to repeat this gesture (Novaro 2019, fig. II.8.3–4).

---

1   *I.e.* a practical approach, based on actual usage characteristics.

2   Only finds with a known context are discussed to avoid problematic data. The examples are drawn from the Aegean area (mainland Greece, the Cyclades and Crete) from across the Bronze Age. Too few depictions survive to draw firm conclusions regarding temporal change in human-vessel interactions, and it is beyond the scope of this brief overview to discuss to what extent any apparent patterns primarily reflect wider iconographical trends. The *CMS* volumes are used to refer to seals and Immerwahr's (1990) catalogue numbers for frescoes.

3   With a jar, not a jug, with the second handle ignored.

4   Involving a one-handled dish.

5   In the Knossian Procession Fresco one figure certainly holds a jug; their lower hand is correctly positioned but their upper is missing.

Fig. 1: Gold signet-ring from Tiryns (photo by author).

Fig. 2: Part of the Theban Procession Fresco (photo by author).

The gesture is subtly adapted to other vessel forms. On the Knossian Cupbearer Fresco (Immerwahr 1990, 174, Kn No. 22), the lower hand is adjusted to suit the tapering form of a conical rhyton but the similarities between jug and conical rhyta handles meant the upper hand retains the usual position.[6] On a stone rhyton from Knossos (Evans 1930, 65, fig. 37, HM 426), at least two males carry handleless bowls, possibly Minoan ladles (Bevan 2007, 131), with both hands placed underneath and the upper body pitched backwards. This pose is conspicuously different to that adopted by male figures carrying much larger shallow baskets or trays in a Pylian fresco (Immerwahr 1990, 197, Py No. 8). These figures have a more relaxed arm position which allows the vessel edge to clip their robes; this conscious rejection of the more formal presentation gesture requires further investigation.

The presentation gesture is exclusively associated with processions and offering scenes. The stance emphasises the vessel's weight, implying it is full: very fitting for such occasions.[7] It provides an unimpeded view of the vessel,[8] yet is clearly an unnatural ritualised pose. Thus, the vessel-carrier is relegated to a mere placeholder, a point underscored by the apparent interchangeability of humans and supernatural beings in such images, despite clothing and jewellery marking their distinguished social status. The vessel, as the focus, dictates the precise positioning of its carrier's body, especially the arms, sometimes forcing it into unnatural or impossible contortions (Fig. 2).[9] However, the emphasis on weight indicates that, although remaining hidden to the viewer, the true centre of attention is the vessel's contents, requiring insider knowledge to fully appreciate the meaning. Although this gesture may have been copied from Egyptian iconography, and was undoubtedly endowed with symbolism, its adaptation to Aegean vessel shapes demonstrates that its real physical implications were understood, and its employment was not mindlessly imitative.

Other Vessel Transportation Gestures

Vessels also appear in transport using other gestures. Amphorae and lekanae are shown carried upright via a pole slung through their handles in frescoes from Tylissos and Agia Triada, and on a larnax from Agia Triada (Immerwahr 1990, 181 A. T. Nos. 2, 3; 184, Ty No. 1). Also relevant are seals depicting a figure with a horizontal pole across their shoulders, with attached vessels

---

6 I remain unconvinced by Poole's argument (2020, 98) that *CMS* II 6, no. 8 from Agia Triada shows the offering of a conical rhyton, due to the supposed vessel's shape and hand positions of both figures.

7 The same reasoning cannot apply to the 'Priestess' Fresco (Immerwahr 1990, 186, Ak No. 8). The hand positions are coincidentally the most sensible for both an incense burner (supporting its weight at the coolest part, *i.e.* its base, whilst simultaneously protecting the embers when walking with the other hand) and a bowl of pigment (providing adequate support by keeping one hand clean be-

neath its base, whilst using the other to dispense the pigment).

8 As similarly highlighted by Maran *et al.* (2015, 103) for an ivory comb.

9 This explains the atypicality highlighted by Poole (2020, 104) concerning the males carrying handleless bowls on the stone rhyton fragment HM 426. Their gesture is dictated by the need to visually separate the focus of the scene, the bowl, from the placeholder carrier, and should not be considered a statement of dominance.

(Morgan 2015, 54, fig. 4).[10] Although involving religious and feasting activities, such depictions may reflect the movement of vessels within more widespread practices, including daily chores, in contrast to the ceremonial presentation gesture, which may have been restricted to specific palatial settings. Poles were probably utilised for all vessels with upright handles protruding over the rim, perhaps even smaller ones such as kylikes.

Men, apparently warriors judging by their greaves, transport tripod cauldrons in a Pylian fresco hunting scene (Immerwahr 1990, 197, Py No. 11). Their exact holding gesture is unreconstructible from surviving fragments, as the point of contact between carrier and vessel is missing. The gesture as currently restored, with both hands gripping the rim, would be difficult to sustain for a bronze cauldron weighing several kilograms, and is inconsistent with the other figures' naturalistic gestures. Hence, the original inclusion of a carrying pole cannot be ruled out.[11]

Fig. 3: Part of the Theban Procession Fresco (photo by author).

The head, as well as the arms and shoulders, could be used to carry vessels, as shown in the miniature frescoes from Agia Irini and Akrotiri (Morgan 1988, 116; 2015, fig. 1b); the women depicted in the latter seem to be of lower status than those in procession frescoes (Poole 2020, 96). Limbs play a secondary role here, to provide balance, but handles were used, *e.g.* on seal *CMS* II 1, no. 391k, from Archanes.

One gesture on the Theban Procession Fresco (Immerwahr 1990, 200–201, Th No. 1) is difficult to explain (Fig. 3). A small stone amphora is held awkwardly downwards, with a straight arm gripping the top of one handle. The surviving fragments reveal something to the immediate right of the vessel, but too little remains to be certain of what was depicted. It implies some other form of interaction that cannot currently be determined; perhaps the vessel was about to be placed on a surface. Except this amphora, all the other vessels shown in transport are open shapes, despite the extensive development of closed vessels, like stirrup jars, designed specifically for transportation.

Vessels in Use

Images of vessels in use are strikingly few, and the range depicted thus is small. Jugs rarely appear as pouring vessels. One notable example is the Ganymede Jug from Akrotiri (Papagiannopoulou 2018, fig. 14), which depicts one male placing his lower hand near the jug's base to facilitate pouring, using the upper to grip the handle; his companion holds out his cup in anticipation. The jug mimics the figures' colour palette and bodily contours. Its high neck necessitates a pronounced pouring gesture. Usually interpreted as a ritual scene (Papagiannopoulou 2018, 179; Younger 2020, 77), the participants' postures are relatively relaxed, which may support Morgan's interpretation of a drinking scene (Morgan 2015, 55). A similar image on the Malia stone triton (Darcque and Baurain 1983, Agios Nikolaos Museum 11246) substitutes two Minoan 'genii',

---
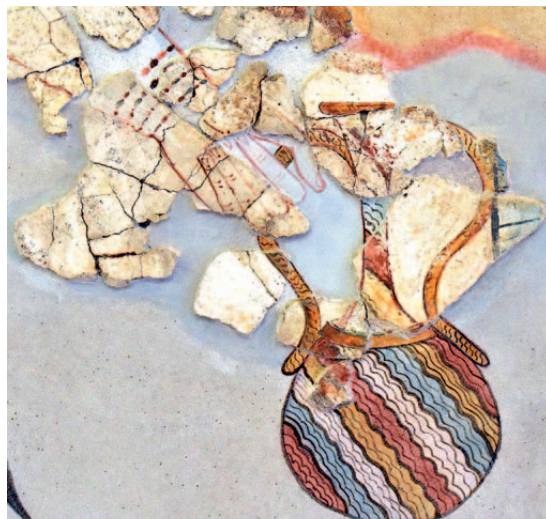
10 I previously extended this interpretation to figures with vertically orientated poles (Aulsebrook 2012, 384). However, their identification as weavers with loomweights is more likely (Ulanowska 2021, 69, fig. 5.4).

11 Although in reality the pole sat at the very top of the handle openings, on the Agia Triada larnax it sits at the bottom (Immerwahr 1990, 180–181, A. T. No. 2). The same visual convention may have been applied to these tripods.

one tilting a double-mouthed jug into the cupped paws of the other. Whether the latter grasps a small bowl is impossible to determine; however, its bent head and proximity of the cupped paws to the muzzle imply it is about to drink or wash its face (Darcque and Baurain 1983, 46). In both images, despite their opposing roles, the participants are not visually distinguished[12] and no hierarchical difference is indicated. The final example,[13] from Akrotiri (Immerwahr 1990, 188, no. 10), shows a man holding a hydria, with a secondary horizontal lower handle to facilitate pouring. The vessel is so heavy, he runs his arm through the upper handle for more strength. This is consistent with the size of known examples and their hypothesised use for water transport.

Whether these gestures illustrate the actual pouring or the anticipatory moment cannot be determined as the contents are never depicted. This convention is confirmed on the Agia Triada larnax (Immerwahr 1990, 180–181, A. T. No. 2): one figure tips a lekane horizontally into a waiting vessel, steadying its base with one hand and gripping its rim with the other, yet the contents are not rendered. This reluctance to depict flowing liquids appears again on a seal from Chania (*CMS* V Suppl. IA, no. 137) showing men milking quadrupeds into footed bowls on the ground.[14]

In contrast, the act of pouring saffron from a small conical basket into a larger flatter one is included in a fresco from Akrotiri (Immerwahr 1990, 186, Ak No. 6). Ignoring its handle, the figure holds her basket with two hands, one at the rim, the other halfway down the body. Her gaze is not directed towards her task as the lightness of these baskets, demonstrated by two other saffron gatherers holding theirs with just one hand, means her full attention is unnecessary, unlike when handling the heavy cumbersome hydria. The large flat basket makes an appearance on a Knossian stone rhyton, with a figure placing something within it (Koehl 2006, 180, no. 764, pl. 47, HM 2397).

The Agia Irini miniature fresco (Immerwahr 1990, 189, A. I. No. 4; Morgan 2015, 50, fig. 1 e) depicts two men with tripod cauldrons. One places his hands inside or immediately above his cauldron, the other on the side of his. The men are presumed to be cooking (Morgan 1998, 204) although the exact meaning of their gestures remains unclear. A tripod in use by two figures is also shown on seal *CMS* II 8, no. 275 from Knossos. They direct their attention and hands towards an object[15] which they are perhaps guiding into the cauldron. It is not clear whether both figures are male. In neither case do the tripods have handles, in contrast to the Pylian fresco and the known tripod cauldron corpus.

The final images discussed here depict drinking vessels: kylikes and chalices. Never is the cup held to the lips, meaning their categorisation as 'in use' can be disputed,[16] although gestures associated with 'toasting' (Stocker and Davis 2004, 190), anticipating/requesting refills and libations (*cf.* Weilhartner 2022, 344) may be indicated. The kylix depicted on the Knossian Campstool Fresco (Immerwahr 1990, 176, Kn No. 26) is probably being passed between two males, not necessarily seated facing each other (Wright 2004, 164). Cups are always held by the stem (*e.g.* Kilian 1980, fig. 2) (Fig. 1), even in the sole three-dimensional representation, from the Mycenaean sanctuary at Amyklai (Demakopoulou 2009, 96–97, fig. 10.2). Therefore, on current evidence, it is not possible to determine the culturally correct use of their handles.

---

12 *Contra* Younger 2020, 77–80. The apparent height difference between the 'genii' compensates for the triton's curvature.

13 Seal *CMS* II 8, no. 243 was incorrectly restored by Evans to show a seated figure pouring the contents of one vessel into another.

14 Another milking scene seal (*CMS* XI, no. 318 b) is not considered authentic.

15 Identified as a cloven-hooved leg by Morgan (2015, 54) although its rudimentary butchery is curious.

16 Apart from the Malia triton shell, the only other possible depictions of drinking are both found on fresco fragments from Tiryns and involve animals: a conical rhyton, with an apparent animal muzzle at the rim (Evans 1928, 769–770, fig. 501; Immerwahr 1990, 204, no. 7) and a fish sipping at the rim of a kylix or mug (Maran *et al.* 2015, 104, fig. 3 b).

Vessel Depictions in Context

The rarity of vessels in Aegean Bronze Age iconography has been somewhat obscured by a tendency to insert them into fresco reconstructions, especially procession scenes such as the Knossos Procession Fresco in which only one male definitely holds a vessel (Poole 2020, 98, 167). Other procession scenes (*e.g.* the Agia Triada larnax, Immerwahr 1990, 180–181, A. T. No. 2) incorporate a mixture of items. Although most reconstructions carefully distinguish original details from hypothesised additions, neglecting this important difference has introduced misleading factoids into scholarly discussion, especially concerning the prevalence and nature of feasting scenes.[17] Experts in this field have observed that the iconography focuses on the preparatory stages, not the climax of use (*e.g.* Morgan 2015). Thus, many physical actions, such as eating and drinking, and their associated gestures are never depicted. Through banqueting, the participants themselves recreated those missing bodily gestures. This process of selection also emphasised certain preparatory phases over others; meat forms a focus, as do the stages immediately prior to the event, whereas the production of beverages and other accompaniments is side-lined. Consequently, certain common classes of vessels, such as stirrup jars, are not shown; any liquids, for consumption or offerings, are already packaged into jugs. It is also notable that, unlike other fresco and glyptic scenes, such as seated figures or chariot groups (Tzonou-Herbst 2010, 216), banqueting and procession scenes do not appear in the corpus of small-scale Mycenaean handmade figurines.

The iconography was not intended to faithfully reproduce the full milieu of Aegean Bronze Age life, only rarely showing vessel interactions with lower-status individuals (Poole 2020, 98–99). It concentrated on spheres relevant to the artisans' patrons, and fulfilled a decorative, as well as a meaningful function (Immerwahr 1990, 105). Any apparent links between, *e.g.* men and tripod cauldrons, may connect to a specific ceremony or festivity, rather than reflecting their full role in society and must be treated with caution. Entire spheres of vessel use, such as lighting and industry, are absent. Certain shortcuts are taken, simplifying vessel forms to edit out irrelevant features and omitting flowing liquids in pouring scenes. Nevertheless, it is apparent that even ceremonial gestures are grounded in physical practicalities.

However, the most important finding from this iconographic survey concerns the role of handles. Considered affordances, and thus potential links between the experiences of past and present, image after image has highlighted that handles could be used in multiple ways: to insert poles, forearms and hands depending upon need, or simply ignored altogether. Practice-orientated approaches rely upon a thorough understanding of the people-environment-thing nexus, meaning further research is required to investigate these less familiar modes of interaction to prevent modern assumptions restricting interpretation.

---

17 *E.g.* the common misconception that men were depicted actively drinking in the Pylian Megaron frescoes. Their missing upper bodies (Immerwahr 1990, 198, Py No. 14) were reconstructed using the Knossos Campstool Fresco and the Tiryns chariot krater (McCallum 1987, 90–91, 130–131, pl. X). Whilst a reasonable interpretation, it is neither fact nor appropriate evidence for investigating details of Mycenaean banqueting.

References

Aulsebrook, S. 2012. "Political strategies and metal vessels in Mycenaean societies: deconstructing prestige objects through an analysis of value." Ph.D. diss., University of Cambridge.

Bevan, A. 2007. *Stone vessels and values in the Bronze Age Mediterranean.* Cambridge: Cambridge University Press.

Darcque, P., and C. Baurain. 1983. "Un triton en pierre à Malia." *BCH* 107: 3–73.

Demakopoulou, K. 2009. "Το Μυκηναϊκό ιερό στο Αμυκλαίο: μια νέα προσέγγιση." In *Sparta and Laconia: from prehistory to pre-modern. Proceedings of the conference held in Sparta, organised by the British School at Athens, the University of Nottingham, the 5th Ephoreia of Prehistoric and Classical Antiquities and the 5th Ephoreia of Byzantine Antiquities, 17–20 March 2005,* edited by W. G. Cavanagh, C. Gallou, and M. Georgiadis, 95–104. *BSA Studies* 16. London: British School at Athens.

Evans, A. 1928. *The Palace of Minos at Knossos.* Vol. 2. London: Macmillan.

Evans, A. 1930. *The Palace of Minos at Knossos.* Vol. 3. London: Macmillan.

Immerwahr, S. A. 1990. *Aegean painting in the Bronze Age.* University Park: Pennsylvania State University Press.

Koehl, R. B. 2006. *Aegean Bronze Age rhyta. Prehistory Monographs* 19. Philadelphia: INSTAP Academic Press.

Kilian, K. 1980. "Zur Darstellung eines Wagenrennens aus spätmykenischer Zeit." *AM* 95: 21–31.

Maran, J., A. Papadimitriou, and U. Thaler. 2015. "Palatial wall paintings from Tiryns: new finds and new perspectives." In *Mycenaeans up to date: the archaeology of the north-eastern Peloponnese – current concepts and new directions,* edited by A.-L. Schallin and I. Tournavitou, 99–116. *ActaAth* 4°, 56. Stockholm: Svenska Institutet i Athen.

McCallum, L. R. 1987. "Decorative program in the Mycenaean palace of Pylos. The megaron frescoes." Ph.D. diss., University of Pennsylvania.

Morgan, L. 1988. *The miniature wall paintings of Thera. A study in Aegean culture and iconography.* New York: Cambridge University Press.

Morgan, L. 1998. "The wall paintings of the North-East Bastion at Ayia Irini, Kea." In *Kea-Kythnos: history and archaeology. Proceedings of an international symposium Kea-Kythnos, 22–25 June 1994,* edited by L. G. Mendoni and A. Mazarakis Ainian, 201–210. *Meletemata* 27. Paris: Diffusion de Boccard; Athens: Research Centre for Greek and Roman Antiquity, National Hellenic Research Foundation.

Morgan, L. 2015. "Why is no one eating? The iconography of feasting in the ancient world." *Journal of Ancient Egyptian Interconnections* 7.3: 49–64.

Novaro, D. 2019. "I modellini fittili". In *Kamilari. Una necropoli di tombe a tholos nella Messarà (Creta),* edited by L. Girella and I. Caloi, 445–456. *Monografie della Scuola Archeologica di Atene e delle Missioni Italiane in Oriente* 29. Athens: Scuola Archeologica Italiana di Atene.

Papagiannopoulou, A. 2018. "The beginnings of an island narration. Pictorial pottery and wall-paintings of the second millennium BC." In *Χρωστήρες / Paintbrushes. Wall-painting and vase-painting of the second millennium BC in dialogue,* edited by A. G. Vlachopoulos, 162–181. Athens: University of Ioannina and Hellenic Ministry of Culture and Sports – Archaeological Receipts Fund.

Poole, S. E. 2020. *A consideration of gender roles and relations in the Aegean Bronze Age interpreted from gestures and proxemics in art. BAR-IS* 2980. Oxford: BAR Publishing.

Stocker, S. R., and J. L. Davis. 2004. "Animal sacrifice, archives, and feasting at the Palace of Nestor." In *The Mycenaean feast,* edited by J. C. Wright, 59–75. *Hesperia* 73.2. Princeton: The American School of Classical Studies at Athens.

Tzonou-Herbst, I. 2010. "Figurines." In *The Oxford Handbook of the Bronze Age Aegean (ca. 3000–1000 BC),* edited by E. H. Cline, 210–220. Oxford: Oxford University Press.

Ulanowska, A. 2021. "Towards engendering textile production in Middle Bronze Age Crete." In *Textiles and Gender in Antiquity. From the Orient to the Mediterranean,* edited by M. Harlow, C. Michel, and L. Quillien, 59–79. London and New York: Bloomsbury.

Weilhartner, J. 2022. "Zur 'Göttin mit Kylix' in der ägäischen Spätbronzezeit." In *Akten des 18. Österreichischen Archäologietages am Institut für Antike der Universität Graz,* edited by G. Koiner, M. Lehner, and E. Trinkl, 343–353. *Veröffentlichungen des Instituts für Antike der Karl-Franzens-Universität Graz* 18. Wien: Phoibos Verlag.

Wright, J. C. 2004. "A survey of evidence for feasting in Mycenaean society." In *The Mycenaean Feast,* edited by J. C. Wright, 13–58. *Hesperia* 73.2. Princeton: The American School of Classical Studies at Athens.

Younger, J. G. 2020. "Narrative in Aegean art: a methodology of identification and interpretation." In *Current Approaches and New Perspectives in Aegean Iconography,* edited by F. Blakolmer, 71–86. *Aegis* 18. Louvain-la-Neuve: Presses universitaires de Louvain.

Against Nature: Tree-Shaking Action in Minoan Glyptic Art as Agonistic Behaviour

Caroline Tully

Abstract   *Minoan gold signet-rings are well-known for their depiction of ritual events. Thirty-one ring images depict ritual scenes in which human figures interact with trees. The majority of figures approach the trees in a calm and seemingly reverential manner; however, eight examples depict the ritual participant clasping and vigorously shaking the tree. These appear on gold rings from Knossos, Archanes, Kalyvia, and Poros on Crete (LM I B–III); Vapheio and Mycenae on mainland Greece (LH II–III); as well as an unprovenanced stone seal in New York. The figures all display a particular body posture: standing with bent knees, sometimes bearing their weight on one leg at the front, while their back leg is both extended and supplying thrust, or kicked back and upwards. The pose is suggestive of active movement and is also seen in glyptic depictions of agonistic scenes such as warrior combat, boxing, weapon use, men in combat with real and supernatural animals, bull-leaping, running, men striding with captured women in tow, and hybrid figures such as minotaurs, bird-men and -women. These iconographic parallels suggest that the tree-shaking pose indicates a coercive or even violent activity. These scenes may depict the attempt to ritually control the natural world through aggression and domination, and to promote the idea that the elite owners of the rings were supremely capable of establishing and maintaining order.*

Tree-shaking ritual is a sub-category of Minoan tree cult, an aspect of Late Bronze Age Cretan religion known primarily from glyptic iconography. This paper argues that images of tree-shaking evident in Minoan cult scenes depict ritual participants undergoing an altered state of consciousness during which they perform coercive dendromancy. In order to support this contention, the paper begins by explaining Minoan tree cult, and the sub-category of tree-shaking. It then examines the tree-shaking pose itself and comparative examples in order to determine what the pose signifies, and establishes that the comparanda all depict agonistic activities performed by males. Examination of the types of agonistic behaviours evident is followed by analysis of the ritual action within tree-shaking scenes. Previous scholars' interpretations of such scenes are considered next, and then the tree-shaking pose is suggested to be an expression of an ecstatic state. Oracular trees from the Levant and Greece are subsequently examined as ethnographic analogies to Minoan tree-shaking scenes, and the altered states of consciousness proposed to have been undergone by the cult personnel are interpreted as shamanistic. The presence of females along with males in Minoan tree-shaking scenes is then interpreted in light of Near Eastern comparanda, and the agonistic pose of the figures is shown to be characteristic of an animistic ontology. The paper concludes that tree-shaking figures adopted agonistic poses in order to compel auditory transactions with numinous trees and that therefore the human-tree relationship in these scenes was characterised by human domination.

Tree Cult

Minoan-style gold signet-rings are well-known for their depiction of ritual events. Of the 340 examples of ring iconography, 31 depict cult scenes in which human figures interact with trees (11%). In addition to sphragistic jewellery and its impressions on clay sealings, evidence of what

for convenience I will call 'tree cult' also appears on other media including stone vases, fresco painting, carved ivory and a bronze plaque. The apparently sacred trees in these scenes are depicted in four main ways: growing within the natural landscape; behind the walls of open-air sanctuaries; in conjunction with cult structures such as columnar shines and stepped altars; and in the vicinity of boats and the sea (Tully 2018). The glyptic images depict the enactment of salutatory or adoration gestures, dance performance, offering of sacrificial animals, and communication with figures identified here as resident nymphs.

Tree-Shaking

The majority of human figures in the scenes approach the trees in a calm and apparently reverential manner; however, eight examples appearing on seven objects, six rings and one seal-stone (22 % or almost a quarter of the 31 glyptic images of tree cult), depict the ritual participant clasping and vigorously shaking the tree. These appear on gold rings from Knossos, Archanes, Kalyvia, and Poros on Crete (LM I B – III); Vapheio and Mycenae on mainland Greece (LH II – III); as well as an unprovenanced stone seal in New York (see Catalogue).

Characteristics

In these images the tree-shaking pose involves the human figure using either one or two hands to grasp the tree (one hand: Figs. 1, 5; two hands: Figs. 2–4, 6–7), and their leg positions, which are all in profile, range from an apparent lunge where one leg is bent, taking the weight of the figure, while the other leg is straighter and supplies thrust or balance (Figs. 1, 5), to bent legs (Figs. 1, 3, 6), bent legs spaced widely apart (Fig. 4), and bent legs with one leg kicked up and back (Figs. 2, 7).

Fig. 1: Gold ring HM 1700 from Knossos (Photo by Jebulon; courtesy of the Heraklion Archaeological Museum – Hellenic Ministry of Culture and Sports – Archaeological Receipts Fund).

So how should we understand the tree-shaking pose(s)? Firstly, are the figures shaking the tree or pulling it? All tree shakers grasp and pull the tree or branch down toward themselves, rather than just reaching up to it. In Figures 1 and 5 the lunging figures use one hand to grasp the tree and appear to be pulling it, while in Figures 2–4 and 6–7 they use two hands (or at least a second arm is not visible) and appear to be exerting more force upon it and thus shaking it. What about the leg positions? Do they depict motion, and different degrees of motion? Where else do we see lunging, bent legs, bent legs spaced widely apart, and bent legs with one leg kicked back and up?

Fig. 2: Gold ring HM 989 from Archanes (Photo by I. Pini; courtesy E. Sapouna-Sakellaraki).

Fig. 3: Gold ring from Kalyvia (CMS II 3, no. 114; courtesy of the CMS Heidelberg).

Fig. 4: Gold ring HM 1629 from Poros (after Rethemiotakis 2017, fig. 8).

276

Fig. 5: Gold ring from Vapheio (CMS I, no. 219; courtesy of the CMS Heidelberg).

Fig. 6: Gold ring from Mycenae (CMS I, no. 126; courtesy of the CMS Heidelberg).

Fig. 7: Steatite seal, unknown provenance (CMS XII, no. 264; courtesy of the CMS Heidelberg).

Comparanda

Agonistic scenes

Although there are female figures as well as males in tree-shaking scenes, all comparative images depict men, and all are agonistic scenes. The Greek 'agon' means a struggle destined to produce a winner and a loser (Liddell and Scott 1955, 10). In Aegean art agonistic scenes include images of warfare, armed and unarmed combat, humans fighting, hunting and engaging in sport with animals, behaving aggressively toward nature, and animals hunting prey. While such scenes may have had a basis in reality, the fact that they were primarily depicted on elite artworks suggests that they functioned as ideology. Traditionally agonistic imagery has been associated with Mycenaean rather than Minoan art, but agonistic scenes are prevalent in Minoan art, with images of fighting increasing in popularity from the late MM onwards and there are more combat scenes from Crete during LM I–II than from the mainland (Krzyszkowska 2005, 139). Agonistic scenes in Aegean art can be classified as: armed combat, unarmed combat, hunting, and combat with nature.

Armed combat – warfare

Images of armed combat appear in an array of media including seals and sealings, wall paintings, precious metal, grave stelae and painted ceramics. The combatants are mainly depicted as generic Aegean people and, except for the Combat Agate and the wall painting depicting Mycenaeans battling opponents wearing skins, both from Pylos, there is little variation to indicate regional differences. The warriors all possess generally the same weaponry and attire but the winner is identified by his dominant pose and central placement (Blakolmer 2013, 62). Aegean fighting scenes probably did not depict historical events, but rather were generic battle scenes designed to express political hegemony through martial conquest (Blakolmer 2013, 61–64).

In view of that, what leg postures do we see in scenes of armed combat? Images of armed combat include the lunge, as seen on an LH I Mycenaean gold ring from Shaft Grave IV in Grave Circle A at Mycenae (*CMS* I, no. 16) depicting two sword-wielding figures in close combat while another figure holds a long javelin and shelters behind a tower shield, and a fourth sits wounded on the ground; the lunge and bent legs are evident in the gold cushion seal from Shaft Grave III (*CMS* I, no. 11) and the amygdaloid seal from Mycenae (*CMS* I, no. 12) in which sword-wielding warriors strike their opponents with downward thrusts over the top of figure-of-eight shields; the pose consisting of bent legs spaced widely apart is seen on the ring impression from Knossos (*CMS* II 8, no. 279) depicting an armed warrior and hunting dogs chasing a fleeing human victim; the lunge and bent legs with one leg kicked back and up are evident in a ring impression from Agia Triada (*CMS* II 6, no. 17) depicting two warriors armed with spears preparing to throw them at one another while a third figure lies wounded or dead on the ground, and two warriors in close combat with spears aimed at each other in a ring impression from Zakros (*CMS* II 7, no. 20); while straight legs and immobile bent legs are seen on a lentoid seal from Milos

(*CMS* I, no. 263) that portrays a figure stabbing another in the back with a short spear while another figure lies dead behind him.

Unarmed combat – sport
Many examples of competitive sporting activities such as boxing, bull-leaping, running and acrobatics are evident in Aegean art from the 3rd millennium BC to LM III C. The majority are fragmentary, however, restricting a full understanding of the wider context of the activities (Rutter 2014, 36). Leg positions evident in unarmed combat scenes include: the lunge as seen in a ring impression from the Temple Repositories at Knossos (*CMS* II 8, no. 280) depicting a three-quarter back view of a boxer in motion with a pillar or flagstaff to his right, perhaps suggesting that the location is a villa or palace (Krzyszkowska 2005, 140); bent legs spaced widely apart are evident on another ring impression in the National Museum of Athens (*CMS* I, no. 306) depicting combatants using their legs as well as fists in what may be kick boxing; bent legs as well as the lunge are depicted on the Boxer Rhyton from Agia Triada; the young boys engaged in boxing depicted in the wall painting from Room Beta 1 at Thera have bent legs with the figure on the right in a slight lunge; and bent legs as well as the one leg kicked back and up pose are seen in all phases of bull-leaping from the initial grappling of the horns, to the flinging of the leaper over the bull's back, and the landing at the rear of the bull (*CMS* II 6, no. 55; III, no. 362; V Suppl. 3, no. 395).

Hunting
Hunting scenes include bulls being netted and speared, male figures spearing lions, boars and deer; being injured in a boar-hunt; shooting arrows at deer from chariots; and hunting dogs chasing boars. Human figures in hunting scenes are depicted with bent legs and straight legs (*CMS* I, nos. 227, 294).

Combat with 'nature'
In scenes of one-on-one combat between humans and animals where male figures attack lions, bulls, boars and deer we see the lunge, bent legs, bent legs kicked up and back, and straight legs (*CMS* I, nos. 112, 199, 290, 307). The minotaur, a composite of human legs and the upper bodies of bulls, lions, deer, goats or dogs, which may be an amalgamation of the idea of the male figure in combat with animals, is depicted with bent legs, bent legs kicked back and up, and straight legs (*CMS* II 3, no. 331; III, no. 363; XI, no. 127).

Summary
Consequently, in regard to the leg poses seen in tree-shaking scenes: lunging also appears in scenes of armed combat (warfare; Fig. 8), unarmed combat or sport (boxing; Fig. 9), and men fighting animals (Fig. 10). The lunge pose appears to signify a phase within a forceful forward movement. Bent legs are evident in scenes depicting unarmed combat, running, bull-leaping, bull-wrestling, minotaurs, dancing, performing as and/or transforming into other creatures, and crouching (Fig. 11). These also seem to be images of motion, except perhaps for an example of an archer (*CMS* II 6, no. 21). This is in contrast to immobile bent legs, depicted front on in fantastic images like the Zakros sealings, and in profile on seated figures and dead figures. Bent legs spaced widely apart are seen in images depicting, striding, running and boxing (Fig. 12). These convey swift movement. Bent legs with one leg kicked back and up appear in images depicting armed combat, human combat with animals, bull-leaping, minotaurs, and human defeat (Fig. 8 on left and Fig. 13). This pose suggests motion, speed, vigorous action, and perhaps also flailing.
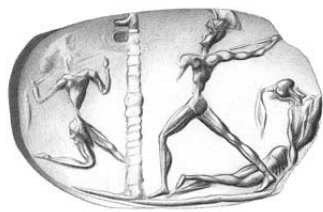
Fig. 8: Ring impression from Agia Triada (CMS II 6, no. 17; courtesy of the CMS Heidelberg).
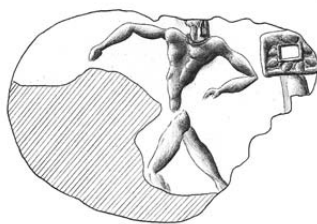
Fig. 9: Ring impression from the Temple Repositories at Knossos (CMS II 8, no. 280; courtesy of the CMS Heidelberg).

Fig. 10: Amethyst seal from Pylos (CMS I, no. 290; courtesy of the CMS Heidelberg).
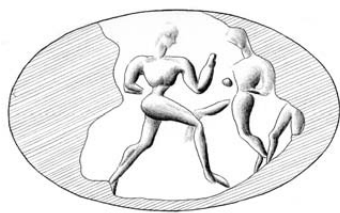

Fig. 11: Ring impression in the National Archaeological Museum of Athens (CMS I, no. 306; courtesy of the CMS Heidelberg).

Fig. 12: Ring impression (CMS V Suppl. 1A, no. 133; courtesy of the CMS Heidelberg).

Fig. 13: Agate lentoid seal in the Ashmolean Museum (CMS VI, no. 342; courtesy of the CMS Heidelberg).

What are the Tree-shaking Figures Doing?

If all these images, in which we see comparative examples of the leg positions of the tree-shakers, are scenes of human aggression, then can we consider images of tree-shaking and -pulling to also be examples of human aggression, but towards vegetation? The iconographic parallels suggest that the tree-shaking pose indicates a coercive or even violent activity. Are tree-shakers in combat with trees? And what do we make of the presence of women performing this activity, considering that all the comparanda depict men?

The tree-shaking figures occur within cult scenes; all of which feature both men and women, except Figure 7 in which only a female is depicted. In five of the images (Figs. 1–2, 4–6) males shake the tree and in three of them females do (Figs. 1, 3, 7). The trees themselves are situated within a tripartite shrine (Fig. 2), a columnar shrine made of piers (Figs. 6–7), a columnar shrine made of wood (Fig. 1), on a stepped ashlar altar (Fig. 1), on a flat ashlar altar (Fig. 4), and in rocky ground (Fig. 5). It is not possible to identify the tree species due to the small size of glyptic art.[1] In five examples the trees do not have fruit (Figs. 1–3, 7) while in two, possibly three, they do (Figs. 4–6). The tree-shaking scene includes a baetyl in four examples (Figs. 1–3, 6) and no baetyl in three (Figs. 4–5, 7). In regard to the action: two examples (Figs. 2, 6) fea-

---

[1] Arthur Evans' suggestion that trees with broad leaves signify fig trees and that those with small leaves are olive trees has been prevalent in glyptic studies, but is not really accurate. Foliage apparently consisting of globules and leaves surrounded by dots are suggested to be fruit, and have also been claimed to indicate flowers (Crowley 2014, 130). Such dots have also been interpreted as silk moths (Van Damme 2012) and fig wasps (Dabney 2014). The only type of tree able to be identified in glyptic is the

palm tree, because it is very distinctive. Jennifer Moody (2017) rightly notes that most Minoan iconographic representations of trees can be divided – at best – into "palms and not-palms". While none of the trees in the tree-shaking scenes are palms, even so, there are obviously different types of trees depicted and these may signify particular variations of cult (Marinatos 1989, 136; Sourvinou-Inwood 1991, 199–243).

ture a male tree-shaker, a central female figure possibly dancing and a baetyl-hugger (1 male, 1 female); one example (Fig. 5) depicts a male tree-shaker and a central female; one example (Fig. 1) features two tree-shakers (a female and a male) and a seated female; one example (Fig. 3) features a female tree-shaker and a male baetyl-hugger; one (Fig. 4) depicts a male tree-shaker and a male figure saluting a female figure; and one (Fig. 7) features a female tree-shaker alone.

Previous Interpretations

Within the history of Aegean archaeology, glyptic images of tree-shaking have been interpreted in three main ways: as the harvesting of psychoactive substances; as regular fruit harvesting; or as the attempt to attract the attention of a deity. Arthur Evans (1930, 142), and later Nikolaos Platon (1984, 68), proposed that the figures shaking trees were gathering psychoactive substances to consume in order to enter an ecstatic state characterised by frenzied movement, or to offer to the nearby female figure interpreted as a "goddess" so that she could enter an ecstatic state; an incongruous suggestion for a divinity. Martin Nilsson (1950, 277) agreed that tree-shaking scenes were ecstatic, even orgiastic; celebrations of the life force in contrast to baetyl-hugging which he felt expressed mourning. Jane Ellen Harrison (1921, 165–169, 178), Bogdan Rutkowski (1986, 107) and Lucy Goodison (2010, 14–15) suggested the fruit-gathering theory, while the most popular interpretation of tree-shaking, subscribed to by Axel Persson (1942, 23, 25), Peter Warren (1987, 492), Nota Dimopoulou and Giorgos Rethemiotakis (2000, 44–48; 2004, 16), Konstantinos Galanakis (2005, 89, 93–94), John Younger (2009, 49) and Nanno Marinatos (1993, 187, 190–192), is that its purpose was to attract a deity. Marinatos has also proposed that tree-shaking images depict aspects of initiation rituals, as well as the final phase in a seasonal cycle whereby the shaking of the tree was undertaken in order to bend, break, and ultimately destroy it. More recently Marinatos has interpreted tree and baetyl cult in light of Near Eastern texts that describe frenzied prophets, seeing the central elite female figures in such images as queens enacting ritual designed to lead to an ecstatic prophetic state (Marinatos 1990, 85; 1993, 187–188; 2009).

My Interpretation

I propose that tree-shaking scenes can be classified with the 'combat with nature' images mentioned above (Nikolaidou and Kokkinidou 1997); and that tree-shaking or -pulling may be an attempt to ritually control the natural world through aggression and violence – which need not be considered incompatible with the Minoans' renowned fondness for the natural world, or indicate malevolence (Evely 1996, 65). I also suggest that because these are ritual scenes that they may be images of coercive dendromancy in which the human figures physically interact with the trees in order to produce sound from the rustling of their leaves for the purpose of divination and that the various bent leg poses indicate that the figures are in an ecstatic state (Tully 2021).

Altered states of consciousness can be achieved through physical activities such as fasting, sensory deprivation or concentration, sound, rhythmic movement, energetic dancing and physical gestures, as well as the cultivation of specific mental states with or without the use of drugs. Christine Morris and Alan Peatfield, and Erin McGowan, have proposed that particular gestures, evident in Minoan clay and bronze figurines from peak, rural and cave sanctuaries and in depictions of cult scenes in glyptic, can facilitate trance states (Morris and Peatfield 2002, 2004; Morris 2004; McGowan 2006; Peatfield and Morris 2012). This idea is based on the work of anthropologist, Felicitas Goodman, who experimented with various restrictive body postures derived from ethnographic examples of shamanic rituals and depictions of humans in ancient art which, in combination with "sonic driving" (the repetitive application of sound), produced altered states of consciousness (Goodman 1986, 1988, 1990). According to this technique physical action can affect emotional and psychological states and therefore be used to access altered states of consciousness.

Cross-Cultural Comparanda

But why should we interpret tree-shaking or -pulling activity within cult scenes as depictions of dendromancy? In order to answer the question we need to turn to comparative ethnographic analogies. Marinatos (2009, 2010) postulates that tree-shaking, along with baetyl-hugging, can be interpreted through cross-cultural comparison with Near Eastern ritual because there was a 'koine' or common language of religious ritual spanning the central and eastern Mediterranean during the Bronze and Iron Ages. In particular she refers to textual evidence including an oracular formula in the Ugaritic *Epic of Ba'al* (*KTU* 1.7.1), the Hebrew *Bible* (*Gen* 28.10–13; 1 *Sam* 10.9, 21.15–16; 2 *Kings* 3.16, 9.11; *Jer* 29.26; *Hos* 9.7), and Hesiod's *Theogony* (line 35) in support of her interpretation of Minoan tree and stone cult in general as prophecy ritual (Marinatos 2009). I have argued elsewhere that east Mediterranean iconographic and archaeological evidence dating to the Middle Bronze Age and textual evidence dating from the Late Bronze and Iron Age indicates the existence of a female tree deity as well as cult sites where this deity may have been worshipped as a literal tree (Tully 2018, 123–141). Evidence from Mari, Ugarit and Egypt attests that the Minoans were in contact with these cultures through maritime trade during the Middle and Late Bronze Age.

Speaking Trees

In regard to Levantine textual evidence, the relevant section of the *Epic of Ba'al* is as follows: "For I have a word that I would say to you, a message that I would repeat to you: a word of tree and a whisper of stone, a word unknown to men, and which multitudes of the earth do not understand: the coupling of the heavens with the earth, of the deeps with the stars. I understand the lightning which the heavens do not know: come, and I shall reveal it in the midst of my divine mountain Saphon, in the sanctuary, in the rock of my inheritance" (*KTU* 1.7.1; Wyatt 2007, 181).

Nicholas Wyatt (2007, 189–90) proposes that this "word of tree" was the susurration – the sound of the wind in the trees – interpreted as the oracular response of a numinous tree; that the interpretation of the wind would have been an esoteric craft known only to ritual specialists; and that it was a form of prophecy utilised by Ugaritic royalty.[2] Wyatt also draws our attention to the analogous tradition of oracular trees in the Hebrew *Bible*. The biblical text certainly contains a lot of material on sacred trees, the best-known examples being the mythological "Tree of the Knowledge of Good and Evil" and the "Tree of Life" situated within the Garden of Eden (*Gen.* 1: 29–3: 24). Trees play prominent roles in the narrative of the patriarchs such as Abraham who built an altar to Yahweh at the Oak of Mamre and planted a tamarisk tree near Beer-Sheba (*Gen.* 21: 33; 13: 18), and Moses who spoke to Yahweh in the form of a burning bush (*Exod.* 3: 2–3). Trees or their representatives, artificial trees or pillars, at open-air cult sites are singled out as examples of incorrect – and older – 'Canaanite' religious practice in *Exodus, Deuteronomy, Judges,* 1 and 2 *Kings, Chronicles, Isaiah, Jeremiah, Micah, Ezekiel,* and *Hosea* (Tully 2018, 124).

Evans (1901, 130–131) suggested that descriptions of "Epiphanies and Visions of the Divine Presence beneath sacred trees and beside holy stones and pillars" mentioned in the biblical text could elucidate scenes of tree cult on Minoan signet-rings. He focussed primarily on examples of numinous trees from, or in the vicinity of which, voices, angels, or deities emerged; in particular the appearance of God to Abraham by the oaks of Mamre (*Gen.* 18: 1), Moses and the Burning Bush (*Exd.* 3: 4), the appearance of the "Angel of the Lord" to Gideon beneath his father's terebinth (*Jud.* 6: 11), Joshua's setting up of the Stone of Witness under an oak tree at Shechem (*Josh.* 24: 26), and Deborah sitting under her palm tree (*Judg.* 4: 4). These animate

---

2 One wonders whether the Minoan "Priestess of the Winds" referred to in two Linear B texts from Knossos (Fp 1.10, 13.3) might be the title of an interpreter of the wind in the trees.

trees also emitted oracular sounds and voices (2 *Sam.* 5: 24; *Judg.* 4: 4–5) and were capable of mobility, as in the example of the trees that went out to choose a king (*Judg.* 9: 8) (Evans 1901, 130–132; Tully 2018, 123–124).

In regard to Greek textual evidence, Shawn O'Bryhim (1996), Carolina López-Ruiz (2010), and Lucy Goodison (2009) have all suggested that line 35 in Hesiod's *Theogony* ("But what is all this to me, the story / of the oak or the boulder?") may refer to the east Mediterranean tree-and-stone oracle consultation method alluded to in the *Epic of Ba'al.* Earlier (line 30), Hesiod relates that he received a laurel sceptre from the Muses on Mount Helicon along with the gift of prophecy. References to oracular trees, magical branches, wands, staffs and sceptres that provide divine wisdom, knowledge and power also appear in Homer. The Homeric 'skêptron' was made from wood studded with gold nails by the god Hephaistos (*Il.* 2.76) (Easterling 1989). In Homeric literature the sceptre has profound religious significance and transmits divine authority to the human sphere (Palaima 1995, 135). This has interesting parallels to examples from the *Bible,* such as the flowering of Aaron's priestly staff (*Num* 17.20–25), and in *Hosea* 4:12, "My people enquires of its tree / and its rod instructs it." Several examples of Minoan art depict human figures receiving or holding sceptres, and single branches feature in association with altars and cult equipment (Tully 2018, 70–72).

Concrete evidence for prophetic activity in association with a sacred tree is found at the cult site of Dodona in Epirus in north-western Greece which centred around an oracular oak tree sacred to Zeus Naios (god of the spring below the temenos) and Zeus Bouleus (counsellor). Dodona was the oldest Hellenic oracle, with inscriptional evidence dating to 550–500 BCE and archaeological evidence that dates back to the Late Bronze Age. The oracle was staffed by priests called 'selloi' and priestesses called 'peleiades' (doves) who, it is believed, interpreted the sound of the rustling leaves of the tree.[3] The site may have originally been a sacred grove, but by the late Hellenistic period there was only a single tree present.

Herodotus (2.55) claims that the original priestesses of the oracle came from Thebes in Egypt. He relates that the contemporary Dodonean priestesses, Promeneia, Timarete and Nikandra, told him that the oracle was originally founded by birds: two black doves had come flying from Thebes; one went to Libya where the oracle of Zeus Ammon was founded, and the other to Dodona; the latter settled on an oak tree and spoke in a human voice, proclaiming that a place of divination from Zeus was to be founded there. The people of Dodona recognised that the message had a divine origin and established the oracular shrine. Herodotus interprets this story as an 'aition' for the foreign origin of the original priestesses; the black colouring of the doves signifying that they were Egyptian, and their unfamiliar language sounding to the inhabitants of Dodona like the cries of birds (Connelly 2007, 81).

In his 1967 work on Dodona, Herbert Parke (1967, 20) claimed that "the rediscovery of the Minoan civilisation of Crete and the Mycenaean civilisation of the mainland has brought to light many representations, particularly on engraved seals and gems, which indicate some form of tree-cult in the pre-Hellenic period, but there is nothing in them to suggest the oracular consultation of a sacred tree". In contrast to Parke's opinion there is, in fact, ample Minoan iconographic evidence that suggests consultation of a sacred tree. In addition to images that depict tiny hovering anthropomorphic beings emerging from trees (*e.g.* Fig. 1; *CMS* II 6, no. 6; VI, no. 280; an ivory pyxis lid from Mochlos), there are also examples of bird epiphany in association with trees, evoking the doves at Dodona (Fig. 3; HM 1043; *CMS* I, no. 179; a bronze plaque from the Psychro Cave; Agia Triada Sarcophagus Side B). The 'selloi' priests at Dodona were said to sleep on the ground; and several examples of Minoan tree cult iconography depict human figures kneeling on the ground, leaning over baetylic rocks and over a table possibly containing a baetyl (Figs. 2–3, 6; HM 1043; *CMS* II 6, no. 4; II 7, no. 6; V, no. 278).[4]

---

3 A recent suggestion is that the priests and priestesses at Dodona interpreted the sound of bronze objects hanging in the tree that clanged together when the wind blew (Charisis 2017).

Goodison (2010, 28, 34) has suggested that Greek Panhellenic sanctuaries were influenced by Minoan rural sanctuaries. Marinatos (2009) has proposed that the classical cult of Delphic Apollo and his association with a laurel tree was a survival of Minoan tree ritual. The *Homeric Hymn to Apollo* (393, 396) mentions that the first priests of the god's oracle at Delphi were from Knossos and that the god spoke "from the laurel tree". That trees in general were animate in ancient Greece is evident in the concept of tree nymphs, semi-immortal beings whose life was intertwined with the trees they inhabited (*e.g.* Alsêids [nymphs of sacred groves], Daphnaiai [of laurel], Dryads [oak], Meliads [ash], Pteleades [elm]). Tree nymphs were also associated with prophecy in the form of divination (Larson 2001, 74). The presence of sentient trees in Greece does not mean that the oracular oak at Dodona necessarily derived from Minoan religion, although it was surely part of the 'koine' of Aegean and eastern Mediterranean religion that recognised sacred trees and stones.

Altered States

It is not known exactly how the prophecies of Zeus were received by the priestly attendants at Dodona. The oak tree was said to 'speak', but it is unclear whether this meant that it spoke in human language, bird language, through the sound of rustling leaves, or in a language or sound only audible to the 'selloi' and 'peleiades' (Parke 1967, 27–29; Marder 2017, 112). We also do not know whether the oracle's attendants only listened to the tree or whether they actively touched it to cause the sound. While many Minoan examples of tree cult depict interaction and communication with numinous trees, the focus here is on the distinctive cluster of tree-shaking scenes, characterised by vigorous, active, haptic interaction with the tree.

The glyptic examples of tree-shaking figures can be arranged so as to show the stages of the movement and hence explain the posture and action: first, the figure lunges toward the tree and grabs hold of it to begin the activity of shaking it (Fig. 1, female figure on left); second, the figure begins shaking the tree, bending their legs for stability (Fig. 1, central male figure; Fig. 3, female on right; Fig. 5, male on left; Fig. 6, male on right); third, increased exertion requires the figure to space their legs more widely (Fig. 4); and fourth, even more effort is required because either their ecstatic state causes them to behave even more vigorously (Figs. 2, 7), or perhaps the tree resists their efforts, which is a kind of defeat for the human figure – both increased effort and the threat of defeat seen in comparative examples of the leg kicked back and up pose.

In the case of the oracle of Dodona, if a tree or bird spoke in human language it would suggest that they had to be in an altered state (different from their normal tree- or bird-state) in order to communicate with humans. Seeing as humans were actively seeking consultation with Zeus through his sacred tree, it would seem more likely that it would be the humans that were required to enter an altered state in order to understand the tree or bird language. In the glyptic examples of tree-shaking, the figures all display an agonistic body posture that expresses movement, that also appears in images depicting physical transformation into animal forms, and which has been interpreted as expressive of ecstatic frenzy which causes or is a result of frenetic movement.

Vigorous movement or dancing is a characteristic of shamanism.[5] Tae-gon Kim defines shamanism as "a traditional religious phenomenon tied closely to nature and the surrounding world, in which a practitioner endowed with the special ability to enter a state of trance possession, can communicate with supernatural beings … [and that] … this transcendental power allows the practitioner, the shaman, to satisfy human cravings for explanation, understanding and prophecy" (Kim 1998, 19; quoted in Nelson 2015, 203–204). Tully and Crooks (2015) argue that

---

[4] One of the categories of prophets at Mari received their revelations in dreams (Huffmon and Schmitt 1992, 479).

[5] Evans suggested that such activities were analogous to Saami shamanism (Evans 1930, 315). The Saami, whose traditional territory is northern Scandinavia spanning modern-day Norway, Sweden, Finland and Russia, practice a form of shamanism similar to the canonical Siberian type (Hutton 2001, 137).

the various ecstatic activities, in addition to tree-shaking, that are evident within Minoan religion can be described as "shamanistic," one of the tropes of which is the adoption of particular body postures.[6]

Gender

The identification of the tree shakers as shamans or ecstatic prophets may explain the presence of females undertaking this activity. Within the wider corpus of images of Minoan tree cult, female figures appear twice as many times as males in the vicinity of trees and tend to predominate in scenes where the tree is touched (Tully 2018, 203–233). In contrast, tree-shaking activity is almost evenly distributed between females and males.[7] An elite female figure wearing an elaborate flounced Minoan skirt appears in five examples (Figs. 1–2, 4–6), but the tree is never shaken by this type of female figure; only by females wearing Minoan trousers or males wearing Minoan breechcloths. Female figures leaning over baetyls also wear Minoan trousers (*CMS* II 6, no. 4; II 7, no. 6; VI, no. 278; XI, no. 29), and the garment appears in other glyptic scenes featuring female figures carrying elaborate skirts (*CMS* II 3, nos. 8, 145; II 6, no. 26), seated female figures with attendants (*e.g. CMS* I, nos. 101, 361; II 6, no. 8; II 7, no. 8; II 8, no. 268; VI, nos. 283, 284; XI, no. 30), or with animals nearby (*CMS* II 3, no. 168; II 6, no. 32), a female archer (*CMS* XI, no. 26), and bird-women and -men (*CMS* II 6, no. 106; II 7, no. 139B). It may have been a more casual garment, an undergarment, or even a cursory attempt by glyptic engravers to depict the Minoan split-front skirt, but is nevertheless distinguishable from the elaborate skirt.

That the elite skirt-wearing women in tree-shaking scenes did not undertake tree-shaking may have been because the activity could not be undertaken while wearing an elaborate skirt, or because the female tree shakers were a different category of person characterised by a distinctive type of garment. The female figure wearing Minoan trousers and/or the male breechcloth-wearing figure may undertake the prophetic activity on behalf of the elite female figure. In regard to the trouser-wearing female figure, according to Near Eastern texts ecstatic prophets were sometimes given gifts of clothing; and/or parts of their own clothing were used in further verification divinations concerning their prophecies (Huffmon and Schmitt 1992, 477–482). Other examples of Minoan glyptic images depict trouser-wearing figures carrying elaborate skirts and it is tempting to wonder whether they were given to them as gifts (*CMS* II 3, nos. 8, 145; II 6, no. 26).

Animism

Dendromancy presupposes animism which, as re-theorized by Irving Hallowell (1960), is an ontology that derives from the interdependent relationship of humans with the material world which is assumed to be sentient (Hallowell 1960). As such it can be communicated with in a direct way and incorporated into social relationships. That the Minoans had an animistic world view is evident in iconographic images of human figures in outdoor locations interacting with trees, stones, the sky, hovering epiphanic human figures, birds, insects and objects. While such activities do occur in cultic contexts, it is proposed here that the Minoan figures in these scenes are not actually worshipping the natural world but are expressing their relationship to it. Vivieros de Castro explains that within an animist ontology, "cultivated plants may be conceived as blood relations of the women who tend them, hunters may approach game animals as affines, [and] shamans may relate to animal and plant spirits as associates or enemies" (de Castro 2004, 466).

---

6 Tully 2018, 96. And the other trope is the consumption of psychoactive substances.

7 Generally, in the majority of cultic scenes in glyptic and other media the sexes are depicted as participating in cult separately, except in examples involving trees but only female figures are depicted sitting under trees while males never are (Marinatos 1987, 25–28, 33; 1989, 130, 136; 1993, 18; 1990, 90–91; Rehak 2000, 271–272).

Interspecies Communication

Therefore, I argue that images of tree-shaking and -pulling depict human figures in what we would term an 'altered state of consciousness' which they are undergoing in order to understand the language of the numinous tree. If the Minoan figures are actually shaking the tree, which their active pose suggests, then the rustling of the leaves would definitely make an audible sound that may have been considered a type of language that the shamanic practitioner or ecstatic prophet could understand, as per the later example of Dodona. In the majority of examples of Minoan tree cult the tree is either not touched at all, or is touched gently, in contrast to tree-shaking scenes where it seems to be actively grasped and pulled or violently shaken. Unlike a Western Romantic approach, an animistic conception of the natural world, as proposed for Minoan Crete, need not equate with a gentle, reverent attitude toward nature. In animist cultures, the recognition and acceptance of plant personhood and specific kinship co-exists with predatory relationships; some trees may have even been considered to be opponents or adversaries (de Castro 2004, 466). Minoan images of tree-shaking may depict the attempt to ritually coerce, compel or otherwise control the numen of the tree, specific types of vegetation, or the natural world in general through physical dominance (Tully 2018; in press). Tree-shaking may have been a way to make an otherwise apparently reluctant tree speak; an action resorted to when there was no wind to cause the leaves to rustle; or even a post-communicative reaction to the tree – temporality being notoriously hard to discern within Minoan glyptic iconography.[8]

Conclusion

In conclusion, the combination of agonistic postures directed toward sacred trees within cult scenes, the likelihood that the Minoans conceived their world from an animistic perspective, and the evidence for a belief in numinous oracular trees within the wider Eastern Mediterranean and on mainland Greece, provides support for the idea that Minoan tree-shaking images depict ritual participants undergoing an altered state of consciousness during which they perform coercive dendromancy. That the agonistic impulse as depicted within Aegean Bronze Age elite art functioned as an ideological visual tool that promoted the idea of elite male domination and control over other males, females, and the natural world, suggests that despite the presence of females, tree-shaking scenes may express the attempt to control the natural world through aggression and domination, within ritual contexts, and thus promote the idea that the elite owners of the rings were supremely capable of establishing and maintaining order.

Catalogue

HM1700 (Fig. 1). The gold ring from Knossos, known as the 'Ring of Minos' and dating to LM I B – II, found on the east slope of the Gypsades Hill near the 'Temple Tomb', depicts on its bezel a seascape surrounded by three cult scenes featuring large boulders, cult structures and human figures. In the center of the image a female figure wearing a flounced skirt poles a hippo-camp-headed boat (Wedde 1990). On the left a female figure wearing Minoan trousers (Kyriakidis 1997) has placed her left knee upon the lower section of a stepped ashlar altar and with her right arm grasps a tree on top of it. In the upper central area a male figure wearing a Minoan breechcloth (Rehak 1996) and with a bent left leg and outstretched right leg, suggesting a lunging movement, grasps a tree situated on top of a columnar shrine with his right hand, and holds a small object with his left hand which has been variously interpreted as a rhyton, a chrysalis or a sprouting bulb or seed. To the right a female figure wearing an elaborate Minoan skirt

---

8 Rather than destroying the tree, as suggested by Marinatos (1990, 85; 1993, 187–188), when a tree is shaken it actually becomes stronger by growing more and stiffer roots for increased anchorage and thickening the girth of its trunk, resulting in increased overall resistance to swaying and bending (Haskell 2017, 189–190). Thus, the tree is not simply a passive recipient of human action but has agency (Jones and Cloke 2008).

sits on another stepped ashlar altar and interacts with a hovering epiphanic female figure wearing a similar garment that possibly emerges from the central tree (Evans 1931; 1935, 950; Platon 1984; Pini 1987; Warren 1987; Dimopoulou and Rethemiotakis 2004, 14, 20; Soles 2011; Krzyszkowska 2012, 180).

HM 989 (Fig. 2). The gold ring found in the side tomb of Tholos Tomb A at the cemetery of Phourni Archanes in a larnax burial of a female, dating to LM III A,[9] depicts, on the right, a tripartite cult structure made from ashlar masonry, on top of which is a tree. A male figure wearing a Minoan breechcloth pulls at the tree with both hands, his bent legs, one of which is kicked back and up, suggesting energetic movement. To the left of this figure and in the centre of the image is a female figure wearing an elaborate Minoan skirt and facing to the left. At the far left of the image a male figure wearing a Minoan breechcloth kneels upon the ground, his head leans upon his left shoulder and his arms encircle a large baetylic stone.[10] Above him hover a dragonfly and butterfly, possible cult stand or Linear A sign (no. 171), an eye and an arrow (Sakellarakis 1967; 1991, 79; Sakellarakis and Sapouna-Sakalleraki 1997, II, 609, 654).

CMS II 3, no. 114 (Fig. 3). A gold ring from Kalyvia, tomb 11 in LM III A2 context, depicts a female figure on the right with bent legs, who seems to be nude, but is probably wearing Minoan trousers (Kyriakidis 1997). She clutches with both hands a tree which is situated within or on top of a columnar shrine on vertical rocks. In the center of the scene a male figure, who also seems to be nude, but is probably wearing a Minoan breechcloth and whose head and forearms are obscured, because of wear and/or the rather minimal and impressionistic rendition of the figure, leans over a large baetylic stone. A bird flies towards him from a pithos to the left of the scene (*CMS* II 3, no. 132).

HM 1629 (Fig. 4). A gold ring found in a large rock-cut tomb of the Neopalatial period cemetery at Poros Heraklion dates to the LM I B. Its bezel depicts on the right side an ashlar structure above which is a tree. A male figure wearing a Minoan breechcloth grasps the tree, his bent knees and widely spaced legs suggesting vigorous movement. Above the male figure in the air are dots and possibly a couple of floating epiphanic objects. In the center of the image is another male figure standing on a small platform. Directly above him in the air are a wing and a small hovering epiphanic female figure. The central male figure extends his right arm in a salute or greeting to a hovering but full size female figure on the left side of the scene. This female figure is in a seated position, and has her arms bent at the elbows as if holding reigns (although none are evident), and two birds below her to the left and right may have been intended to be understood as functioning as either vehicles for her or as pulling a vehicle. Below each bird is a clump of flowers (Dimopoulou and Rethemiotakis 2004; Rethemiotakis 2017).

CMS I, no. 219 (Fig. 5). A gold ring from Vapheio, found in a LH II–III A1 tholos tomb, depicts on the left, a pithos with some dots around its upper part, perhaps a garland decoration, above (behind) which are thin, cylindrical rocks with a tree growing out of them. A male figure with a bent right leg and extended left leg stands on globular rocks and pulls at the tree with his right hand. In the center of the scene a female figure wearing an elaborate skirt appears to be dancing. Above and to the right of the female figure are three hovering objects including a rhyton, a shooting star or sprig of wheat, and a double axe with tassels. To the far right of the scene a sacred knot or garment, possibly with a sword, lies upon a figure-eight shield or a rock.

CMS I, no. 126 (Fig. 6). A LH gold ring from Mycenae depicts, on the right side, a male figure with bent legs pulling on a tree situated in a columnar structure that possibly contains a baetyl, whilst looking backward over his shoulder and downwards, toward the central scene where a female figure wearing an elaborate skirt stands with her hands on her hips and looks toward him. On the left another female figure wearing an elaborate skirt leans over another shrine

---

9 The style of this ring suggests a LM I B date. Minoan style rings found in Mycenaean period tombs were probably heirlooms (Tully and Crooks 2019).

10 Baetyls are natural and worked stones traditionally thought to be aniconic representations of a deity (Crooks 2013), similar to Levantine *masseboth* (Graesser 1972).

structure or table with her arms folded, laying her head on her arms. Below (*i.e.* inside) the table at left are a garlands or a double-stranded necklace above an oval object, perhaps a baetyl. Above her are three jagged vertical marks which may depict hovering epiphanic shooting stars, wheat spikes or branches. Two curved marks at the top of the image may indicate garlands or the sky (*CMS* I, no. 126).

CMS **XII, no. 264** (Fig. 7). An unprovenienced grey-green serpentine lentoid seal in LM I iconographic style (Cretan Popular Group) depicts a female figure wearing Minoan trousers, with bent legs, the left one kicked back and up, facing to the left and grasping with both hands a tree on top of a columnar structure which sits on rocks or a flimsy built support (Kenna 1972, 356).

Acknowledgments

References

Athanassakis, A. N. 1976. *The Homeric hymns: translation, introduction, and notes.* Baltimore: Johns Hopkins University Press.

Blakolmer, F. 2013. "The missing 'Barbarians': some thoughts on ethnicity and identity in Aegean Bronze Age iconography." *Talanta* 44: 53–77.

Cadogan, G., E. Hatzaki, and A. Vasilakis. 2004. *Knossos: palace, city, state. BSA Studies* 12. London: British School at Athens.

Charisis, Ch. V. 2017. "Ένας χάλκινος τροχίσκος από τη Δωδώνη. Η ίυγξ, ο λέβης και η μουσική των θεών." In *Σπείρα. Επιστημονική συνάντηση προς τιμήν της Α. Ντούζουγλη και τον Κ. Ζάχου,* 365–380. ΤΑΡΑ: Athens.

Connelly, J. B. 2007. *Portrait of a priestess: women and ritual in ancient Greece.* Princeton: Princeton University Press.

Crooks, S. 2013. *What are these queer stones? Baetyls: epistemology of a Minoan fetish. BAR-IS* 2511. Oxford: Archaeopress.

Crowley, J. 2014. "Images of the Earth in Aegean art." In *Physis. L'environnement naturel et la relation homme-milieu dans le monde égéen Protohistorique. Actes de la 14ᵉ Rencontre égéenne internationale, Paris, Institut National d'Histoire de l'Art (INHA), 11–14 décembre 2012,* edited by G. Touchais, R. Laffineur, and F. Rougemont, 465–467. *Aegaeum* 37. Peeters: Leuven and Liège.

Dabney, M. K. 2014. "Representations of fig cultivation in Aegean art." In *Physis. L'Environnement Naturel et la Relation Homme-Milieu dans le Monde Égéen Protohistorique. Actes de la 14ᵉ Rencontre égéenne internationale, Paris, Institut National d'Histoire de l'Art (INHA), 11–14 décembre 2012,* edited by G. Touchais, R. Laffineur, and F. Rougemont, 469–470. *Aegaeum* 37. Peeters: Leuven and Liège.

de Castro, E. V. 2004. "Exchanging perspectives: the transformation of objects into subjects in Amerindian ontologies." *Common Knowledge* 10: 463–484.

Dimopoulou, N., and G. Rethemiotakis. 2000. "The 'Sacred Conversation' Ring from Poros." In *Minoisch-Mykenische Glyptik: Stil, Ikonographie, Funktion. V. Internationales Siegel-Symposium, Marburg, 23–25 September 1999,* edited by I. Pini, 39–56. *CMS Beiheft* 6. Berlin: Gebr. Mann.

Dimopoulou, N., and G. Rethemiotakis. 2004. *The Ring of Minos and gold Minoan rings: the epiphany cycle.* Athens: Ministry of Culture, Archaeological Receipts Fund.

Easterling, P. 1989. "Agamemnon's *skēptron* in the *Iliad.*" In *Images of authority: papers presented to Joyce Reynolds on the occasion of her seventieth birthday,* edited by M. M. Mackenzie and C. Roueché, 104–121. Cambridge: Cambridge Philological Society.

Evans, A. J. 1901. "Mycenaean tree and pillar cult and its Mediterranean relations." *Journal of Hellenic Studies* 21: 99–204.

Evans, A. J. 1931. "The magic clue of a royal signet ring." *Illustrated London News* 4823, 179: 485–489.

Evans, A. 1935. *The Palace of Minos at Knossos.* Vol. IV. London: Macmillan.

Galanakis, K. 2005. *Minoan glyptic: typology, deposits and iconography. From the Early Minoan period to the Late Minoan I B destruction in Crete. BAR-IS* 1442. Oxford: Archaeopress.

Goodison, L. 2009. "'Why all this about oak or stone?': Trees and boulders in Minoan religion." In *Archaeologies of cult: essays on ritual and cult in honour of Geraldine C. Gesell,* edited by A. L. D'Agata and A. van de Moortel, 51–57. *Hesperia Suppl.* 42. Princeton: American School of Classical Studies at Athens.

Goodison, L. 2010. *Holy trees and other ecological surprises.* Manchester: Just Press.

Goodman, F. D. 1986. "Body posture and the religious altered state of consciousness: an experimental investigation." *Journal of Humanistic Psychology* 26: 81–118.

Goodman F. D. 1988. *Ecstasy, ritual and alternate reality: religion in a pluralistic world.* Bloomington: Indiana University Press.

Goodman, F. D. 1990. *Where the spirits ride the wind: trance journeys and other ecstatic experiences.* Indiana: Bloomington.

Graesser, C. F. 1972. "Standing stones in ancient Palestine." *Biblical Archaeology* 35: 34–63.

Hallowell, A. I. 1960. "Ojibwa ontology, behaviour, and worldview." In *Culture in history: essays in honor of Paul Radin,* edited by S. Diamond, 19–52. New York: Colombia University Press.

Harrison, J. E. 1921. *Epilegomena to the study of Greek religions and Themis: a study of the social origins of Greek religion.* New York: University Books.

Haskell, D. G. 2017. *The songs of trees.* New York: Penguin.

Huffmon, H. B., and J. J. Schmitt. 1992. "Prophecy." In *The Anchor Bible Dictionary,* edited by D. N. Freedman, 447–489. New York: Doubleday.

Hutton, R. 2001. *Shamans: Siberian spirituality and the Western imagination.* London: Hambledon and London.

Jones, O., and P. Cloke. 2008. "Non-human agencies: trees in place and time." In *Material agency,* edited by C. Knappett and L. Malafouris, 79–96. New York: Springer.

Kenna, V. E. G. 1972. *CMS XII: Nordamerika, I: New York, The Metropolitan Museum of Art.* Berlin: Gebr. Mann Verlag.

Kim, T. 1998. "What is Korean shamanism?" In *Korean shamanism: revivals, survivals, and change,* edited by K. Howard, 15–32. Seoul: Seoul Press.

Krzyszkowska, O. 2005. *Aegean seals. An introduction. BICS Suppl.* 85. London: University of London.

Krzyszkowska, O. 2012. "Impressions of the natural world: landscape in Aegean glyptic." In *Cretan offerings: studies in honour of Peter Warren,* edited by O. Krzyszkowska, 169–187. *BSA Studies* 18. London: British School at Athens.

Kyriakidis, E. 1997. "Nudity in Late Minoan I seal iconography." *Kadmos* 36: 119–126.

Larson, J. 2001. *Greek nymphs: myth, cult, lore.* Oxford: Oxford University Press.

Liddell, H. G. and R. Scott. 1955. *An intermediate Greek-English lexicon.* Oxford: Clarendon Press.

López-Ruiz, C. 2010. *When the gods were born: Greek cosmogonies and the Near East.* Cambridge: Harvard University Press.

Marder, M. 2017. "To hear plants speak." In *The language of plants: science, philosophy, literature,* edited by M. Gagliano, J. C. Ryan, and P. Viera, 103–125. Minneapolis: University of Minnesota Press.

Marinatos, N. 1987. "Role and sex division in ritual scenes of Aegean art." *JPR* 1: 23–34.

Marinatos, N. 1989. "The tree as a focus of ritual action in Minoan glyptic art." In *Fragen und Probleme der bronzezeitlichen ägäischen Glyptik,* edited by W. Müller, 127–143. *CMS Beiheft* 3. Berlin: Gebr. Mann Verlag.

Marinatos, N. 1990. "The tree, the stone and the pithos: glimpses into a Minoan ritual." *Aegaeum* 6: 79–92.

Marinatos, N. 1993. *Minoan religion. Ritual, image and symbol.* Colombia: University of South Carolina Press.

Marinatos, N. 2009. "The role of the queen in Minoan prophecy rituals." In *Images and prophecy in the ancient eastern Mediterranean,* edited by M. Nissinen and C. E. Carter, 86–94. *Forschungen zur Religion und Literatur des Alten und Neuen Testaments.* Göttingen: Vandenhoeck and Ruprecht.

Marinatos, N. 2010. *Minoan kingship and the solar goddess. A Near Eastern koine.* Urbana: University of Illinois Press.

McGowan, E. R. 2006. "Experiencing and experimenting with embodied archaeology: re-embodying the sacred gestures of Neopalatial Minoan Crete." *Archaeological Review from Cambridge* 21: 32–57.

Moody, J. M. 2017. *Veteran and sacred trees in modern and Minoan Crete.* Presentation at the New York Aegean Bronze Age Colloquium, 24 March 2017.

Morris, C., and A. Peatfield. 2002. "Feeling through the body: gesture in Cretan Bronze Age religion." In *Thinking through the body: archaeologies of corporeality,* edited by Y. Hamilakis, M. Pluciennik, and S. Tarlow, 105–120. New York: Kluwer Academic/Plenum Publishers.

Morris, C., and A. Peatfield. 2004. "Experiencing ritual: shamanic elements in Minoan religion." In *Celebrations. Sanctuaries and the vestiges of cult activity. Selected papers and discussions from the Tenth Anniversary Symposium of the Norwegian Institute at Athens, 12–16 May 1999,* edited by M. Wedde, 35–58. Bergen: Greig Medialog.

Nelson, S. M. 2015. *Shamans, queens, and figurines: the development of gender archaeology.* Walnut Creek: Left Coast Press.

Nikolaidou, M., and D. Kokkinidou. 1997. "The symbolism of violence in Late Bronze Age palatial societies of the Aegean: a gender approach." In *Material harm: archaeological studies of war and violence,* edited by J. Carman, 174–197. Glasgow: Cruithne Press.

Nilsson, M. P. 1950. *The Minoan-Mycenaean religion and its survival in Greek religion.* Lund: Gleerup.

O'Bryhim, S. 1996. "A new interpretation of Hesiod's 'Theogony' 35." *Hermes* 124: 131–139.

Palaima, T. G. 1995. "The nature of the Mycenaean wanax." In *The role of the ruler in the prehistoric Aegean,* edited by P. Rehak, 119–138. *Aegaeum* 11. Liège: Université de Liège.

Parke, H. W. 1967. *The oracles of Zeus: Dodona, Olympia, Ammon.* Cambridge: Harvard University Press.

Peatfield, A., and C. Morris. 2012. "Dynamic spirituality on Minoan peak sanctuaries." In *Archaeology of spiritualities,* edited by K. Rountree, C. Morris, and A. Peatfield, 227–245. New York: Springer.

Persson, A. W. 1942. *The religion of Greece in prehistoric times.* Berkeley: University of California Press.

Pini, I. 1987. "Zum Ring des Minos." In *Ειλαπίνη. Τόμος Τιμητικός γιά τόν Καθηγητή Νικόλαο Πλάτωνα,* edited by L. Kastrinaki, G. Orphanou, and N. Giannadakis, 441–455. Heraklion: Εκδοτική Φροντίδα, Βικέλαια Δημοτική Βιβλιοθήκη.

Platon, N. 1984. "The Minoan thalassocracy and the golden ring of Minos." In *The Minoan thalassocracy. Myth and reality, Proceedings of the Third International Symposium at the Swedish Institute in Athens, 31 May–5 June 1982,* edited by R. Hägg and N. Marinatos, 65–70. Stockholm: Svenska Institut I Athen.

Rehak, P. 1996. "Aegean breechcloths, kilts, and the Keftiu paintings." *AJA* 100: 35–51.

Rehak, P. 2000. "The Isopata Ring and the question of narrative in Neopalatial glyptic." In *Minoisch-Mykenische Glyptik: Stil, Ikonographie, Funktion, V. Internationales Siegel-Symposium, Marburg, 23–25 September 1999,* edited by I. Pini, 269–276. *CMS Beiheft* 6. Berlin: Gebr. Mann Verlag.

Rethemiotakis, G. 2017. "The 'Divine Couple' Ring from Poros and the origins of the Minoan calendar." *AM* 131/132: 1–29.

Rutkowski, B. 1986. *The cult places of the Aegean.* New Haven: Yale University Press.

Rutter, J. 2014. "Sport in the Aegean Bronze Age." In *A companion to sport and spectacle in Greek and Roman antiquity,* edited by P. Christesen and D. G. Kyle, 36–52. Chichester: Wiley Blackwell.

Sakellarakis, J. A. 1967. "Minoan cemeteries at Arkhanes." *Archaeology* 20: 276–281.

Sakellarakis, J. A., and E. Sapouna-Sakalleraki. 1991. *Archanes.* Athens: Ekdotike Athenon.

Sakellarakis, J. A., and E. Sapouna-Sakelleraki. 1997. *Archanes: Minoan Crete in a New Light.* Vols. I–II. Athens: Ammos.

Sourvinou-Inwood, C. 1991. *Reading Greek culture: texts and images, ritual and myths.* Oxford: Clarendon Press.

Thomas, N., and C. Humphreys. 1996. *Shamanism, history and the state.* Ann Arbor: University of Michigan.

Tully, C. J. 2012. "The sacred life of trees: what trees say about people in the prehistoric Aegean and Near East." In *Proceedings of the 33rd Australian Society for Classical Studies Conference,* edited by E. Anagnostou-Laoutides. http://www.ascs.org.au/news/ascs33/index.html.

Tully, C. J. 2016. "Virtual reality: tree cult and epiphanic ritual in Aegean Glyptic iconography." *JPR* 25: 35–46.

Tully, C. J. 2018. *The cultic life of trees in the prehistoric Aegean, Levant, Egypt and Cyprus. Aegaeum* 42. Peeters: Leuven.

Tully, C. J. 2021. "Understanding the language of trees: ecstatic experience and interspecies communication in Late Bronze Age Crete." In *The Routledge companion to ecstatic experience in the ancient world,* edited by S. Costello, K. Foster, and D. Stein, 469–488. London: Routledge.

Tully, C. J., in press. "Agonistic scenes." In *The Blackwell companion to Aegean art and architecture,* edited by L. Hitchcock and B. Davis. Oxford: Blackwell.

Tully, C. J., and S. Crooks. 2015. "Dropping ecstasy? Minoan cult and the tropes of shamanism." *Time and Mind: The Journal for Archaeology Consciousness and Culture* 8: 129–158.

Tully, C. J., and S. Crooks. 2019. "The self possessed: framing identity in Late Minoan Glyptic." In *Μνήμη/Mneme: past and memory in the Aegean Bronze Age,* edited by E. Borgna, I. Caloi, F. Carinci, and R. Laffineur, 749–752. *Aegaeum* 43. Peeters: Leuven.

Van Damme, T. 2012. "Reviewing the evidence for a Bronze Age silk industry." In *Kosmos. Jewellery, adornment and textiles in the Aegean Bronze Age,* edited by M-L. Nosch and R. Laffineur. *Aegaeum* 33. 163–169. Peeters: Liège.

Warren, P. 1987. "The Ring of Minos." In *Ειλαπίνη. Τόμος Τιμητικός γιά τον Καθηγητή Νικόλαο Πλάτωνα,* edited by L. Kastrinaki, G. Orphanou, and N. Giannadakis, 485–500. Heraklion: Εκδοτική Φροντίδα, Βικέλαια Δημοτική Βιβλιοθήκη

Wedde, M. 1990. "The 'Ring of Minos' and beyond: thoughts on directional determination in Aegean Bronze Age ship iconography." *Hydra* 7: 1–24.

Wyatt, N. 2007. *Word of Tree and Whisper of Stone, and other papers on Ugaritic thought.* Piscataway: Gorgias Press.

Younger, J. G. 2009. "Tree tugging and omphalos hugging on Minoan gold rings." In *Archaeologies of cult: essays on ritual and cult in honour of Geraldine C. Gesell,* edited by A. L. D'Agata and A. van de Moortel, 43–49. Princeton: American School of Classical Studies at Athens.

A Simple Touch? Reassessing Aegean Bronze Age Depictions of Human and Animal Figures Interacting with a Tree or a Column

Laetitia Phialon

Abstract   *A series of Aegean glyptic images depict humans, animals or fantastic beings interacting with trees and architectural elements. This article explores the symbolic value of trees, pillars and columns in rituals and investigates how far these elements may have functioned as interchangeable motifs in Aegean Bronze Age iconography. Whereas tree-shaking scenes suggest the performance of nature-focused rites closely related to the Minoan elites in Neopalatial Crete, the simple act of touching a tree, where nothing ecstatic is implied, speaks of a calmer link between the practitioner and the sacred tree. In antithetical group compositions, the highly stylized rendering of the tree makes possible its assimilation with the pillar or column, revealing a subtle shift from the display of cultic signs to the exploitation of politico-religious symbols, as is the case with the column in Mycenaean Greece. In contrast, in Aegean funerary contexts, a plant motif flanked by animals, as depicted on ceramic vases or larnakes, may be interpreted as a substitute for a 'Tree of Life', and thus as a symbol of fertility and regeneration. The fact that a column may be touched by human figures and by a sphinx, as shown on a larnax from Tanagra in Boeotia, also involves the possibility that wooden columns were sacred in the Late Helladic period. This tactile gesture links human agents to a supernatural power, which may have been associated to the conception of regeneration in the afterworld.*

Introduction

Glyptic imagery is central to understanding Aegean Bronze Age ritual activity and religious concepts. A number of figurative scenes involving individuals or animals interacting with trees attracted attention as early as the early 20th century, when Arthur Evans (1901, 101–104, 106, 200) argued for the presence of sacred trees and pillars. While the existence of a tree cult is commonly accepted, in particular through the reading of these glyptic images, the idea of a pillar cult has regularly been challenged. This in turn raises the question as to how far trees, tree-pillars and columns may be interchangeable motifs in Aegean Bronze Age iconography. Accordingly, it is necessary to address the question of how trees, pillars and columns may have functioned in rituals. A reappraisal of the scenes involving a tactile gesture linked to the presence of a tree or a column is essential to better understand Aegean rites and beliefs. Attention will be drawn to the figures depicted in cultic milieux, their gestures and bodily attitudes.

This paper first explores how humans, animals or fantastic beings interact with trees and architectural elements in Aegean glyptic images. I will focus on scenes involving individuals described as shaking, grasping, pulling or simply touching trees (Tully 2018, 13–15). Other components depicted in these scenes, such as the columnar shrine, will also be taken into consideration. Particular attention will then be paid to antithetical group compositions in glyptic images (Crowley 2013, 99–100, I 74–I 75). The stylization of the tree, the nature of the attendants flanking a tree or a column, and their bodily attitude in particular will be discussed. I will argue for a shift in the use and meaning of tree and column images from the display of cultic signs in Neopalatial Crete to the exploitation of politico-religious symbols in Mycenaean Greece. Finally, this paper offers the opportunity to better assess the meaning of touching a column in the funerary sphere by considering two scenes depicted on a larnax from Tanagra. The

presence of a sphinx on a side of this larnax will lead us to further explore the function of the column or pillar in funerary contexts (Marinatos 1997, 290), and the significance of touching it in pictorial scenes.

Sacred Trees, Pillars, and Libations: A Comment on Evans' Theory

According to Evans (1901, 100), the sacred tree was worshipped by a "ritual watering". This idea is supported by the image on a seal-stone of Minoan 'genii' holding jugs in order to perform libations over the three-branch element that raises from the double horns on top of an altar (Evans 1901, 101, fig. 1), as well as images in impressed glass plaques depicting Minoan 'genii' ready to pour libations over different elements – all smaller than them – such as a cairn (Evans 1901, 117, fig. 12), along with sacred pillars or baetylic tripod-lebes.[1] On the Tiryns gold ring (*CMS* I, no. 179), three small and thin vegetal elements (slender trees or branches) and an architectural one (column at a reduced size or column-like altar) stand in front of Minoan 'genii' holding jugs, heading towards a seated female figure, most likely a goddess, either presenting the jugs as offerings to her or aiming to pour libations on the elements (Fig. 1). Moreover, in Evans' view, the image of the deity evolved from a primitive cult using aniconic forms, such as baetylic and pillar forms, to an elaborated one characterized by anthropomorphic representations.[2] As pointed out by Caroline Tully (2018, 5), "the sacred trees in Evans' study were part of a wider complex that also involved sacred stones, pillars and columns; the trees and stones being the "natural" versions of the architectural pillars and columns".

The actual act of pouring itself is not represented in the aforementioned images involving Minoan 'genii'.[3] Nevertheless, the discovery of jugs (juglets) around pillars in pillar crypts from the Protopalatial period is a strong argument for identifying pillars as the recipients of libations and thus as the focal points of worship in archaeological contexts (D'Agata and Hermary 2012, 276). The religious use of crypt rooms in the Neopalatial period is also suggested by the discovery of double-axe bases in them and objects suitable for offerings or libations such as stone vases, in particular rhyta, in some cases fallen from an upper floor room (Gesell 1985, 26–29). The other major element taken into consideration for identifying the pillar as "a vehicle of divine presence", notably in the pillar crypts, is the signs engraved on it, which may be regarded as sacred symbols (Marinatos 1993, 87–88).

Although most pillar crypts in Minoan Crete have been identified as shrines (Platon 1954; Marinatos 1993, 87–88), the idea that the pillar itself was worshipped there, just as a divinity would be, has however been challenged (Rutkowski 1979, 35: pillars in crypts vs. free-standing pillars and columns). Certain marks carved on pillars, especially at Malia, may constitute "some sort of signature of the individuals or teams who participated in the construction" of the buildings (Devolder 2018, 359), while other marks – the deep ones – on the blocks of the Pillar Crypt may be the result of "the intertwining of both secular and ritual purposes" (Devolder 2018, 362, also 353, 356, and fig. 13). Without being worshipped the pillar may have marked the sacred place where the divinity would have appeared (Marinatos 1993, 88, 97–98). Furthermore, in the cases where pillars have functioned as supports for upper rooms, one may wonder why crypts should be regarded as cult rooms (Gesell 1985, 26; Rutkowski 1986, 37, 45). This does not exclude the idea, however, that pillars may have been "endued with sacred power to strengthen their structural function" (Nilsson 1950, 248), and hence have been linked to the religious sphere.

---

1 Evans 1901, 117, figs. 13–14. On baetyls: Niemeier 1989, 175, 177; Warren 1990, 193–201; Younger 2009, 43–46; Yasur-Landau 2016, 415–419. On trees and baetylic columns, cairns and altar-blocks as sacred objects: Evans 1935, 460. On Neopalatial scenes of tree shaking and of leaning on a baetyl: Günkel-Maschek 2020, 191–196.

2 Evans 1901, 101, 127. However, scholars like Rut-

kowski (1986, 108–109) consider the aniconic cult objects to be contemporary with the anthropomorphic deities; see discussion in Tully 2018, 6.

3 Dimopoulou and Rethemiotakis 2004; on the act of pouring (two men holding a jug and a cup over a plant motif) likely represented on the "Ganymede jug" (Middle Cycladic): Vlachopoulos, ed. 2001, 34, fig. 9; 179, fig. 14: c; 278, fig. 1:a.

Pillars and columns were both structural elements employed as architectural supports, but had different forms in Minoan Crete. Pillars were square, made of stone blocks (Evans 1901, 195). Depictions of pillars show that they probably had rectangular 'capitals' (*e.g.* on the Boxer Rhyton from Agia Triada: Blakolmer 2012, 88 with bibliography). In contrast, columns were made of a stone basis, a wooden shaft, slightly tapering towards the bottom, and a curving capital (Eichinger 2004, 19, 67–68, 83, 137; also Evans 1901, 195). In the Grandstand Fresco of the palace at Knossos (Evans 1901, 193, fig. 66), the pillars seem to stand outside the tripartite shrine, and the columns inside it. This built environment does not include trees,

Fig. 1: Gold signet-ring from Tiryns, National Archaeological Museum, inv. 6208 (CMS I, no. 179; © Hellenic Ministry of Culture and Sports / Hellenic Organization of Cultural Resources Development; https://www.namuseum.gr/en/collection/syllogi-mykinai kon-archaiotiton/).

in contrast to the Sacred Grove and Dance Fresco where a series of trees lines the dancing floor (Evans 1930, 66–74, pl. XVIII). These trees are not watered, not touched by the female dancers or the spectators behind them, but they may yet have been part of a sacred place where the divinities appeared or resided (Galanakis 2005, 93; Tully 2018, 17).

Sacred Trees and Ecstatic Cults in Glyptic Imagery
Interactions between trees, divinities and cult practitioners

Regarding the nature and function of trees in sacred places, the views of scholars are very distinct, as remarked upon by Tully (2018, 17): in short, "Evans believed that trees could become "possessed" by a divinity; Nilsson suggested that trees were worshipped as "abodes of the deities" […]. Marinatos initially interpreted trees as signs that marked a sacred area […]. Later she suggested that the purpose of the tree-cult was to welcome a deity and its associated fertility. […] Galanakis considers the sacred tree to be "part of the cultic apparatus…an inseparable part of the environment where these divinities seem to appear or reside." […] [Goodison] proposes instead that the tree itself could be the focus of veneration […], Minoan cult practitioners may have been in communication with it." According to Tully (2018, 26, 50), Minoan numina of tree, stone, mountain or sky are embodied by the person conducting the ritual, and hence "possess" human bodies, while the Minoan landscape may function "as a politicised, active agent in the enactment of power" (Tully 2018, 51, n. 132, see Crooks, Tully, and Hitchcock 2016, 163). The possessing of a human body by a tree is the reverse concept of a tree possessed by a divinity.

Another image commented on by Evans in support of the view that the tree was sacred in Mycenaean religion is the scene of worship depicted on a gold signet-ring from Mycenae, where the tree stands behind the seated female figure identified as the Goddess (Fig. 2; Evans 1901, 108, fig. 4; also Niemeier 1989, 173, fig. 4:1; *CMS* I, no. 17). Noteworthy is that the small floating female figure appearing on the other side of the tree is touching its leaves, without shaking them (but possibly picking fruit, see Tully 2018, 205).[4] Small flying or floating figures are usually interpreted as epiphanic deities (Cain 2001; Crowley 2013, 132, "epiphany Lady"), appearing in various scenes together with trees or without them (or with vegetal motifs on a gold ring from Isopata, *CMS* II 3, no. 51).[5] This raises the question as to why an epiphanic deity is as-

---

4 On the symbolic role of sun and moon depicted in this image: Goodison 2020, 174. On the tree as a possible terebinth, *i.e.* a holy tree in the Iron Age Levant: Beckmann 2012, 28–29, fig. 1.

5 On glyptic images showing small floating figures: Younger 1988, 137–138. On the Ivory Pyxis Lid from

Mochlos (with a tree not touched by the figures): Soles 2016, 249, pls. LXXXI, LXXXII:a; Tully 2018, 228–229, fig. 36; Vlachopoulos 2020, 238, fig. 25 on p. 236, LM I B; and the pyxis from Agia Triada: Militello 2020, 98, figs. 19–20.

Fig. 2: Gold signet-ring from My-
cenae, National Archaeological
Museum, inv. 992 (CMS I, no.
17; courtesy of the CMS Heidel-
berg).

Fig. 3: Gold signet-ring from
Archanes, HM 989 (© Heraklion
Archaeological Museum; https://
www.heraklionmuseum.gr/en/collec
tions/#collections).

Fig. 4: "Ring of Minos", Knossos,
HM 1700 (© Heraklion Archaeo-
logical Museum; https://www.hera
klionmuseum.gr/en/collections/#col
lections).

sociated to a tree in the same image. With the assumption that the epiphanic deity emerges from
the tree (Tully 2018, 25), the tree itself or its numen functions as an active agent in the religious
sphere. In any case (with or without the concept of numen), the link between the tree and the de-
ity is ensured by the touching of the leaves in an epiphanic episode.

Tree-shaking scenes and built structures

Scenes of tree-shaking or pulling are shown on various gold signet-rings, notably from Archanes
(Fig. 3; Sakellarakis 1967, 280, fig. 13), Poros and Vapheio (CMS I, no. 219),[6] as well as on the
so-called Ring of Minos (Fig. 4; Evans 1935, 950–952, fig. 917, pl. LXV).[7] The scene of this
last signet-ring depicts two figures, one female on the left, and one male in the centre, shaking
(or pulling) branches of trees, whereas a seated female figure on the right faces a small figure ho-
vering slightly above her. This small female figure does not touch the tree. Tree-shaking scenes
are usually interpreted as part of real ritual enactments, possibly depicting scenes of "fruit-gather-
ing accompanied by ritual dances and gestures" (Tully 2018, 13; see also Harrison 1921), or per-
haps intended to provoke the epiphany of the deity.[8] Minoan tree-shaking scenes images are
nature-focused (Nikolaidou 2020, 183) and most likely linked to a seasonal ritual cycle (Tully
2018, 13). According to Martin Nilsson (1950, 277; cited by Tully 2018, 14), the shaking of
the tree along with dancing suggests that the tree cult was "ecstatic or orgiastic".

    Ecstatic scenes particularly occurred in Neopalatial iconography on precious objects, such
as gold signet-rings (Warren 1981, 164; D'Agata and Hermary 2012, 278), demonstrating that
the ritual of shaking or pulling trees was of the highest significance and closely associated to the
Minoan elites (Tully 2018, 97, 120–121, 163). According to Tully (2018, 163), the tree-shaking
scenes are "imaginary compositions constructed from elements of actual events and places that
function as a propagandistic visual message that convey the idea of an intimate association be-
tween elite figures and an animate landscape." These images can thus be understood as signs
(Tully 2018, 24–25; also Günkel-Maschek 2020, 121–125). The conception of an animate land-
scape communicating with the Minoan elites brings with it the possibility that the haptic and ki-

---

6 Marinatos 2010, 96, fig. 7.6.a (Archanes); Dimo-
poulou and Rethemiotakis 2000, 43, fig. 4 (Poros). On
these glyptic images and other examples: Niemeier 1989,
175–176, figs. 5:2, 5:4. Also Tully 2018, 227, fig. 34
(Archanes), 223, fig. 29 (Poros), 206, fig. 6 (Vapheio);
and other examples, 216, fig. 19 (CMS II 3, no. 114)
(Kalyvia), 218, fig. 22 (CMS XII, no. 264) (unknown
provenance), 219, fig. 23 (CMS I, no. 126) (Mycenae).

7 Also Dimopoulou and Rethemiotakis 2004; Tully

2018, 217, fig. 21; Vlachopoulos 2020, 223–228, 242–
244. On doubts about its authenticity, see discussion in
Krzyszkowska 2005, 336; also comment in Crowley 2013,
382.

8 Interpretation also suggested for a scene on the
Mycenaean pictorial rhyton from Tiryns seen below:
Aamont 2006, 154; see also Vermeule and Karageorghis
1982, 92.

Fig. 5: Gold signet-ring from Mycenae, National Archaeological Museum, inv. 3148 (CMS I, no. 119; courtesy of the CMS Heidelberg).

Fig. 6: Pictorial rhyton from Tiryns, LH III B, Nauplion Museum 13 202 (Slenczka 1974, 44, no. 87, pl. 7:1).

nesic dimensions may have played a central role in these rituals (Morris 2001, 247; Dakouri-Hild 2021, 351, 361, 368).

It is noteworthy that scenes of tree-shaking are not conceived of as occurring in wild natural environments inasmuch the trees are closely linked to architectural structures or pithoi. On the above-mentioned Ring of Minos, the two lateral ones are regarded either as stepped ashlar structures and the central built element as a columnar structure by Tully (2018, 217–218, fig. 21), or as two isodomic structures and a pillar shrine by Evans (1935, 951). The columnar structure consists of two lateral upright pillars supporting a sort of cornice or entablature (Militello 2020, 93), with an empty space or a vertical element (baetyl or column?) between them (Tully 2018, 77, 220; on eight types of shrines, see Crowley 2013, 211). In comparison with the gateways surmounted by trees,[9] the columnar shrines standing beside human figures are usually smaller in proportions (Tully 2018, 78).

A Simple Touch or a Gesture of Worship

Trees in glyptic images are not always shaken or pulled by the cult practitioners. Mycenaean scenes of tree-touching are of a different nature. A gold signet-ring from Mycenae shows a man simply touching a tree rising from a columnar structure (Fig. 5; *CMS* I, no. 119), whereas a woman standing close to a tree and touching a columnar structure is depicted on another gold signet-ring from Mycenae (*CMS* VI, no. 279).[10] Moreover, the trees depicted on the signet-rings from Mycenae are rendered in a more rigid way than their Minoan counterparts.

Furthermore, the male figure represented on a pictorial krater from Enkomi on Cyprus and the robed men depicted on a rhyton from Tiryns are described as touching trees.[11] On the latter

9 On columnar shrines and gateways, in some cases surmounted by horns of consecration ("gate shrine"): Crowley 2013, E 168. By comparison, on the doorway/gate (or a shrine) topped by horns of consecration covered with blood and a tree in the Shrine fresco (Xeste 3) at Akrotiri: Vlachopoulos 2020, 239, fig. 26.b on p. 237; Vlachopoulos 2021, 259–260, pl. LX II:a, with bibliography.

10 Also Tully 2018, 220, figs. 24–25. However, for figures in a tree-shaking scene from Mycenae: *CMS* I, no. 126; Tully 2018, 219, fig. 23.

11 Vermeule and Karageorghis 1982, 46, 202, V.39, and 92, 212, IX.15, LH III B; also Tournavitou 2018, 510, figs. 7a–b. For these vases and a fragmentary jar from the Argive Heraion depicting a man facing a tree (Vermeule and Karageorghis 1982, 91, 211, IX.11): Benzi 2009, 21. For a seal impression from Cyprus (Common Style) showing figures in a gesture of adoration, raising their arms towards the stylized tree between them or grasping it: Webb 1999, 272, 274, fig. 88:1–2; Tully 2018, 151, 309, fig. 205. On the gesture of touching trees on Cypriot vases dated to c. 750 BC (Hubbard Amphora and Chrysochou Jug), see D'Albiac 1992, 289–290.

vase (Fig. 6), the trees look like quite rigid staffs (for "dendroid" staffs, see Koehl 2006, 339). How can we interpret this simple touching? There is nothing ecstatic in the calm act of touching trees, even though Emily Vermeule and Vassos Karageorghis (1982, 92, IX.15) suggest that this tactile gesture recalls the tree-shaking ritual. According to Robert Koehl (2006, 339), these "dendroid" staffs may function as "attributes of religious authority". Likewise, the rods crowned by sorts of leaves, which are grasped by female figures, that decorate a fragment of ivory pyxis from Agia Triada may be understood as standards surmounted with leafy emblems in a sanctuary (Rutkowski 1973, 148–151).

The gesture consisting of touching a tree is very close to the "greeting gesture" (Crowley 2013, 190, E 121), which seems to be adopted by the man raising his hand towards the central tree in the scene of the so-called Ring of Nestor (*CMS* VI, no. 277),[12] or to the "beckoning gesture" of a man depicted on a six-sided seal-stone from Mycenae.[13] Conversely, the gesture made by female figures, consisting in both hands raised to the forehead, is regarded as a gesture of adoration.[14] Therefore, the simple touch of a tree may also have functioned as a gesture of worship.

Trees of Life, Pillars, or Columns: Symbols of Fertility, Religious or Palatial Power

Returning to the stylization of trees, it is worth mentioning that most trees encountered in antithetical group compositions are highly stylized; they are identified as 'Trees of Life',[15] a term used in the Hebrew Bible (*e.g.* Book of Genesis 2, 9). In ancient Near Eastern art, 'Trees of Life' are often associated with confronted animals, providing parallels for Aegean glyptic images, in which most trees depicted in antithetical group compositions have rigid trunks (Crowley 2013, I 74; but an exception: Crowley 2013, E 154). These central vertical elements may be placed on a base (Crowley 2013, E 154, also I 74 and E 101) or assimilated to a pillar or column (Evans 1901, 154–155, fig. 32–33, "tree-pillar", "the fleur-de-lys type of foliated pillar"; *CMS* VI, no. 446, Goulas; *CMS* I, no. 87, Mycenae [Fig. 7]). In the modern scholarship, the 'Tree of Life' is usually interpreted as a symbol of life and regeneration, venerated in cult activity (Morgan 1987, 186, 193). In Assyria, the sacred tree links the conceptions of fertility and fructification to the kings (Giovino 2007, 78). Finally, it must be stressed that the attendants of the trees or plant motifs in glyptic images are either actual animals (agrimia, lions, bulls), rendered in various positions, or fantastic creatures (griffins, genii, sphinxes). The confronted animals usually do not touch the central trees, but they may be tethered to them, or, in the case of the griffins, may peck at them.

Further antithetical group compositions in glyptic images include animals or fantastic creatures flanking architectural elements identified as pillars by Evans.[16] Here too, the confronted animals do not touch these elements with a paw, but may be tethered to them in some cases. From there, it is easy to understand why Evans (1901, 105) associated the sacred trees and pillars. There is thus a possibility that trees and pillars may be seen as interchangeable motifs in antithetic group compositions. In his view, "the living tree […] can be converted into a column or a tree-pillar, retaining the sanctity of the original" (Evans 1901, 106). This idea is even more rele-

---

12 Tully 2018, 207, fig. 7. On doubts about its authenticity, see the discussion in Krzyszkowska 2005, 334–336.

13 Crowley 2013, 191, E 123a; see *CMS* I, no. 107, "Mann mit erhobenem linken (rechten) Arm". Also Sakellarakis 1972, 241, pl. 91:α. For 15 gestures including forehead, greeting and beckoning ones, see Crowley 2013, 187, E 116.

14 On the figure on the left panel of an LM III A1 larnax from the North Cemetery at Knossos: Morgan 1987, 177, and figs. 4–5; on a LH III B wall painting from the chamber tomb at Thebes: Aravantinos and Fappas 2018, 439, fig. 9. For this gesture in glyptic cultic images: Tully 2018, 209, fig. 10; 224–225, fig. 31; 260–261, figs. 95–96, 98; respectively, *CMS* VI, no.

281, Knossos; *CMS* I, no. 127, Mycenae; and *CMS* I, nos. 86, 96, Mycenae; *CMS* V, no. 728, Mega Monastiri.

15 *e.g.* Crowley 2013, I 74, E 154, E 255a. Respectively *CMS* I, no. 58, no. 123, and *CMS* I, no. 266; *CMS* II 6, no. 102; *CMS* I, no. 60. On the heraldic class: Evans 1901, 153.

16 Evans 1901, 158, fig. 36. For another glyptic example: Evans 1901, 159–160, fig. 39; Crowley 2013, E 171. For "pillar" and "Grand pillar" images: Crowley 2013, T 1 (*CMS* VIII, no. 65), I 75 (*CMS* XII, no. 302; XI, no. 196), E 171 (*CMS* VI, no. 364, and "orb rod", *CMS* VI, no. 365), S 22 (*CMS* VII, no. 187), S 27 (*CMS* I, no. 218), S 73a (*CMS* I, no. 19 "Säule").

vant when identifying the central architectural elements as columns rather than pillars. As pointed out above, pillars were square and made of stone, whereas columns had rounded wooden shafts.

Wooden columns were inherently associated with the Mycenaean palatial power, since they supported the roof opening in the main room of the Mycenaean palaces.[17] According to James Wright (1994, 58–59), the column functioned definitely as a strong politico-religious symbol in Mycenaean Greece, in that "it represents the palace, which contains the hearth and the seat of the wanax", and "at the symbolic level it mediates between the human structure that contains the hearth

Fig. 7: Gold signet-ring from Mycenae, National Archaeological Museum, inv. 2854 (CMS I, no. 87; courtesy of the CMS Heidelberg).

and the heavens". The column is even the central element in the famous Lion Gate relief sculpture at Mycenae (Wright 1994, 58). Here, the lions flank the column, which is taller than them and thus appears to be the dominant element in the composition. There is no doubt that the column was closely linked to the display of the palatial power or formal authority (Blakolmer 2019, 67). Similarly, in glyptic images, the animals or fantastic creatures are subordinated to the columns (Goodison 1989, 111). The symbolic value of the free-standing columns in these examples is thus undeniable.

Trees and Plant Motifs Depicted on Larnakes and Pottery: Symbols of Regeneration

In funerary contexts, the depiction of trees in antithetical group compositions may be explained in other terms. There is little reason to link their representation to the palatial sphere and power. A plant motif such as the palm (Antognelli Michel 2012) may though be interpreted as a substitute of a 'Tree of Life', and thus as a symbol of fertility and regeneration, as is the case with antithetical goats flanking a palm on an LM III A2/III B krater from Ligortyno in the Mesara (Watrous 1991, 299–300, pl. 87:d; D'Agata 2005, 118, fig. 3:a–b; Crouwel and Morris 2015, 180–181, fig. 27), and perhaps with hunted goats flanking a tree on an LM III A larnax exhibited in Hannover (Dettmer 1998, 76–77). The pictorial pottery from Cyprus, found in tombs, provides two further examples of goats flanking trees in antithetical group compositions, some eating their leaves (Vermeule and Karageorghis 1982, 23, 197, III.26; and 63, 9, VI.9; an example from Rhodes: 227, XII.11).

Nevertheless, birds flanking plant motifs, sometimes picking at them (Watrous 1991, 296, pls. 84:e, 87:a, 87:g, 91:d), are more frequently seen than goats on Late Minoan larnakes. According to Vance Watrous (1991, 296, 298, 301), papyri, palms and water birds are part of Nilotic landscapes, which represent the afterworld. The palm tree theme depicted on the larnakes may be compared to the 'Tree of Life'", and thus connected to the notion of "renewal of life after death" (Karetsou 2015, 100–101, fig. 3.39, on a larnax from Kalochorafitis).[18] On Late Minoan larnakes, goats are not related to Nilotic landscapes, but appear in scenes of hunt and sacrifice, as is also the case with bulls, suggesting that specific rituals were probably conducted in relation to funerals or beliefs in an afterlife. For instance, on the Agia Triada Sarcophagus, two goats are depicted in the scene of bull sacrifice (Long 1974, 63–64, pls. 30–31).

---

17 On the decorative and structural function of wooden posts: Whittaker 1997, 136 (posts in the Temple at Mycenae or in Room 117 at Tiryns).

18 On the palm as "an axis of the world": Marinatos 2010, 147; linked to the sacral sphere, see Günkel-

Maschek 2020, 491–504. On a wall painting at Akrotiri showing monkeys crouched in front of stylized papyrus motifs, almost touching their column-shaped trunks with their upraised forearms in an attitude of worship: Morgan 2005 a, 37, pl. 4: 2 a–b.

Fig. 8: Larnax from Tanagra (Aravantinos and Fappas 2018, 436, fig. 5.a).

The scene on the Agia Triada Sarcophagus raises the possibility that the bulls flanking a plant motif on a larnax from Tanagra in Boeotia (Fig. 8) were also intended to be sacrificed. On this larnax, below a row of ten mourners, a considerably erased group consisting of a vegetal motif (flower combined with a palm) and two antithetical bulls is followed on the left by a figure whose attitude is now indistinguishable (Aravantinos 2010, 113; Aravantinos and Fappas 2018, 436, fig. 5.a). According to the excavator (Spyropoulos 1973, 21, pl. 11:β; also Gallou 2005, 99), this figure wearing a chiton leads the left bull, perhaps to a sacrifice. The presence of a palm tree may serve as an argument in favour of such an interpretation (Antognelli Michel 2012, 46–47), when compared with a glyptic image depicting a bull sacrifice and including a palm tree that may symbolize the divinity for whom the sacrifice is intended (Long 1974, 67, fig. 90). However, on this larnax, there are no other symbols related to bull sacrifices such as the horns of consecration, double axes and bucrania, as found on some Late Minoan larnakes (Long 1974, 67; also Watrous 1991, 290; Panagiotopoulos 2007, 210). By comparison, LH III B pictorial pottery from Cyprus provides examples of bulls seen in a fighting attitude on each side of flowers,[19] displaying their powerful and fertile vitality. In funerary contexts, such scenes may be, here too, related to the concept of regeneration.

Not only actual animals are represented in antithetical group compositions on LH III B kraters from Cyprus, but also sphinxes and griffins are shown flanking trees or palms, without touching them (Vermeule and Karageorghis 1982, 202, V.27, and 207, VI.16). As is the case with glyptic images, the trees are rendered in a very stylized way on pictorial pottery. By comparison, in the Near East, hybrid creatures are seen touching trees in a "complex religious and ritual figural imagery" (Koehl 2018, 227), as illustrated by the 'investiture scene' painting from the Palace of Zimri-Lim at Mari (court 106, 18th century BC), which shows such creatures identified as griffins touching the tall trees that frame the main scene.[20] Nevertheless, the Near Eastern palatial context of this wall painting is far different from the Aegean funerary non-palatial context of the aforementioned larnax from Tanagra. Far different too is the palatial context of the 9th century BC at Nimrud that yielded an ivory depicting a sphinx supporting and touching a tree-column, but here again there is a strong symbolic link between the sphinx, tree and column (Gilibert 2011, 90, fig. 24).

Touching a Column: Two Scenes of a Larnax from Tanagra

Returning to the Aegean, it is worth examining a larnax from Tanagra in Boeotia decorated by a singular scene consisting of a sphinx and a human figure flanking a column, both of them touching it (Fig. 9a).[21] The sphinx depicted on this larnax is particular in that it shows a pair of arms with hands but no wings. Generally, Mycenaean sphinxes have wings but no arms. This is why

---

19 Vermeule and Karageorghis 1982, 203, V.41, and 208, VI.50. On two fighting cows on one side, and two fighting bulls on the other side of a pictorial krater from Berbati in the Argolid (LH III A2–III B): Åkerström 1987, 33–34, pl. 23.

20 Koehl 2018, 228, fig. 3; Nys 2017–2018, ST. M. NR. MES. 22; Tully 2018, 285, fig. 154, and 295, fig. 182:a; see Margueron 2008, 28, fig. 13, and 29, fig. 14, pl. 47 (reconstruction of the south façade of the Court of Palms).

21 Spyropoulos 1971, 12, pl. 18:β; Ergon 1971, 15, fig. 12; Rutkowski 1979, 35 ("the hands [of the figures] are

nearly touching the pillar"). Larnax (first long side) illustrated in Belgiorno 1978, pl. I, fig. 1; Vermeule 1979, 68, fig. 26; Demakopoulou and Konsola 1981, pl. 43B; Immerwahr 1990, pl. 92; Immerwahr 1995, 114, fig. 7: 3.a; Cavanagh and Mee 1995, 49, 61, no. 45, fig. 8; Gallou 2005, figs. 50:a–b with second long side; Aravantinos 2010, 121 with second long side, 122–123; Kramer-Hajos 2015, 639, fig. 4; Dakouri-Hild 2021, 365, fig. 12 with second long side. Also Phialon and Farrugio 2005, 247–248 (the sacred pillar as an element indicating the presence of a sanctuary or a tomb).

Fig. 9a–b: Larnax from Tanagra (Aravantinos 2010, 122–123, first side, 121, second side).

Maria Rosaria Belgiorno defines this creature as "centauriform" (Belgiorno 1978, 207, 211–215, 225, 227; for a centaur, see Rutkowski 1973, 150). However, its four-legged body is massive, as a bull would be, and its feet and tail are not horse-like. On the other long side of the larnax, four human figures are represented, two of them standing on either side of a column (Fig. 9b; Spyropoulos 1971, 12, pl. 19:α; *Ergon* 1971, 15, fig. 13). A close examination of the scene allows us to confirm that the figures, who are the closest to the column, touch it as well. Thus, this gesture should not be seen as a 'beckoning' one.

There is little doubt that the columns depicted on this larnax may function as sacred architectural elements (Spyropoulos 1971, 12: "ἱεροῦ πεσσοῦ", *i.e.* a sacred pillar; for this notion, see Marinatos 1993, 98, 180) and that fantastic creatures and humans can only coexist in a liminal sphere. The sphinx may be regarded as the guardian of the column (Sourvinou-Inwood 1973, 534–537), or perhaps as the companion of the deceased (Tournavitou 2018, 508), as it has been suggested for the sphinx tethered to the waist of a female figure on another larnax from Tanagra (Spyropoulos 1970, 35). The dogs depicted close to the sphinx, which are usually involved in hunting scenes on Minoan larnakes (Papageorgiou 2020, 355, figs. 10–11), may also play the role of guardians. The human figure on the other side of the column is often identified as a man, perhaps a priest or the dead (Marinatos 1997, 290; for a priest, see Kramer-Hajos 2015, 635, 648, fig. 4), whereas the role and gender of the human figures depicted on the other long side of the larnax is difficult to assess, both genders may have been represented.[22]

Therefore, the column depicted on the aforementioned larnax from Tanagra may represent the entrance of a tomb, or perhaps that of a shrine linked to the tomb. It is worth remembering that pillar rooms or crypts are part of monumental mortuary buildings in Minoan Crete (Long 1959), such as the Temple Tomb at Knossos or the Tholos B complex at Archanes (Marinatos 1993, 89–90, fig. 70). In the Tomb of the Double Axes at Isopata, a rock buttress dividing the interior into two wings gives the visual impression of a pillar standing in the centre of the chamber (Marinatos 1993, 93, fig. 72). Moreover, in the Temple Tomb, Evans (1935, 965, 967, fig. 930) assumed the existence of a shrine with two columns above the crypt in this monumental tomb, whose reconstituted entrance includes two columns as well (Pini 1968, 39–40, fig. 36; Marinatos 1993, 90, fig. 70). On the other hand, the façades of the tholoi at Mycenae, notably the Treasury of Atreus, were adorned with half-columns on either side of their entrances (Eichinger 2004, 121, S 14 and Ka 6, 7).

Lastly, it is worth stressing that the free-standing column depicted on the aforementioned larnax from Tanagra is centrally positioned and, on the first long side described here, may divide the scene between two spheres, the human side and the other- or afterworld (Marinatos 1997,

---

22 As women: Sourvinou-Inwood 1973, 535; Morgan 1987, 193; vs. as men: Cavanagh and Mee 1995, 46; as priests: Immerwahr 1995, 113; Kramer-Hajos 2015, 635, 648.

290). Moreover, the columns are touched by the fantastic and human beings, just as trees may be by cult practitioners in some ceramic and glyptic images. This introduces the idea that columns may have been worshipped. In any case, the world of the living and the afterworld may have been bridged by this tactile gesture (Dakouri-Hild 2021, 361), which may also have served to mediate human agents to the supernatural power.

Alternatively, the column may be related to the passage or transition to the afterworld, as is the case with the "gates" in the ancient Egyptian conception of the Netherworld (Marinatos 2001, 387). This is echoed by the notion of gates linked to the deities of the Underworld in Hittite-Hurrian beliefs.[23] Gateways are represented in Minoan glyptic images, sometimes topped by trees, without being the objects of ecstatic pulling, as it appears, for instance, on a gold ring from Knossos, in a scene where a column-like element or cult stand is depicted inside the way (column: Nilsson 1950, 256–257, fig. 123; cult stand: Tully 2018, 209, fig. 10; *CMS* VI, no. 281). Of particular interest is the large free-standing column or pole-like element in the centre of this image, which goes beyond its frame.[24] In contrast, tree-shaking scenes such as the one depicted on the signet-ring from Archanes (Fig. 3) may include a small pillar-like motif among the floating symbols.[25] One may wonder whether such a motif may be understood as a Minoan reminiscence of the Egyptian Djed pillar,[26] which was related to the Egyptian god of the afterlife, death and rebirth. The use of an Egyptian symbol in Aegean glyptic imagery does not mean that Minoans or Mycenaeans adopted the Egyptian conception of the afterworld, but some aspects of it may have circulated together with their images in the Aegean.

Finally, it is worth referring to the wall painting of the Shrine of the Fresco at Mycenae, in which a gate seems to open next to the column standing behind the woman holding a sword in the upper zone. This unique scene, which involves the possible representations of souls (two hovering red and black figures, see Marinatos 1988, 247–248), may be connected with a possible chthonic cult housed in the neighbouring Shrine of the Idols (Morgan 2005b, 169). Moreover, the perception of death was certainly closely linked with the notion of fertility represented by the grain held by the female figure on the lower zone of the wall painting (Morgan 2005b, 168–169). Therefore, the depiction of a column in a funerary context, such as in the two scenes of the Tanagra larnax, had most likely a polysemic value.

Conclusions

This paper, which began with a reflection on scenes of trees shaken or pulled by human figures in Minoan glyptic, has led us to consider depictions of columns flanked by animals or fantastic creatures in the Aegean. The discussion has moved from the notion of an animate landscape in Neopalatial Minoan cult to the display of palatial and sacral power in Mycenaean Greece, revealing a subtle chronological and geographical shift in the use and meaning of these religious symbols. In antithetical group compositions, the 'Tree of Life' and the tree-pillar are highly stylized, and their resemblance to the columns allows us to accept the idea that the living tree was converted into a column, as proposed by Evans (1901, 106). Stylistically, however, the images of the 'Tree of Life', a motif originating from the Near East, has little in common with the depictions of trees in the Minoan tree-shaking scenes, which are rendered in a more realistic way

---

23 Ekroth 2018, 50. On gates and Underworld in Near Eastern literature: Lazongas 2012, 149; Kopanias 2012, 194–196.

24 For a pole (or pointed column) in a fighting scene: *CMS* II 6, no. 17; different from the upright post impaling a triangle, *i.e.* a post-like object, compared to the biblical "Ashera": Evans 1901, 104.

25 On the pillar-like motif as a rod or pillar shape: Crowley 2013, E 142. On images of insects possibly functioning as symbols of regeneration: Laffineur 1985, 252–257, 261; Phialon and Aravantinos 2021, 295.

26 On a Minoan column with two lateral bars on an alabastron from Pankalochori, possibly a Minoan version of the Djed Pillar: Kanta 2012, 230, 232–233, fig. 6. On a bone plaque in the shape of a Djed pillar from the islet of Modi near Poros, probably originally affixed to a wooden chest or casket, which seems to have contained the bones of a baby (LH III B2?): Konsolaki-Yannopoulou 2003, 431, fig. 15; Konsolaki-Yannopoulou 2019, 62, 65, fig. 23.

(Kourou 2001, 31–37). Moreover, with the presence of a column instead of a tree as the central element in an antithetical group composition, as it occurs in the Mycenaean iconography, the politico-religious power seems to supersede the natural force.

In contrast, the depiction of vegetal motifs flanked by birds that pick at them on several Minoan larnakes appears to be in line with a more nature-focused symbolism on Crete. The vital force that animates the trees shaken by humans in Minoan glyptic images was perhaps not so different from the energy stemming from the vegetal motifs and picked up by the birds on Minoan larnakes. The images of goats eating the leaves of the 'Tree of Life' occurring on Late Bronze Age pottery from Cyprus were part of the same conception of vitality and fertility. There are thus reasons to believe that such a life energy may have been transmitted by a simple touch of tree leaves too. Likewise, wooden shafts of columns may have held this sacred power.

The pictorial scenes depicting a sphinx as well as human figures touching the columns on a larnax from Tanagra is particularly relevant, since this tactile gesture may be seen as a potential means of communication between the world of the living and the afterworld. Whereas the column is usually understood as a politico-religious sign of authority, it may also symbolize the entrance of a tomb in funerary contexts, especially when a sphinx is close to it, or perhaps that of a sanctuary. Nevertheless, the symbolic link between a wooden column and a sacred tree was certainly not forgotten in the LH III period, involving aspects of fertility and regeneration that probably still played a central role in the Mycenaean eschatological beliefs and conceptions of death and afterlife.

References

Aamont, C. 2006. "Priestly burial in Mycenaean Greece." In *The archaeology of cult and death,* edited by M. Georgiadis and C. Gallou, 151–169. Budapest: Archaeolingua.

Åkerström, Å. 1987. *Berbati: the pictorial pottery. SkrAth,* 4°, 36: 2. Stockholm: Paul Åströms Förlag.

Alram-Stern, E., F. Blakolmer, S. Deger-Jalkotzy, R. Laffineur, and J. Weilhartner, eds. 2016. *Metaphysis. Ritual, myth and symbolism in the Aegean Bronze Age. Proceedings of the 15th International Aegean Conference, Vienna, Institute for Oriental and European Archaeology, Aegean and Anatolia Department, Austrian Academy of Sciences and Institute of Classical Archaeology, University of Vienna, 22–25 April 2014. Aegaeum* 39. Leuven: Peeters.

Antognelli Michel, N. 2012. "Palms and papyruses in the Late Minoan/Helladic III: the exotic world, the fantastic word and the afterworld." In Stampolidis, Kanta, and Giannikouri 2012: 41–52.

Aravantinos, V. L. 2010. *The Archaeological Museum of Thebes.* Athens: John S. Latsis Public Benefit Foundation and EFG Eurobank Ergasias S. A.

Aravantinos, V. L., and I. Fappas. 2018. "The female figure in the pictorial tradition of Mycenaean Boeotia: critical overview and technical observations." In Vlachopoulos 2018: 427–449.

Beckmann, S. 2012. "Resin and ritual purification: terebinth in eastern Mediterranean Bronze Age cult." In Stampolidis, Kanta, and Giannikouri 2012: 27–40.

Belgiorno, M. R. 1978. "Centauressa o sfinge su una larnax micenea da Tanagra?" *SMEA* 19: 205–228.

Benzi, M. 2009. "Minoan genius on a LH III pictorial sherd from Phylakopi, Melos? Some remarks on religious and ceremonial scenes on Mycenaean pictorial pottery." *Pasiphae* 3: 9–26.

Blakolmer, F. 2012. "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,* edited by D. Panagiotopoulos and U. Günkel-Maschek, 83–114. *Aegis* 5. Louvain-la-Neuve: Presses universitaires de Louvain.

Blakolmer, F. 2019. "No kings, no inscriptions, no historical events? Some thoughts on the iconography of rulership in Mycenaean Greece." *From 'Lugal.gal' to 'Wanax': kingship and political organisation in the Late Bronze Age Aegean,* edited by J. M. Kelder and W. J. I. Waal, 49–94. Leiden: Sidestone Press.

Blakolmer, F., ed. 2020. *Current approaches and new perspectives in Aegean iconography. Aegis* 18. Louvain-la-Neuve: Presses universitaires de Louvain.

Cain, C. D. 2001. "Dancing in the dark: deconstructing a narrative of epiphany on the Isopata Ring." *AJA* 105: 27–49.

Cavanagh, W., and C. Mee. 1995. "Mourning before and after the Dark Age." In *Klados: essays in honour of J. N. Coldstream,* edited by C. Morris, 45–61. London: University of London Institute of Classical Studies.

Crooks, S., C. J. Tully, and L. A. Hitchcock. 2016. "Numinous tree and stone: re-animating the Minoan landscape." In Alram-Stern et al. 2016: 157–164.

Crouwel, J. H., and C. E. Morris. 2015. "The Minoan amphoroid krater: from production to consumption." *BSA* 110: 147–201.

Crowley, J. L. 2013. *The iconography of Aegean seals. Aegaeum* 34. Leuven: Peeters.

D'Agata, A. L. 2005. "Central southern Crete and its relations with the Greek mainland in the Postpalatial period." In *Ariadne's threads. Connections between Crete and the Greek mainland in Late Minoan III (LM III A2 to LM III C). Proceedings of the International Workshop held at Athens, Scuola Archeologica Italiana 5–6 April 2003,* edited by A. L. D'Agata and J. Moody, 109–130, Athens: Scuola Archeologica Italiana di Atene.

D'Agata, A. L., and A. Hermary. 2012. "Ritual and cult in Crete and Cyprus from the third millennium to the first millennium BC: towards a comparative framework." In *Parallel lives: ancient island societies in Crete and Cyprus. Papers arising from the conference in Nicosia organised by the British School at Athens, the University of Crete and the University of Cyprus, in November-December 2006. BSA Studies* 20, edited by G. Cadogan, 273–288. London: British School at Athens.

Dakouri-Hild, A. 2021. "The most discouraged Mycenaeans: performing emotion and death in Late Bronze Age Tanagra, Greece." *JFA* 46: 349–381.

D'Albiac, C. 1992. "Some aspects of the sphinx in Cyprus: status and character." In *Studies in honour of Vassos Karageorghis,* edited by G. C. Ioannidis, 285–290. Nicosia: Society of Cypriot Studies.

Davis, B., and R. Laffineur, eds. 2020. *ΝΕΩΤΕΡΟΣ: Studies in Bronze Age Aegean art and archaeology in honor of Professor John G. Younger on the Occasion of his Retirement. Aegaeum* 44. Leuven: Peeters.

Demakopoulou, K., and D. Konsola. 1981. *Archaeological Museum of Thebes: guide.* Athens: General Direction of Antiquities and Restoration.

Dettmer, H.-G. 1998. „… *den Sinn für das Schöne erwecken …". Führer durch das Kestner-Museum Hannover.* Hannover: Kestner-Museum Hannover.

Devolder, M. 2018. "The functions of masons' marks in the Bronze Age palace at Malia (Crete)." *AJA* 122: 343–366.

Dimopoulou, N., and G. Rethemiotakis. 2000. "The 'Sacred Conversation' Ring from Poros." In *Minoisch-Mykenische Glyptik: Stil, Ikonographie, Funktion. V. Internationales Siegel-Symposium, Marburg, 23.–25. September 1999,* edited by I. Pini, 39–56. *CMS* Beiheft 6. Berlin: Gebrüder Mann.

Dimopoulou, N., and G. Rethemiotakis. 2004. *The Ring of Minos and gold Minoan rings: the epiphany cycle.* Athens: Ministry of Culture Archaeological Receipts Fund.

Eichinger, W. 2004. *Die minoisch-mykenische Säule: Form und Verwendung eines Bauglieds der ägäischen Bronzezeit. Antiquitates* 27. Hamburg: Verlag Dr. Kovač.

Ekroth, G. 2018. "Hades, Homer and the Hittites: the cultic-cultural context of Odysseus' 'round trip' to the underworld." In *Round trip to Hades in the eastern Mediterranean tradition: visits to the underworld from Antiquity to Byzantium,* edited by G. Ekroth and I. Nilsson, 37–56. Leiden and Boston: Brill.

Evans, A. J. 1901. "The Mycenaean tree and pillar cult and its Mediterranean relations: with illustrations from recent Cretan finds." *JHS* 21: 99–204. London: Macmillian.

Evans, A. 1930. *The Palace of Minos at Knossos,* III. London: Macmillan.

Evans, A. 1935. *The Palace of Minos at Knossos,* IV. London: Macmillan.

Galanakis, K. 2005. *Minoan glyptic: typology, deposits and iconography. From the Early Minoan period to the Late Minoan I B destruction in Crete. BAR-IS* 1442. Oxford: John and Erica Hedges Ltd.

Gallou, C. 2005. *The Mycenaean cult of the dead. BAR-IS* 1372. Oxford: Archaeopress.

Gesell, G. C. 1985. *Town, palace, and house cult in Minoan Crete. SIMA* 67. Göteborg: Paul Åströms Förlag.

Gilibert, A. 2011. "Die nordsyrische Sphinx." In *Wege der Sphinx: Monster zwischen Orient und Okzident. Eine Ausstellung der Abguss-Sammlung antiker Plastik des Instituts für Klassische Archäologie der Freien Universität Berlin,* edited by L. Winkler-Horaček, 79–97. Rahden/Westf.: Verlag Marie Leidorf GmbH.

Giovino, M. 2007. *The Assyrian sacred tree: a history of interpretations. Orbis Biblicus et Orientalis* 230. Fribourg: Academic Press Fribourg, Göttingen: Vandenhoeck & Ruprecht.

Goodison, L. 1989. *Death, women and the sun: symbolism of regeneration in early Aegean religion.* London: Institute of Classical Studies.

Goodison, L. 2020. ""Seeing" stars … or suns?" In Davis and Laffineur 2020: 169–174.

Günkel-Maschek, U. 2020. *Minoische Bild-Räume: Neue Untersuchungen zu den Wandbildern des spätbronzezeitlichen Palastes von Knossos.* Heidelberg: University Publishing.

Harrison, J. E. 1921. *Epilegomena to the study of Greek religions and Themis: a study of the social origins of Greek religion.* New York: University Books.

Immerwahr, S. A. 1990. *Aegean painting in the Bronze Age.* University Park and London: The Pennsylvania State University Press.

Immerwahr, S. A. 1995. "Death and the Tanagra larnakes." In *The ages of Homer: a tribute to E. Townsend Vermeule,* edited by J. B. Carter and S. P. Morris, 109–121. Austin: University of Texas press.

Kanta, A. 2012. "A Minoan version of the djed pillar and other borrowed ideas about the afterlife in the Cretan Late Bronze Age." In Stampolidis, Kanta, and Giannikouri 2012: 229–236.

Karetsou, A. 2015. "The larnakes from Tomb B/1973." In *Kalochorafitis. Two chamber tombs from the LM III A2–B cemetery,* edited by A. Karetsou and L. Girella, 47–116. *Studi di Archeologia Cretese* XII. Padova: Bottega d'Erasmo: A. Ausilio.

Koehl, R. B. 2006. *Aegean Bronze Age rhyta. Prehistory Monographs* 19. Philadelphia, Pennsylvania: INSTAP Academic Press.

Koehl, R. B. 2018. "From pot patterns to pictures: thoughts on the evolution of Aegean wall-painting." In Vlachopoulos 2018: 225–233.

Konsolaki-Yannopoulou, E. 2003. "Ἡ μυκηναϊκή εγκατάσταση στο νησάκι Μόδι της Τροιζηνίας." In *Β΄ Διεθνές Διεπιστημονικό Συμπόσιο: Η Περιφέρεια του Μυκηναϊκού Κόσμου. 26–30 Σεπτεμβρίου, Λαμία 1999. Πρακτικά,* edited by N. Kyparissi-Apostolika, and M. Papakonstantinou, 417–432. Athens: Υπουργείο Πολιτισμού.

Konsolaki-Yannopoulou, E. 2019. "Ναυτικό εμπόριο στο πέτρινο Λιοντάρι του Πόρου. Ο Υστερομυκηναϊκός οικισμός στη βραχονησίδα Μόδι." *Αρχαιολογία & Τέχνες* 131: 56–67.

Kopanias, K. 2012. "Paradise lost. The image of the netherworld in the Near East." In Stampolidis, Kanta, and Giannikouri 2012: 191–202.

Kourou, N. 2001. "The sacred tree in Greek art. Mycenaean versus Near Eastern traditions." In *La questione delle influenze vicino-orientali sulla religione greca,* edited by S. Ribichini, M. Rocchi, and P. Xella, 31–53. *Monografie Scientifiche.* Rome: Consiglio Nazionale delle Ricerche.

Kramer-Hajos, M. 2015. "Mourning on the larnakes at Tanagra: gender and agency in Late Bronze Age Greece." *Hesperia* 84: 627–667.

Laffineur, R. 1985. "Iconographie minoenne et iconographie mycénienne à l'époque des tombes à fosse." In *L'iconographie minoenne,* edited by P. Darcque and J.-C. Poursat, 245–266. *BCH* Suppl. 11. Athens: École française d'Athènes.

Laffineur, R., and T. G. Palaima, eds. 2021. *ZOIA: Animal-human interactions in the Aegean Middle and Late Bronze Age. Proceedings of the 18th International Aegean Conference, originally to be held at the Program in Aegean Scripts and Prehistory, in the Department of Classics, The University of Texas at Austin, May 28–31, 2020. Aegaeum* 45. Leuven: Peeters.

Lazongas, E. 2012. "Gates and pillars of heaven. The architectural structure of cosmos in Greek, Egyptian and Near Eastern tradition and art." In Stampolidis, Kanta, and Giannikouri 2012: 139–152.

Long, C. R. 1959. "Shrines in sepulchres? A re-examination of three Middle to Late Minoan tombs." *AJA* 63: 59–65.

Long, C. R. 1974. *The Ayia Triadha Sarcophagus: a study of Late Minoan and Mycenaean funerary practices and beliefs. SIMA* 41. Göteborg: Paul Åströms Förlag.

Margueron, J.-C. 2008. "Mari." In *Beyond Babylon. Art, trade and diplomacy in the second millennium B.C.,* edited by J. Aruz, K. Benzel, and J. M. Evans, 27–33. New York: Metropolitan Museum of Art.

Marinatos, N. 1988. "The fresco from Room 31 at Mycenae: problems of method and interpretation." In *Problems in Greek prehistory,* edited by E. B. French and K. A. Wardle, 245–251. Bristol: Bristol Classical Press.

Marinatos, N. 1993. *Minoan religion. Ritual, image, and symbol.* Columbia: University of South Carolina.

Marinatos, N. 1997. "Minoan and Mycenaean larnakes: a comparison." In *La Crète mycénienne: Actes de la Table Ronde internationale organisée par l'École française d'Athènes (26–28 mars 1991),* edited by J. Driessen and A. Farnoux, 281–292. *BCH* Suppl. 30. Athens: École française d'Athènes.

Marinatos, N. 2001. "The cosmic journey of Odysseus." *Numen* 48: 381–416.

Marinatos, N. 2010. *Minoan kingship and the solar goddess: a Near Eastern koine.* Urbana, Chicago, and Springfield: University of Illinois Press.

Militello, P. 2020. "Minoan religious architecture: representation and reality." In Blakolmer 2020: 87–115.

Morgan, L. 1987. "A Minoan larnax from Knossos." *BSA* 82: 171–200.

Morgan, L., ed. 2005. *Aegean wall painting: a tribute to Mark Cameron. BSA Studies* 13. London: The British School at Athens.

Morgan, L. 2005a. "New discoveries and new ideas in Aegean wall painting." In Morgan 2005: 21–44.

Morgan, L. 2005b. "The Cult Centre at Mycenae and the duality of life and death." In Morgan 2005: 159–171.

Morris, C. 2001. "The language of gesture in Minoan religion." In *Potnia. Deities and religion in the Aegean Bronze Age. Proceedings of the 8th International Aegean Conference, Göteborg, Göteborg University, 12–15 April 2000,* edited by R. Laffineur and R. Hägg, 245–251. *Aegaeum* 22. Liège: Université de Liège Histoire de l'art et archéologie de la Grèce antique, Austin: University of Texas Program in Aegean Scripts and Prehistory.

Niemeier, W.-D. 1989. "Zur Ikonographie von Gottheiten und Adoranten in den Kultszenen auf minoischen und mykenischen Siegeln." In *Fragen und Probleme der bronzezeitlichen ägäischen Glyptik. Beiträge zum 3. Internationalen Marburger Siegel-Symposium 5.–7. September 1985,* edited by I. Pini: 163–186. *CMS* Suppl. 3. Berlin: Gebr. Mann Verlag.

Nikolaidou, M. 2020. "Blessed (?) charms: the figure-eight shield in the Aegean arts of personal adornment." In Davis and Laffineur 2020: 181–192.

Nilsson, M. P. 1950. *The Minoan-Mycenaean religion and its survival in Greek religion.* 2nd ed., Lund: C. W. K. Gleerup.

Nys, N. 2017–2018. "The sphinx unriddled. The sphinx and related composite creatures. A motif of political-religious legitimation during the dynamical period of cultural changes appearing in the Late Bronze (1600–1200 BC) and the Early Iron Age (1200–800 BC) in the Eastern Mediterranean.", Ph.D. diss., Ghent University.

Panagiotopoulos, D. 2007. "Mykenische Trauerbilder." In *ΣΤΕΦΑΝΟΣ ΑΡΙΣΤΕΙΟΣ. Archäologische Forschungen zwischen Nil und Istros. Festschrift für Stefan Hiller zum 65. Geburtstag,* edited by F. Lang, C. Reinholdt, and J. Weilhartner, 205–214. Vienna: Phoibos.

Papageorgiou, I. 2020. "Dismounting riders? Reconsidering two Late Bronze Age rider scenes." In Blakolmer 2020: 349–368.

Phialon, L., and V. L. Aravantinos. 2021. "Terracotta birds and hybrid winged creatures from Tanagra: rethinking relations between funerary practices, beliefs and religious symbols in the Late Bronze Age." In Laffineur and Palaima 2021: 281–299.

Phialon, L., and S. Farrugio. 2005. "Réflexions sur l'usage des larnakès et cercueils en Grèce mycénienne." *RA* 40: 227–254.

Pini, I. 1968. *Beiträge zur minoischen Gräberkunde.* Wiesbaden: Franz Steiner Verlag GmbH.

Platon, N. 1954. "Τα Μινωικὰ Οἰκιακὰ Ἱερά." *CretChron* 8: 428–483.

Rutkowski, B. 1973. "Minoan sacred emblems." In *Antichità Cretesi. Studi in onore di Doro Levi,* I, edited by G. Pugliese Carratelli and G. Rizza, 148–157. Catania: Università di Catania, Istituto di archeologia.

Rutkowski, B. 1979. "Mycenaean pillar cult in Boiotia." In *Proceedings of the Second International Conference on Boiotian Antiquities. Teiresias* Suppl. 2, edited by J. M. Fossey and A. Schachter, 35–36. Montreal: McGill University.

Rutkowski, B. 1986. *The cult places of the Aegean.* New Haven and London: Yale University Press.

Sakellarakis, J. A. 1967. "Minoan cemeteries at Arkhanes", *Archaeology* 20: 276–281.

Sakellarakis, J. A. 1972. "Το προσχέδιον τῆς σφραγῖδος CMS I 220 ἐκ Βαφειοῦ." *ArchEph:* 234–244.

Slenczka, E. 1974. *Figürlich bemalte mykenische Keramik aus Tiryns. Tiryns* VII. Mainz am Rhein: Verlag Philipp von Zabern.

Soles, J. S. 2016. "Hero, goddess, priestess: new evidence for Minoan religion and social organization." In Alram-Stern et al. 2016: 247–253.

Sourvinou-Inwood, C. 1973. "Minoan and Mycenaean afterlife beliefs and their relevance to the Homeric underworld." Ph.D. diss., University of Oxford.

Spyropoulos, T. G. 1970. "Ἀνασκαφὴ μυκηναϊκοῦ νεκροταφείου Τανάγρας." *Prakt:* 29–36.

Spyropoulos, T. G. 1971. "Ἀνασκαφὴ μυκηναϊκοῦ νεκροταφείου Τανάγρας." *Prakt:* 7–14.

Spyropoulos, T. G. 1973 "Ἀνασκαφὴ μυκηναϊκῆς Τανάγρας." *Prakt:* 11–21.

Stampolidis, N. C., A. Kanta, and A. Giannikouri, eds. 2012. *Athanasia: the earthly, the celestial and the underworld in the Mediterranean from the Late Bronze and the Early Iron Age. International archaeological conference. Rhodes 28–31 May, 2009.* Heraklion: University of Crete.

Tournavitou, I. 2018. "Unconditional acceptance and selective rejection. Interactive thematic cycles in Mycenaean painting. Tales of the unexpected." In Vlachopoulos 2018: 495–511.

Tully, C. J. 2018. *The cultic life of trees in the prehistoric Aegean, Levant, Egypt and Cyprus. Aegaeum* 42. Leuven: Peeters.

Vermeule, E. 1979. *Aspects of death in early Greek art and poetry.* Berkeley, Los Angeles, London: University of California Press.

Vermeule, E., and V. Karageorghis. 1982. *Mycenaean pictorial vase painting.* Cambridge, Massachusetts, London: Harvard University Press.

Vlachopoulos, A. G., ed. 2018. *Χρωστήρες / Paintbrushes. Wall-painting and vase-painting of the second millennium BC in dialogue.* Athens: University of Ioannina and Hellenic Ministry of Culture and Sports – Archaeological Receipts Fund.

Vlachopoulos, A. G. 2020. "The Ring of Nestor and the quest of authenticity." In Blakolmer 2020: 223–252.

Vlachopoulos, A. G. 2021. "Divine acolytes: the animals and their symbolism in the Xeste 3 wall-paintings." In Laffineur and Palaima 2021: 249–280.

Warren, P. 1981. "Minoan Crete and ecstatic religion. Preliminary observations on the 1979 excavations at Knossos + postscript on the 1980 excavations at Knossos." In *Sanctuaries and cults in the Aegean Bronze Age: proceedings of the First International Symposium at the Swedish Institute in Athens, 12–13 May, 1989,* edited by R. Hägg and N. Marinatos, 155–166. *SkrAth,* 4°, 28. Stockholm: Paul Åströms Förlag.

Warren, P. 1990. "Of baetyls." *Opuscula Atheniensia* 18: 193–206.

Watrous, L. V. 1991. "The origin and iconography of the Late Minoan painted larnax." *Hesperia* 60: 285–307.

Webb, J. M. 1999. *Ritual architecture, iconography and practice in the Late Cypriot Bronze Age. SIMA-PB* 75. Jonsered: Paul Åströms Förlag.

Whittaker, H. 1997. *Mycenaean cult buildings. A study of their architecture and function in the context of the Aegean and the eastern Mediterranean. Monographs from the Norwegian Institute at Athens* 1. Bergen: The Norwegian Institute at Athens.

Wright, J. C. 1994. "The spatial configuration of belief: the archaeology of Mycenaean religion." In *Placing the gods: sanctuaries and sacred space in ancient Greece,* edited by S. E. Alcock and R. Osborne, 37–78. Oxford: Clarendon Press.

Yasur-Landau, A. 2016. "The baetyl and the stele: contact and tradition in Levantine and Aegean cult." In Alram-Stern et al. 2016: 415–419.

Younger, J. G. 1988. *The iconography of Late Minoan and Mycenaean sealstones and finger rings.* Bristol: Bristol Classical Press.

Younger, J. G. 2009. "Tree tugging and omphalos hugging on Minoan gold rings." In *Archaeologies of cult: essays on ritual and cult in Crete in honor of Geraldine C. Gesell,* edited by A. L. D'Agata and A. van der Moortel, 43–49. *Hesperia* Suppl. 42. Princeton: American School of Classical Studies at Athens.

do-ra pe-re: The Ritual Processions of the Aegean 2nd Millennium B.C. Re-visited

Tina Boloti

Abstract   *One of the most important practices (apart from libations and communal feasting, animal sacrifice included) of the official cult in the Aegean during the 2nd millennium BC is ritual processions. Since the rulers expressed their authority not through political or warrior imagery, but through the manipulation and control of ritual, Aegean Late Bronze Age two-dimensional iconography, especially wall paintings, provides rich documentation while additional evidence is offered by related representations on other media such as on golden signet-rings, seal-stones and clay sealings, painted sarcophagi, and stone and clay vessels. Due to space limitations, this paper focuses on the participants in ritual processions and the pictorial formula that enables the viewers to identify them. Prompted by selected examples, two of which I have recently re-examined, I discuss the messages conveyed on the one hand by the bodies of the worshippers in line (female, male, or even supernatural creatures, as the so-called Minoan 'genii') carrying cult equipment and offerings in their outstretched hands (i.e.* do-ra pe-re *in Mycenaean Greek, transcribed as* δῶρα φέρει *in ancient Greek) for a supposed deity (or her impersonator), and on the other hand by the clothing they wear.*

Introduction

In the 'realm of images' of the 2nd millennium BC Aegean, ritual processions hold a major place (Immerwahr 1990, 53, 88–90, 114–118; Boulotis 1995) as they constituted one of the most important practices of the official cult, apart from libations and communal feasting, animal sacrifice included (Hitchcock *et al.* 2008; Wright *et al.* 2004). Since the rulers communicated messages of authority not through political or warrior imagery, but through the manipulation and control of ritual, Aegean Late Bronze Age two-dimensional iconography, especially wall paintings, provides rich documentation while additional evidence is offered by related representations in minor arts (seal images, relief art, figurines). Undoubtedly, both categories shared a common palatial iconography that essentially originated in Neopalatial Crete and was later adopted in Mycenaean Greece (Blakolmer 2019, 49).

The Pictorial Formula – the Participants

Ritual processions are formed from an organized body of active participants (in Aegean Bronze Age religious iconography, mainly human and occasionally supernatural creatures) walking in a formal or ceremonial manner. The human figures (male and/or female) rendered in line, one by one or in pairs, "as if walking in palace corridors" as Anne Chapin (2020, 378) recently pointed out, seem to communicate "messages of strength, order and stability". Moreover, thanks to the repetition of common characteristics (even with slight variations), they emphasize "the organizational principle of visual harmony" (Chapin 2020, 378). These men and women, generally interpreted as indistinct cult celebrants, as members of the elite, or as members of privileged Minoan and Mycenaean social groups (Blakolmer 2008, 257), are easily recognisable due not only to their attribution of the Aegean skin color convention (dark red for men and white for women) but also to their attire. The most prominent among them are considered to be members of the priesthood, priests or priestesses. Priestesses, especially, are ambiguously interpreted either as
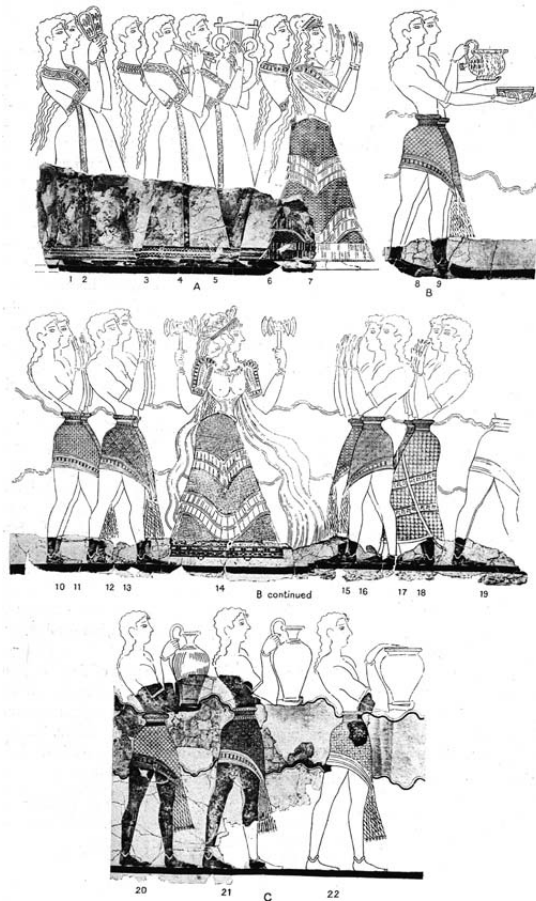
Fig. 1: Successive groups of the "Procession fresco" from Knossos. Restored drawing by E. Gilliéron, fils (after Evans 1928, 723, fig. 450).
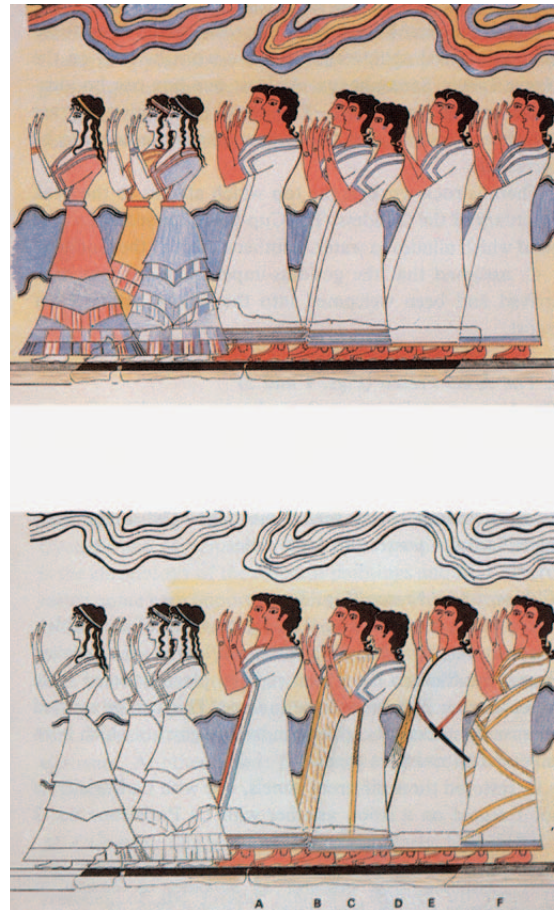
Fig. 2: Cameron's reconstruction proposal of figures from the "Procession fresco" at Knossos (after Cameron 1987, fig. 6).

such or as goddesses, which, in theory, are difficult to differentiate, since priestesses assume the visual characteristics of the goddesses. It is no accident that scholars have been divided in their opinions (*e.g.* the discussion in Boloti 2014, 261–262).

Case Study 1: Minoan Crete

The most characteristic Minoan example of ritual procession comes from the LM II–LM III A1 Corridor of the Procession Fresco in the Palace of Knossos (Evans 1928, 719–736). The life-size figures (mostly male, with some women included), painted on both sides of the corridor, wear different types of garments (kilts, long robes, hide-skirts) which may suggest different status and age groups (Marinatos 1993, 52). Although Arthur Evans (1928, 723, fig. 450) (Fig. 1) and Mark Cameron (1975, 138–139) (Fig. 2) restored the figures with raised arms in a position of worship, "the few fragments of arms that have survived depict the men as carrying vessels or, in one case a garment" (Marinatos 1993, 51–52, referring to a reconstruction proposed by Boulotis 1987). Actually, Christos Boulotis argued for a single register of figures in separate scenes of offering, among which, almost at the beginning of the eastern wall of the aforementioned corridor, he placed an imposing female figure receiving a long-fringed cloth from a male figure (Fig. 3; Boulotis 1987, 150, fig. 8). This contrasts with Evans' suggestion of numerous ribbons hanging freely on either side of her dress (Fig. 1). It is important to stress here that, unlike in an oriental palace or temple where a king ruled (Marinatos 1993, 53), the central figure in the Knossian Procession Fresco is a woman, who was interpreted by Evans as a 'goddess' (see figure 'no. 14' of Group B in the restored drawing by E. Gilliéron, fils: Fig. 1). This woman, as I recently proposed (Boloti

Fig. 3: Boulotis' reconstruction of the "goddess" from the "Procession fresco" at Knossos (after Boulotis 1987, 154, fig. 8).

Fig. 4: Reconstruction of the "goddess" from the "Procession fresco" at Knossos by the author; drawing by N. Sepentzoglou (after Boloti 2019).

Fig. 5 a: The Hagia Triada sarcophagus, side A (after Marinatos – Hirmer 1986, pl. XXXIII).

Fig. 5 b: The Hagia Triada sarcophagus, side B (after Marinatos – Hirmer 1985, pl. XXXII below).

2014, 248–250; 2019), was most probably clad in a long robe with a frontal vertical band and a polos headdress (Fig. 4), which seem to constitute a Mycenaean unisex garment prevalent in Crete as well as on the Greek Mainland from LH II/LM II onwards (Boloti 2019, 6–14). Although her face and feet are turned to the right, I believe that her upper and lower body were rendered entirely in frontal view, thus underlining her connection to both male groups who surround her. The position of her hands, however, remains ambiguous, since the double axes which Evans assumed that she held (Fig. 1) are speculative. If we adopt the idea that she is offered a long cloth, it seems reasonable to assume that her left hand was somewhat extended to receive the offering.

Long robes with a vertical band, although simpler than the aforementioned female garment, are also worn by six male processional figures (see Group A in the restored drawing by E. Gilliéron, fils) on the east wall of the Corridor of the Procession Fresco (Fig. 1), and apparently by four more men on the west wall (Boulotis 1987, 148–150, Group D, figs. 3, 5). The former, preserved only in their lower half, were restored by Evans as musicians (Evans 1928, 721–722, fig. 450) following the example of the lyre- and the flute-players (sides A and B respectively) on the Agia Triada sarcophagus (Fig. 5; Militello 1998, 155–163), although it seems that the second one wears a shorter version of this garment (Militello 1998, 291).

Case Study 2: Mainland Greece

Unlike in Minoan Crete, female ritual processions seem to predominate in the iconographic programs of the Mycenaean palatial centres (Immerwahr 1990, 114–118; Boulotis 1995). Identification of this activity is made possible by the figures' position in the ceremonies and/or, at least in some cases, by their attire which diverges more or less from the standardized dress types (*i.e.* more elaborate examples or pieces of attire accompanied by accessories, like headdresses). Noteworthy is the sartorial similarity between goddesses and priestesses, which generally applies to the iconographic codes of that era (attested mostly in glyptic imagery). As a consequence, their identification is often ambiguous, especially in the case of fragmentary wall paintings (Boloti 2014, 261–262). Despite differences in iconographic details, concerning the outfit of the participants and the objects carried (*cf.* ivory pyxides, vessels of precious metals, necklaces and flowers, as well as a female idol and clothing, as Boulotis [1979] suggested for the example from Tiryns), the exclusive participation of women in these processions, in combination with the nature and evident similarity of the offerings, "indicate[s] the possibility of a significant supra-regional festival, probably in honour of a female divinity, as part of the Mycenaean religious calendar – a spring festival to judge by the offerings of lilies and wild roses in the processions at least at Thebes and Pylos" (Boulotis 2000 b, 1116). Evidently, the existence of a religious calendar according to which the offering of valuable 'gifts' (for the transliterated Mycenaean Greek phrase *do-ra[-qe] pe-re* [= δῶρα [τε] φέρει], which is attested four times in the Pylian Linear B tablet Tn 316, see Ruipérez and Melena 1996, 193–196), took place either occasionally or, in the context of a sanctuary, is clearly attested in the palatial Linear B archives from Knossos and Pylos (Melena 1974; Boulotis 2000 a).

Next to the aforementioned life-size female processions in the Mycenaean palaces, small-scale processions with male participants have been detected, so far, at Pylos (Lang 1969), Argos (Tournavitou and Brecoulaki 2015) and Mycenae (Iakovides 2013). Only one female figure participates in the procession depicted in the wall-painting of Vestibule 5 (Fig. 6), dated to the final LH III B phase of the Pylian palace (Lang 1969, 64–68, 5H5–15H5, pl. 119). The fresco, "a late reminiscence of the Knossian offering-bearers" according to Sara Immerwahr (1990, 118), represents almost exclusively men, c. 30 cm in height. They proceed to the left, arranged on two levels, with an oversized bull in the middle, the presence of which implies in all probability a sacrificial ritual. The majority of the male participants wear long ceremonial bordered robes, while fewer are dressed in kilts. The aforementioned woman, on the other hand, of the same size as the men, is clad in a flounced skirt, a typical garment of the Minoan and Mycenaean elites, which, in combination with an elaborately varied tight bodice, was also worn in ceremonial contexts as amply documented in different artistic media (wall-paintings, glyptic, etc.). A number of female cult functionaries, and among them priestesses, apparently wore the same skirt – a type at-
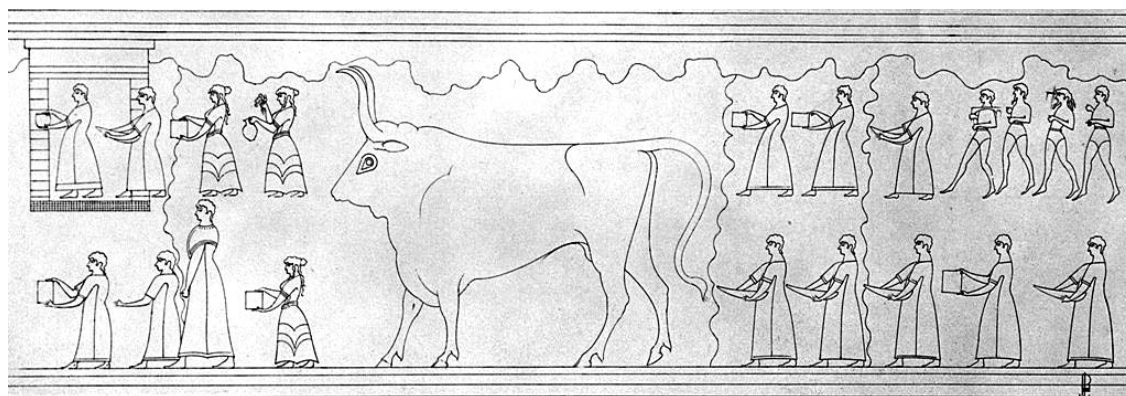

Fig. 6: Palace of Pylos, vestibule 5, wall sketch (after Lang 1969, pl. 119).

tested in the case of female divinities as well. Therefore, would just the presence of the Pylian woman in the procession justify her identification as a priestess? This assumption is quite plausible indeed, given the ritual character of the scene and its meaningful setting in the vestibule of the throne room. Nevertheless, the fragmentary state of the figure and the poor preservation of the fresco do not provide further distinctive features about her identity or about the role she played in this particular ritual.

Despite the predominance of a coded visual language in the expression of religious attitudes it is reasonable to assume the existence of local variants of the established priestly attire, on a diachronic as well as on a synchronic level, and even within the same community. The related iconographical evidence from mainland Greece (frescoes from the palatial centres) as well as from Crete (the sarcophagus

Fig. 7: Reconstruction of the fresco fragment 40Hne from Pylos by the author; drawing by N. Sepentzoglou (after Boloti 2016, 510, pl. CXLVII d).

and frescoes from Agia Triada and the Procession Fresco from Knossos) implies the existence of variations. Moreover, the latter can be attributed to the ranking of religious functionaries and duties as it is attested in the Linear B tablets.

Case Study 3: Mainland Greece

Among the supernatural figures which appear in Aegean Bronze Age religious iconography, only the so-called Minoan 'genii' were usually rendered as groups. While in Minoan glyptic from MM II onwards, these creatures are mainly engaged in two types of human activities: libation (*i.e.* vegetation rituals, carrying the characteristic libation jug) or hunting (usually carrying hunted – presumed to be sacrificial – animals), on the Greek Mainland they appear to participate in rituals, often in processions (Boloti 2016). In this light, the 'genius' on fresco fragment 40 H ne from the Palace of Pylos (Fig. 7) which carries a sacred knot or dress and a double axe, as I have recently proposed (Boloti 2016), might have been part of a broader composition, most probably of processional character. The final goal of the procession could easily have been a female divinity such as *e.g.* the seated one depicted on signet-ring *CMS* I, no. 179 from Tiryns (Fig. 8), or the standing one shown on sealing *CMS* I, no. 379 from Pylos. Would this have been the 'Goddess of Nature', whose realm included vegetation, animals and consequently hunting activities in which 'genii' also participated? Plausibly.

The Final Goal of the Procession(s) – Conclusive Remarks

The final goal of the procession would have been an enthroned figure, female in all probability (Rehak 1995, 103), a goddess or a high priestess possibly impersonating the divinity. A plausible candidate is the fragmentary polos-crowned 'White Goddess', from the northwest plaster dump

of the palace of Pylos (Lang 1969, 221), in conjunction with a half-size woman dressed in a long robe with a vertical central band, from the same dump (Fig. 9). The half-size woman, whose feet overlap with a carved footstool, ivory in all probability judging by its white colour, finds its closest parallel in the composition of the aforementioned signet-ring from Tiryns *CMS* I, no. 179 (Fig. 8). There, the procession of 'genii', which approaches an enthroned 'goddess', designates respectively the aforementioned Pylian woman as a leading processional figure, a high priestess in all probability, as reasonably argued by Lang (Lang 1969, 85, 50Hnws: priestess' feet). This long

Fig. 8: The golden signet-ring CMS *I, no. 17 from Mycenae (after Mylonas 1983, 187, fig. 141).*

Fig. 9: Palace of Pylos, the Priestess' feet (after Lang 1969, pl. N).

robe with a vertical central band, of which only the lower part has been preserved, is decorated with linear and architectural motifs on its elaborate border divided into two horizontal bands: zigzags in the upper band, as well as in the band that goes up the side of the garment, and alternating blue and yellow beam-ends in the lower one. Without commenting on the dress-type, Lang rightly noted the structural similarity of the latter with the aforementioned much earlier garment of the 'Goddess' no. 14 from the palace of Knossos (Fig. 1; see the recent analysis in Günkel-Maschek 2020, 252–261), which I reconstructed as a long robe with vertical band too (Fig. 4).

Since Aegean iconography was a strictly 'palatial' concern, the imagery of processions in 2nd millennium BC imagery highlights the prime fields for display and negotiations of power. Especially the frescoes which "would have been viewed by a variety of visitors, from bureaucrats to crafters" (Hitchcock and Nikolaidou 2013, 517) constitute an expression of piety which indicates the strong connection between human (political) and divine power since the latter legitimized the former. Evidently, among the strategies employed by elites to maintain political authority is the embracement of religion, since the latter, as Nanno Marinatos eloquently points out "was the primary means of enforcing the authority of the rulers" (Marinatos 1993, 111), and it "could unify the population in a peaceful manner" (Marinatos 1993, 75). Wall paintings (which in Crete constitute the only expression of monumental pictorial art), especially, give us insights into the ideology of the ruling classes. The frescoes are above all meaningful images, mirrors of a mentality, or even propaganda, interacting with other art forms, such as seals and signet-rings, which probably never held a leading position compared to other media, *e.g.* frescoes, which were more suitable for the depiction of narrative scenes. Seals and signet-rings nonetheless played decisive roles as transmitters and distributors of representational motifs as well as propagators of iconographical concepts and messages. Since seal images originate in mural decoration, they reflect more or less standardized palatial iconography, such as the abbreviated representations of ritual processions, found on a series of both seals and seal impressions, mainly of the LM I period (Günkel-Maschek 2020, 190–206, 234–248), thanks to which we may fill in the gaps in successive stages of Minoan rituals (Warren 1988, 20–23).

In Aegean Bronze Age procession iconography the prominent gesture remains the outstretched hands, either of the participants who hold offerings or cultic utensils possibly for the preparation of a festival (Marinatos 1993, 53), or of the high-priestesses which seem to receive them on behalf of the gods (*e.g.* the Knossos Procession Fresco in case study 1). Especially in the case of fresco fragment 40 H ne from the Palace of Pylos (case study 3), the role of the participants is played by a supernatural figure, a Minoan 'genius', which seems to simultaneously hold a cultic utensil and an offering (Boloti 2016).

References

Blakolmer, F. 2008. "Processions in Aegean iconography II. Who are the participants?" In Hitchcock, Laffineur, and Crowley, eds. 2008, 257–268.

Blakolmer, F. 2019. "No kings, no inscriptions, no historical events? Some thoughts on the iconography of rulership in Mycenaean Greece." In *From 'LUGAL.GAL' to 'WANAX'. Kingship and political organization in the Late Bronze Age Aegean,* edited by J. M. Kelder and W. J. I. Waal, 49–94. Leiden: Sidestone Press.

Blakolmer, F., ed. 2020. *Current approaches and new perspectives in Aegean iconography, Aegis* 18. Louvain-la-Neuve: Presses universitaires de Louvain.

Boloti, T. 2014. "e-ri-ta's dress: contribution to the study of the Mycenaean priestesses' attire." In *Prehistoric, Ancient Near Eastern and Aegean textiles and dress: an interdisciplinary anthology,* edited by M. Harlow, C. Michel, and M.-L. Nosch, 245–270. *Ancient Textiles Series* X. Oxford: Oxbow Books.

Boloti, T. 2016. "A "knot"-bearing (?) Minoan Genius from Pylos. Contribution to the cloth/clothing offering imagery of the Aegean Late Bronze Age." In *Metaphysis. Ritual, Myth and Symbolism in the Aegean Bronze Age,* edited by E. Alram-Stern, F. Blakolmer, S. Deger-Jalkotzy, R. Laffineur, and J. Weilhartner, 505–510. *Aegaeum* 39. Leuven and Liège: Peeters.

Boloti, T. 2019: "Revising the dress code of the "Goddess" from the Procession Fresco at the Palace of Knossos". *Proceedings of the 12th International Congress of Cretan Studies, Heraklion 21–25/9/2016,* Heraklion.

Boulotis, Ch. 1979. "Zur Deutung des Freskofragmentes Nr. 103 aus der Tirynther Frauenprozession." *ArchKorrBl* 9: 59–67.

Boulotis, Ch. 1987. "Nochmals zum Prozessionsfresko von Knossos: Palast und Darbringung von Prestige-Objekten." In *The function of the Minoan palaces. Proceedings of the 4th International Symposium, Swedish Institute,* edited by R. Hägg and N. Marinatos, 145–156. Athens: Svenska Institutet i Athen.

Boulotis, Ch. 1995. "Αιγαιακές τοιχογραφίες. Ένας πολύχρωμος αφηγηματικός λόγος." *Αρχαιολογία και Τέχνες* 55: 13–32.

Boulotis, Ch. 2000 a. "Σκέψεις για μυκηναϊκά μηνολόγια." *Αρχαιολογία και Τέχνες* 74: 9–16.

Boulotis, Ch. 2000 b. "Η τέχνη των τοιχογραφιών στη μυκηναϊκή Βοιωτία." *Επετηρίς της Εταιρείας Βοιωτικών Μελετών,* III 1, 1095–1149. Athens.

Brandt, E. 1965. *Gruss und Gebet. Eine Studie zu Gebärden in der minoisch-mykenischen und frühgriechischen Kunst.* Waldsassen: Stiftland-Verlag.

Cameron, M. A. S. 1975. *A general study of Minoan frescoes,* Ph.D. Diss., University of Newcastle-upon-Tyne.

Chapin, A. P. 2020. "Iconography in context: the visual elements of Aegean art." In Blakolmer, ed. 2020: 369–384.

Evans, A. 1928. *The Palace of Minos at Knossos,* II. London: Macmillan.

Günkel-Maschek, U. 2020. *Minoische Bild-Räume: Neue Untersuchungen zu den Wandbildern des spätbronzezeitlichen Palastes von Knossos.* Heidelberg: Heidelberg University Publishing.

Hitchcock, L. A., R. Laffineur, and J. Crowley, eds. 2008. *DAIS. The Aegean feast. Proceedings of the 12th International Aegean Conference, University of Melbourne, Centre for Classics and Archaeology, 25–29 March 2008. Aegaeum* 29. Liège and Austin: Université de Liège and University of Texas.

Hitchcock, L., and M. Nikolaidou. 2013. "Gender in Greek and Aegean prehistory." In *A companion to gender prehistory,* edited by D. Bolger, 502–525. Chichester: John Wiley & Sons, Inc.

Iakovides, S. 2013. *Ανασκαφή Μυκηνών IV − Η Οικία στις λάκες.* Athens: The Archaeological Society at Athens Library 288.

Immerwahr, S. A. 1990. *Aegean painting in the Bronze Age.* University Park and London: The Pennsylvania State University Press.

Lang, M. L. 1969. *The Palace of Nestor at Pylos in Western Messenia, II: the frescoe*s. Princeton: Princeton University Press.

Marinatos, N. 1993. *Minoan religion. Ritual, image, and symbol.* Columbia: Columbia University Press.

Marinatos, S., and M. Hirmer. 1986. *Kreta, Thera und das mykenische Hellas,* 2nd ed. Munich: Hirmer Verlag.

Melena, J. L. 1974. "Reflexiones sobre los meses del calendario micénico de Cnoso y sobre la fecha de la caída del palacio." *Emerita* 42: 77–102.

Militello, P. 1998. *Haghia Triada I. Gli Affreschi.* Padova: Bottega d'Erasmo.

Mrass, M. 2005. *Gesten und Gebärden. Begriffsbestimmung und -verwendung in Hinblick auf kunsthistorische Untersuchungen.* Regensburg: Schnell und Steiner Verlag.

Mylonas, G. E. 1983. *Πολύχρυσοι Μυκήναι.* Athens: Εκδοτική Αθηνών.

Rehak, P., ed. 1995. *The role of the ruler in the prehistoric Aegean. Proceedings of a panel discussion presented at the Annual Meeting of the Archaeological Institute of America, New Orleans, Louisiana, 28 December 1992. Aegaeum* 11. Liège: Université de Liège.

Ruipérez, M., and J.-L. Melena. 1996. *Οι Μυκηναίοι Έλληνες.* Athens: Kardamitsa Publications.

Tournavitou, I., and H. Brecoulaki. 2015. "The Mycenaean paintings from Argos: a preliminary presentation." In *Mycenaean wall paintings in context: new discoveries and old finds reconsidered,* edited by H. Brecoulaki, J. L. Davis, and S. Stocker, 209–241. *Meletemata* 72. Athens: National Hellenic Research Foundation.

Warren, P. 1988. *Minoan religion as ritual action.* Göteborg: Paul Aström Förlag.

Wright, J. ed., 2004. *The Mycenaean feast. Hesperia* 73. Princeton: The American School of Classical Studies at Athens.

VI. Gesture, Posture, Sex, and Gender

Gesturing Age, Posturing Gender. The Neolithic Antecedents of Bodily Comportment in the Aegean

Paz Ramirez-Valiente

Abstract   *The research presented in this paper examines the postures and gestures of anthropomorphic figurines from Neolithic Crete and a selection of sites from Thessaly. Postures and gestures are classified by type and then analysed statistically in comparison with the sex of figurines. The aim is to distinguish whether or not bodily comportment is related to sex and possibly gender and age. Conversely, the differences in postures and gestures may be the result of the materials employed to make the figurines or a chronological development. The preliminary conclusions suggest that different factors determine the modelling of bodily comportment in Neolithic bodies: the chronology and materials used for the manufacture of the figurines are related to specific postures and arm-positions, gestures and postures that conceal or emphasise sexual attributes are possibly associated with different age-stages; and shared gestures and postures in figurines of different sexual categories may represent similar gender identities.*

Introduction

The Neolithic Aegean represents the starting point of the diversification in bodily comportments in three-dimensional form. For instance, the 'Folded Arms' gesture, typical of Cycladic figurines from the Early Bronze Age, appears for the first time in the Neolithic. The study of anthropomorphic figurines may shed light on the symbolic construction of social identities in which gender and age are significant factors. The conventions employed by Neolithic sculptors in the representation of gestures and postures on figurines may help us understand the division in age-stages and the variety and ambiguity of gender in the Neolithic Aegean.

The diversity of bodily postures and gestures on Neolithic Aegean figurines in clay and hard materials implies the existence of an elaborated language, perhaps concerning ritual expressions. Gesture is also a way of communicating cultural bodily comportments that have different meanings in different societies. Postures and gestures represented on figurines convey messages that express different body languages that may be related to sex, gender and age. Biological sex is not the only structuring principle for identifying sex and gender, but it tends to play a significant categorising role in any given society (Herdt 1994, 80). Thus, the presence or absence of sexual attributes is one of the main ways to categorise Neolithic figurines by sex in our assemblage (see section B, methodology). In this analysis, gender is understood as the social construction of sex. Even though the biological sex of a figurine might not be represented through the depiction of sexual attributes, it could still represent gender through clothing, ornamentation, gestures or postures that are conventionally associated with a particular sex. However, sex and gender change through the life course of an individual. Therefore, an intersectional view is also needed to go beyond the binary assumptions of sex in past scholarship and consider other options for the variations in sex, perhaps indicating age or other non-binary genders.

Previous literature has analysed postures and gestures on figurines from the Neolithic Aegean. For instance, Peter Ucko (1968, 324), who previously analysed gestures and postures on figurines from Neolithic Crete related to sex, considered that no correlations existed between arm-positions, postures and sex. However, he associated a higher number of figurines in the squatting position with females and 'no-sex' figurines, and standing with males and 'no-sex' cate-
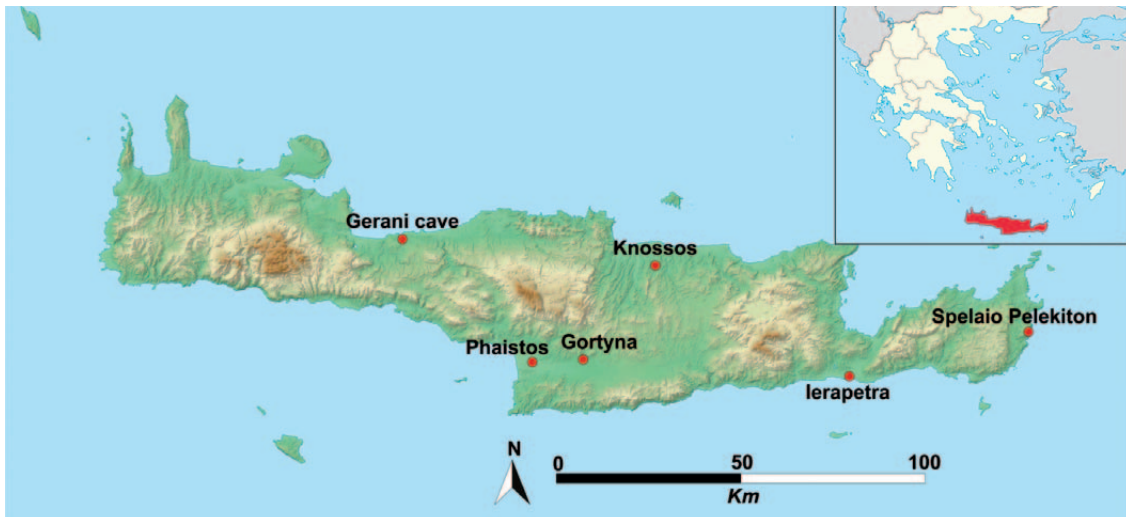
Fig. 1: Map of Crete and sites with Neolithic figurines.

Fig. 2: Map of Thessaly with the selected sites with Neolithic figurines.

gories (Ucko 1968, 323). Also, Ucko (1968, 323) showed that the number of figurines with gestures like arm-stumps is higher in 'no-sex' figurines, while females are mainly represented with 'arms-to-chest'. Maria Mina (2008) also analysed postures and gestures in her corpus of figurines from the Neolithic and Early Bronze Age Aegean. She associated gestures with the hands on or near the breasts related to female figurines (Mina 2008, 39). Furthermore, Mina related this association with "expressing a pre-occupation with reproduction as a central part of women's lives" (Mina 2008, 39). An assertion that still reflects the influence of the 'Mother Goddess' theories (*e.g.* Gimbutas 1982) that put reproduction as an essential part to understand the importance of women in the Neolithic, particularly as related to the high number of female figurines in areas such as Greece or the Balkans. Instead, Stratos Nanoglou (2005, 146), in his analysis of figurines from Thessaly, considers that gender is not associated with gesture as, for instance, he considers that breasts are not related to particular gestures or postures. However, he differentiates between earlier Neolithic figurines (Early and Middle Neolithic) with gestures and postures that suggest an emphasis on motion and action, and the later Neolithic ones (Late and Final Neolithic) when almost none of the bodies have articulated legs and the arms are represented as stubs, indicating static bodies (Nanoglou 2005, 150; 2010, 221).

For the purposes of the present discussion, aspects of analysis that play a central part in the understanding of gestures and postures represented on figurines are their associations with sex, gender and age, as well as their possible use as indicators of gender and age in figurines, and their significance in Neolithic iconography.

318

Methodology

The figurine sample analysis is taken from the corpus of figurines from Neolithic Crete, which includes a total of 127 figurines from the sites of Knossos, the Gerani Cave, Phaistos, Pelekita Cave, Ierapetra, Gortyna (Fig. 1), and figurines from unknown sites in the Mesara plain or in central Crete. The other corpus analysed for this study is a selection of case studies from Thessaly, considering the high number of Neolithic sites with figurines in this region. The sample includes sites of all the different Neolithic phases from Early to Final Neolithic (Table 1): Sesklo, Tsangli, Tsani Magoula, Platia Magoula Zarkou, Dimini, Rachmani, Zappeio 2 (or Magoula Kouskouro), Chara 1 (Magoula Panagou), Sitochoro 1 and Nees Karyes (Sarliki) (Fig. 2). The total number of figurines included in the sample from Thessaly is 208. Both assemblages of figurines from Crete and Thessaly include figurines made mainly of clay, but also of marble, steatite, shell, slate, breccia, bone and stone.

Initial Neolithic / Aceramic (IN):	*c.* 7000–6600/6500 *cal.* BC
Early Neolithic (EN):	'Early Ceramic' (Frühkeramikum), Proto-Sesklo, Pre-Sesklo c. 6500–6000/5900 *cal.* BC
Middle Neolithic	(MN): Sesklo I, II, III *c.* 6000/5900–5600/5500 *cal.* BC
Late Neolithic (LN):	Tsangli-Larisa, Arapi (LN I); Otzaki, Classic Dimini (LN II); *c.* 5600/5500–4500 *cal.* BC
Final Neolithic (FN):	Rachmani *c.* 4500–3500 *cal.* BC

Table 1. Chronology of Neolithic Greece with the Thessalian phases combining radiocarbon calibrated dates and relative chronology terms (modified from Perlès and Johnson 2004, 66; Reingruber et al. 2017).

The methodology used to analyse sex categories on the figurines is mainly based on their sexual attributes. The sexual features examined are the presence or absence of breasts, genitalia, an exaggerated protruding belly, a pubic triangle and exaggerated buttocks. The categories are as follows:

Female: presence of breasts or female genitalia, exaggerated buttocks or exaggerated protruding belly. Possible presence of secondary traits such as wide hips and buttocks, decorative motifs, painting, anatomical details and incisions, postures or gestures associated with Female sex.

Probably Female: unclear presence of breasts or female genitalia. Secondary attributes that may indicate a female gender such as the presence of wide hips and buttocks, decoration and painting, anatomical details and incisions, postures and gestures, must be analysed compared to their presence or absence in definite Female figurines.

Male: presence of male genitalia and absence or small rendering of breasts. Secondary patterns that may indicate male gender include the body shape, decoration, postures and gestures associated with Male sex.

Probably Male: unclear or absence of representation of male genitalia. Other features such as body shape, posture, arm-position, or decoration can suggest male bodies and must be analysed compared to definite Male figurines.

Asexual: absence of sexual attributes, including male and female genitalia, breasts, and the lack of any pattern of secondary traits associated with figurines categorised as probably sexed.

Double-sex: presence of male and female sexual attributes on the same figurine, generally consisting of breasts and male genitalia.

Non-Identifiable: fragmented figurines that cannot be assigned to any category due to their state of preservation.

The gestures and postures on the figurines are divided into types using descriptive categories that are developed taking as reference previous works (*e.g.* Ucko 1968). The different categories are then analysed statistically and compared with sex and age classifications. The three-dimensional representations of postures and gestures show distinctive patterns which probably had an associated meaning and significance that is, at times, difficult to interpret, considering the schematism of some representations. The materials used to make the figurines may also influence the

representations of particular gestural representations and, therefore, this aspect will also be explored in the analysis.

The methodology to classify the figurines by age looks at the differences in size, sex (or absence of), gestures and postures that may be gendered, anatomical details, especially differences in the development of sexual traits or body hair growth, and decoration. The appearance in the same archaeological context of figurines with sexual traits (Female/Male) with those showing an ambiguous depiction of sex (Probably Female/Male) or absence of sexual traits (Asexual) that also show differences in size, such as larger sexed figurines and smaller Asexual are important to identify possible age-stages in the assemblage. Those Asexual and of small size compared to other larger Male or Female figurines representing adults may be interpreted as children, juveniles, prepubescent or younger individuals. Other ageing traits as signs of old age are also considered which include paunches, wrinkles, sagging breasts and a sagging chest. Neolithic images without firm bodies and faces marked by signs that may indicate advanced age have been interpreted in this way (Hitchcock and Nikolaidou 2013, 505; Gallou 2018, 63).

Gestures on Neolithic Figurines from the Aegean

The examination of gestures represented on Neolithic figurines from Crete and Thessaly reveals an array of different arm position types, the most numerous being the arms depicted as stumps, 'arms to the chest' in different variations, and no arms.

The analysis of gestures depicted on figurines compared to their sex shows that the arm-positions are definitely gendered. Statistically, the most frequent way of depicting the arm-position in the Neolithic of Crete and Thessaly is through arm-stumps. Arm-stumps are probably a schematic depiction of the 'arms to the chest' gesture. This is exemplified by the figurine AMH.2716 (Ucko 1968, fig. 120) from Late Neolithic Knossos, which has arm-stumps modelled in a triangular shape, but the arms are bent to the chest in low relief. The use of arm-stumps might also be a way of avoiding the breakage of the arms, especially for clay figurines. Ucko (1962, 45) suggested this idea using an ethnographic parallel with the dolls of the Ashanti tribes, who employed this method for figurines that children carried around. Arm-stumps are displayed in most categories of sex: in Female, Probably Female, Probably Male and Asexual, except for Male figurines in Crete and Thessaly, and for Double-sex figurines, which are only found in Thessaly. This gesture is mainly used for Asexual figurines in both Crete and Thessaly (Tables 2–3) and, less frequently, in Females. Most arm-stumps appear on Late and Final Neolithic figurines made of hard materials. However, stumps are also numerous in clay, especially in those figurines with more schematic traits where the anthropomorphic shape of the figurine is merely outlined. Perhaps the selection of the material conditioned the details depicted on the figurines, particularly the representation of arm-stumps. There is also a slight difference in shape in the classification of arm-stumps in Crete. Female and Probably Female figurines are mostly depicted with rounded arm-stumps, while Asexual figurines and Probably Males are mostly associated with triangular arm-stumps (Table 2). While this difference could pertain to a gender differentiation and perhaps rounded and triangular stumps represented two diverse schematic gestures of the 'arms to the chest', it rather seems to be related to the material from which figurines were made. Precisely, triangular stumps on Asexual figurines from Crete are mostly associated with hard materials (in seven figurines out of nine total), which could relate to the different tools and carving methods used for these materials. In Crete, seventeen figurines with arm-stumps are Asexual (Table 2). In Thessaly, twenty-eight Asexual figurines depict the arms as stumps (Table 3). This is the sex category with the highest number of arm-stumps. However, Female figurines have arm-stumps in thirteen examples from Crete and eight from Thessaly.

The 'arms to the chest' gesture is statistically the second category in number in the series of gestures present on Neolithic figurines from Crete and Thessaly. Similarly to arm-stumps, the 'arms to the chest' gesture appears in most sex categories except for Probably Males in Crete and Male and Probably Males in Thessaly. In contrast with Minoan figurines, where this gesture ap-

pears on male figurines from peak sanctuaries and Neopalatial bronze figurines (Morris 2001, 249), in general, the variants of 'arms to the chest' appear more commonly on Female and Probably Female figurines in Neolithic Thessaly and Crete. However, the only exception of a Male figurine with 'arms to the chest' is the marble L2623 (Papathanassopoulos 1996, fig. 247) found in Pit A, from Middle Neolithic Knossos.

The 'arms to the chest' gesture can be further subdivided into subtypes. One is the 'arms to the chest below the breasts'. This is the most widely used gesture for Female figurines in Crete and Thessaly. In Thessaly, 'arms to the chest below the breasts' is found in nine Female figurines (Table 3). For instance, at Platia Magoula Zarkou, the two larger Female figurines found on the house model ML. PMZ.619 are represented with 'arms to the chest below the breasts', while the smaller Female has the arms missing (Fig. 3). The clay house model without a roof had nine figurines in its interior, and it was found in a pit dug into the destruction level of a house at the end of the Middle Neolithic in Platia Magoula Zarkou (Gallis 1985). Therefore, the house model dates either to the end of the Middle Neolithic period or the beginning of the Late Neolithic (Nanoglou 2005, 149). The group of nine anthropomorphic figurines display different sizes, shapes, decorations, gestures, postures, and sex. The largest figurine is a Female and measures 7 cm high, represented with the 'arms to the chest below the breasts' gesture. Next to this figurine lay a Probably Male figurine depicted with four legs, which can be referred to as the 'four-legged' or 'seated on a stool' type characteristic of the Early-Middle Neolithic, which tends to be Male (Gallis 1985, 21). The two figurines possibly represent a couple and are the largest compared to the other groups. In the opposite corner and next to the entrance opening, another Female and a Probably Male couple were rendered in a slightly smaller size. Both the Female and the Probably Male figurines were depicted in the same way as the first couple: with the same gesture, posture, and decorations. These four figurines probably represent the oldest couple and the younger couple of adults. Adjacent to this pair, and next to the Female figurine's head, lay two smaller and schematic figurines, which lack any indication of sex, arms and leg differentiation. These figurines measure only 2.5 cm and could represent children or infants. In the corner side, close to the oven, lay three small figurines (smaller in size than the two couples) but each of a different size. The largest of those is a Female figurine modelled with breasts and incised decoration, possibly representing a young girl or adolescent. The slightly smaller figurine to the right corner shows a similar posture to the other adult Probably Males and is perhaps an adolescent or pre-

Fig. 3: Platia Magoula Zarkou house model ML. PMZ.619 with its contents and the arrangement in which the figurines were found (Alram-Stern et al. 2022, 524, fig. VI.27–37b).

Fig. 4: Clay Female figurine M41 with 'arms to the chest below the breasts', from Middle Neolithic Tsangli (after Papathanassopoulos 1996, fig. 211).

pubescent individual. The middle figurine of the three was even smaller, measuring 2.6 cm in height (Gallis 1985, 22), possibly representing a child or infant without arms and leg differentiation. This example shows how different gestures, postures and size may indicate differences in both sex and ages of the figurines that, in this case, Kostas Gallis (1985, 22) interpreted as the members of a family.

Other possible relationships between sex, age and gesture, particularly in Female figurines, may be found, for instance, on M41 from Middle Neolithic Tsangli (Fig. 4). This figurine has a wide body with protruding belly and two incised lines indicating fat folds and similarly protruding buttocks, perhaps showing signs of a woman of old age. Other figurines which share the same gesture, round flat bases and paunches are No. 10.673 from Middle Neolithic Tsangli (Ucko 1968, pl. LXVII) and ML. THE.642 from Zappeio 2 (Gallis and Orphanidis 1996, fig. 226). Therefore, Female figurines with hands under the breasts may represent adult or older women, especially those of a larger size, broader torsos and bodies that include fat folds or paunches. Thus, the difference in representing gestures may indicate both gender and age.

However, there might also be a difference in gesture depiction between sites. For instance, six Female figurines with 'arms to the chest covering or touching the breasts' were found in Early or Middle Neolithic Sesklo. Three further examples of the same gesture on Probably Females come from Chara 1 ML. THE.1128 and ML. THE.1788 (Gallis and Orphanidis 1996, figs. 276, 689) and Early Neolithic Sesklo (unknown inv.no.; Tsountas 1908, fig. 33, 3). In contrast, 'arms to chest below the breasts' appear on five figurines from Tsangli, two from Platia Magoula Zarkou, two from Zappeio and two from Chara 1. Interestingly, two Female figurines from Chara 1 (ML. THE.1203; Orphanidis and Gallis 2011, fig. 701) and Tsangli (unknown inv.no.; Wace and Thompson, fig. 75 b) depict the left hand resting below the breasts or on the abdomen, while the right arm raises upwards but in both examples is broken. This gesture perhaps represented a different symbolic expression or action.

The Double-sex figurine ML. THE.1070 from Chara 1, Thessaly (Gallis and Orphanidis 1996, fig. 132) has the right hand touching the right breast; the left hand is broken, although it probably rested on the sternum area. Therefore, this figurine shows a gesture only associated with Females and Probably Females in Thessaly. Gallis and Orphanidis (1996, fig. 132) suggest that the gesture recalls homosexuality. Instead, this figurine should be viewed as an amalgamation of Male and Female sexes given the depiction of breasts and a phallus, and the combination of a Female gesture and a Male posture ('sitting on a stool') that will be analysed below.

The gesture 'arms to the chest covering or touching the breasts' is an ambiguous representation, as the breasts are not clearly indicated on many occasions, and in others, they are covered by the hands. In Neolithic Knossos, in Crete, this gesture is mainly attested on three Probably Females: AMH.2715 (Ucko 1968, fig. 121), AE.731 (Fig. 5) and AN.1927–3260 (Fig. 6); and on two Female figurines (1938.662 and unknown inv.no.; Ucko 1968, fig. 58; Mina 2008, fig. 7). In Thessaly, it appears on seven Female figurines and, less frequently, on two Probably Females. Probably Female figurines covering their breasts appear on some figurines of small size at Knossos. For these three figurines, it is unclear where the hands and the breasts end; the stumps are modelled, but the arms are shown in relief probably on the breasts. The sexual attributes are also ambiguously rendered and, therefore, are classified as Probably Females. Similarly, the other two figurines with a similar gesture from Crete that are Female (1938.662 and unknown inv.no., Ucko 1968, fig. 58; Mina 2008, fig. 7) have the breasts explicitly shown. Is this vague rendering of the gesture a possible representation of age? It is unclear whether age is a factor in depicting distinct gestures since we do not know if showing breasts was only allowed for adult women. In Minoan Crete, adult women wear costumes that leave part of the breasts exposed. A similar attire could apply to Neolithic Knossos.

The 'arms to the chest touching/covering breasts' gesture also appears on three Probably Female figurines from Thessaly, ML. THE.1128 (Gallis and Orphanidis 1996, fig. 276) and ML. THE.1788 from Chara 1 (Orphanidis and Gallis 2011, fig. 689) and a torso fragment from Sesk-

Fig. 5: Probably Female figurine AE.731 with arms over the breasts, from Neolithic Knossos (Photograph by the author, © Ashmolean Museum, University of Oxford).

Fig. 6: Figurine 1927–3260 with arms covering the breasts, Neolithic Knossos (Photograph by the author, © Ashmolean Museum, University of Oxford).

lo (unknown inv.no.; Tsountas 1908, fig. 33, 3). The breasts seem to be slightly outlined on these figurines but are unclear due to the hands covering them. Similar to the examples from Crete, the presence of breasts is ambiguous and not clearly outlined, which might be a way to depict a young girl without developed breasts or the intention to cover them. Figurine ML. THE.1215 from Chara 1 (Orphanidis and Gallis 2011, fig. 178) has the same gesture as the 'arms to the chest' but has no distinct breasts, thus perhaps also indicating an individual of Probably Female gender but of a young age. The ambiguity in the depiction of sexual attributes may indicate the representation of younger girls, perhaps prepubescents or adolescents. A small marble Asexual figurine from Late Neolithic Dimini also seems to schematically represent the 'hands to the chest' arm position (Tsountas 1908, fig. 37, 8).

These figurines covering their breasts might show a meaningful division, perhaps of age-stages, or perhaps a taboo of nudity that could be related to age. For instance, Egyptian children, boys and girls, were often represented naked until they reached puberty. Similarly, in Minoan Crete, images of children appear naked, but young men on stone vases and frescoes wear loin-cloths (Pomadère 2012, 434). Thus, Maia Pomadère suggests that nudity in the Minoan imagery from Crete was reserved for young children but not for the young in general. This may suggest that the figurines with arms covering their breasts perhaps depict young females who have reached pre-pubescent or pubescent ages but not children. In her study of Minoan Bronze Age figurines' gestures, Louise Hitchcock (1997) considers that this arm position appears in females lacking clear details like facial features and other traits, including sex, perhaps suggesting a similar link between the gesture and younger age representation in Minoan iconography.

Other less frequent subtypes of the 'arms to the chest' gesture are the 'arms resting on the sides' at the waist or hip level (e.g. AMH.249 from Neolithic Ierapetra, Crete; Ucko 1968, fig. 169) and 'arms to the abdomen' (e.g. AMH.G184 of unknown provenance in Crete; Kanta and Kokkosali 2017, fig. 13) which are mainly associated with Female figurines. The 'arms to the abdomen' gesture is more frequent in Thessaly, where it appears on six Female and one Asexual figurine. Therefore, the 'arms to the chest' gesture and its variations, including the 'arms to the chest covering or touching the breasts', are gendered body expressions in the figurines from Crete and Thessaly. Unfortunately, many of these figurines lack information regarding their archaeological context and the associated objects they were deposited with. However, a possible explanation for the representation of age-stages on figurines is their possible use in transitions,
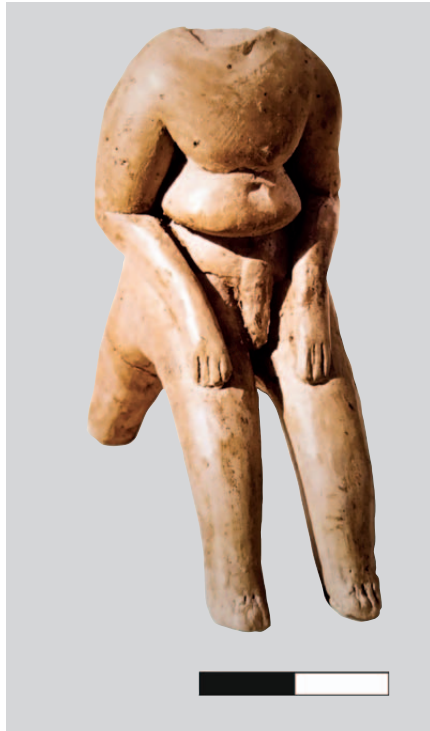
Fig. 7: Male figurine MB-M.5109 with the 'hands to thighs' gesture and 'sitting on a stool' posture, from Middle Neolithic Sesklo (after Theocharis 1973, fig. 37).
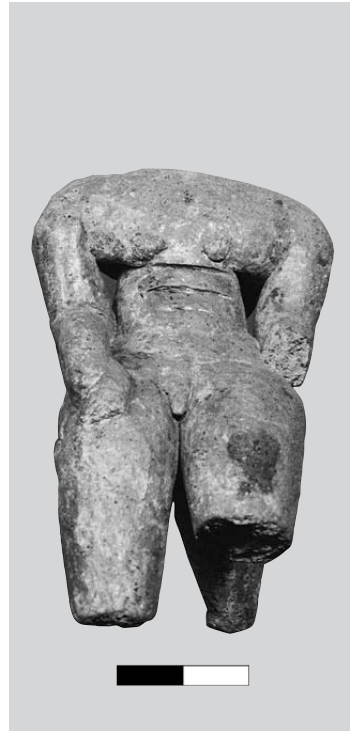
Fig. 8: Double-sex figurine ML. THE.644 from Zappeio 2 with the 'hands to thighs' gesture and 'sitting on a stool' posture, probably Early or Middle Neolithic date (after Gallis and Orphanidis 1996, fig. 125).

initiations or coming-of-age rituals. This possibility was already suggested by Ucko (1968, 434–437) and Lauren Talalay (1993, 41–42) using anthropological and historical parallels of other figurines uses, although they did not recognise different age-stages represented in Neolithic figurines from Greece. Figurines found in groups in the same archaeological context and showing different age-stages may be interpreted as such.

Different types of gestures are the 'hands to the thighs' and 'hands to the knees'. These gestures are mostly associated with Male figurines from Early and Middle Neolithic Thessaly. The 'hands to the thighs' gesture appears on the Male figurines MB-M.5109 (Fig. 7) and MB-M.4340 from Middle Neolithic Sesklo (Hourmouziadis 1973, fig. 7b), MB M.2430 from Middle Neolithic Tsangli (Wace and Thompson 1912, fig. 75e), and a Probably Male figurine from Rachmani (unknown inv.no.; Wace and Thompson 1912, fig. 26m). The gesture 'hands to the knees' appears on another Male figurine from Middle Neolithic Tsani Magoula (MB-M.5108; Hourmouziadis 1973, fig. 9). The gesture 'hands to thighs' is shared by two Double-sex figurines: ML. THE.644 from Zappeio 2 (Fig. 8) and ML. THE.68 from Nees Karyes (Gallis and Orphanidis 1996, fig. 131). Both are probably of Early or Middle Neolithic dates, although they have no contextual data. Thus, this gesture may represent a close gender relationship between Male and Double-sex figurines in the way both genders are conventionally portrayed. As mentioned before, the other Double-sex figurine analysed in this study from Chara 1 is represented with an arm to the chest and the other to the sternum area, which is a gesture mostly associated with Female figurines. Therefore, two Double-sex figurines share a gesture with Males and the other with a Female. As such, there is a clear difference in how bodies occupy space in relation to the representation of gestures in Females and Males in Neolithic Thessaly, perhaps as a way of representing gender-distinct activities, ritual motions or even gender roles.

Fig. 9: Neolithic marble Asexual figurine 1941.200 without arms and standing with differentiated legs, Neolithic Knossos (Photograph by the author, © Ashmolean Museum, University of Oxford).

In Neolithic Crete, Male figurines are represented with different gestures. For instance, Male figurine 18717 (Papathanassopoulos 1996, fig. 252) from Late Neolithic Knossos displays a gesture with the arms open, protruding outwards of the body. However, the arms are broken at the midpoint. Two other figurines – the Asexual L276 (Gavrilaki 2017, fig. 7) from Middle Neolithic Gerani Cave and the Probably Female 1389 (Kanta and Kokosali 2017, fig. 16) – both in hard materials – are depicted with extended horizontal arms, which may be a similar depiction to that of the Male gesture at Knossos.

Probably Male figurines in Thessaly are represented without arms, one being a phallic-shaped figurine from Tsangli (Wace and Thompson 1912, fig. 77c) and the other two from the house model from Platia Magoula Zarkou (ML. PMZ.619; Fig. 3). Conversely, Probably Male figurines at Knossos in Crete have triangular arm-stumps. However, the number of Probably Male figurines in the sample from Crete and Thessaly is relatively small overall (5 % of the total, see Ramirez-Valiente 2023, 12, fig. 2) to draw meaningful statistical conclusions.

At least five figurines from Crete are armless (59/9, L62/L722, G104, No. 7730, 1941.200; Ucko 1968, fig. 36; Gavrilaki 2017, fig. 8; Kanta and Kokkosali 2017, fig. 11; Davaras 1979, fig. 215c; Fig. 9). Four armless figurines are Asexual and almost all of marble, except for figurine 59/9 in clay and the phallic-shaped stone No.7730. These armless figurines are very schematic. They represent a basic body contour shape that divides the head or waist from the rest of the body and, in a few instances, with leg differentiation (*e.g.* in figurines G104 and 1941.200). Similarly, in Thessaly, thirteen Asexual figurines also appear without arms. Figurines without arms are associated with Asexual schematic representations. In particular, armless figurines also appear in possible depictions of children. For instance, the four small Asexual figurines from the Platia Magoula Zarkou house model (ML. PMZ.619; Fig. 3) and one Female figurine from Thessaly is depicted without arms (Wijnen 1981, figs. 14–15), but none from Crete. The absence of arms suggests that in these contexts, gesture representation was unimportant, a fact that in some examples also extends to other details, like facial features or sex categorisation.

An unusual gesture appears on Asexual figurine EAM.5945 from Middle Neolithic Sesklo (Fig. 10) with the 'arms to the groin' gesture, perhaps representing an individual covering its genitals but these are not clearly represented and therefore, its sex is unknown. Furthermore, at Knossos appears a very schematic early depiction of the 'Folded Arms' gesture (also known as 'FAF') with three grooved incisions on the marble Probably Female figurine AMH.G99 (Kanta and Kokkosali 2017, fig. 3). This figurine was found in the same area as the marble legs of a figurine of Cycladic type, and it may be of a Final Neolithic date, an antecedent to the later typology of Cycladic figurines with 'Folded Arms'. Also unusual is the 'kouro-
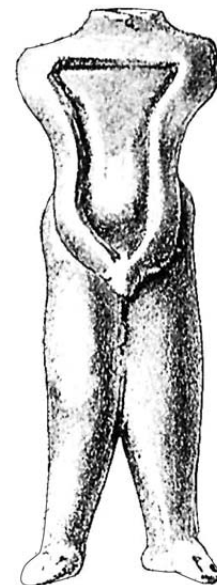

Fig. 10. Asexual figurine EAM.5945 with the 'arms to the groin' gesture and 'standing with differentiated legs' posture, Middle Neolithic Sesklo (after Tsountas 1908, fig. 33, 2).

trophos' figurine from Late Neolithic Sesklo (EAM.P5937; Tsountas 1908, fig. 31, 2) with the 'hands holding a child'. This is the only example of a Neolithic 'kourotrophos' figurine from the assemblages of Crete and Thessaly that can be securely identified as such (for other possible 'kourotrophos' figurines in Thessaly see Skafida and Toufexis 1994, 18, fig. I/8, and for Macedonia Koukouli-Chrysanthaki et al. 2007). Also, in Thessaly, two Asexual figurines from a group found in House T at MN Tsangli were represented with the hands holding a rounded object. One of the figurines has the arms remaining while the other has the rounded object attached to their body but no arms remaining. This group was interpreted by Giorgos Hourmouziadis (1973) as representing the action of kneading the dough in a bread-making scene. However, it probably represents both figurines carrying an offering, considering the context in which they were found was a pit with a structured deposit that included several well-preserved objects (Wace and Thompson 1912, fig. 69 h–j).

Considering the chronological phases in Thessaly, the division in gestures is more pronounced and varied in the Early and Middle Neolithic. The contextual evidence from Sesklo, Tsangli and Tsani Magoula suggests that Female gestures such as 'arms to the chest' with variations (with the hands touching or covering the breasts, the hands below the breasts, or the hands to the abdomen) and Male gestures like 'hands to the thighs or knees' are concentrated in the Early and Middle Neolithic phases. The exceptions are the two late Middle or early Late Neolithic larger adult Female figurines from the Platia Magoula Zarkou house model (ML. PMZ.619; Fig. 3). In contrast, in the Late and Final Neolithic phases, arm-stumps and no arms proliferate in both Asexual and Female figurines at sites such as Dimini, Sesklo, or Rachmani. Therefore, it is highly probable that the figurines lacking contextual data from Chara 1, Zappeio 2, Nees Karyes and perhaps Sitochoro 1 belong to the Early and Middle Neolithic periods since both gestures and figurine types are similar to figurines from other sites dating to those phases. However, exceptions are the schematic figurines found in Early Neolithic I levels from Sesklo, which are represented with arm-stumps and no arms. Nanoglou (2012, 283) associates the differences in gesture and posture between the periods with an emphasis on representing motion and actions in the earlier Neolithic, when a wider variety of gestures is present in Thessaly, in contrast with the 'static' gestural depictions of the later Neolithic. However, the representation of figurines in a sitting posture, particularly those 'sitting on a stool' seem to purposefully represent individuals in a non-active posture, which will be discussed in the following section. In Crete, most figurines date to the Late Neolithic and, therefore, we cannot establish a chronological development of the gestures.

Gesture	Female	Probably Female	Male	Probably Male	Asexual	NI
Downward projection	1	0	0	0	0	0
Arms to the chest	1	3	1	0	7	5
Arms to the chest under breasts	5	0	0	0	0	0
Triangular stumps	2	0	0	3	9	4
Rounded stumps	11	2	0	0	3	2
Stumps (other: broken, rectangular)	0	0	0	0	5	1
Arms to the chest touching/covering the breasts	2	3	0	0	0	0
Folded Arms by incision	0	1	0	0	0	0
Protruding outward of the body	0	0	1	0	0	0
Horizontally extended outwards	0	1	0	0	1	0
Arms to the abdomen	1	0	0	0	1	0
Arms to the sides at waist level	1	0	0	0	0	0
No arms	0	0	1	0	4	0
Total	**24**	**10**	**3**	**3**	**30**	**12**

Table 2. Sex and gesture of the figurines from Neolithic Crete.

Gesture	Female	Probably Female	Male	Probably Male	Asexual	Doublesex
Arm-stumps	8	1	0	0	28	0
No arms	1	0	0	3	13	0
Arms to the abdomen	6	0	0	0	1	0
Arms to the chest touching/covering breasts	7	2	0	0	0	1
Arms to groin	0	0	0	0	1	0
Hands to thighs	0	0	3	1	0	2
Arms to the chest below the breasts	9	2	0	0	0	0
Arms to the chest	0	0	0	0	1	0
Hands holding an object	0	0	0	0	1	0
Hands to knees	1	0	1	0	0	0
Hands to sides resting on hips	0	0	1	0	1	0
Hands holding a child	1	0	0	0	0	0
Total	33	5	5	4	47	3

Table 3. Gesture and sex of figurines from Neolithic Thessaly.

Postures on Neolithic Aegean Figurines

The main figurine postures in Neolithic Crete and Thessaly are standing and sitting but with different variations (Tables 4 and 5). Standing figurines are divided between those with differentiated and undifferentiated legs. All sex categories are depicted standing with differentiated legs. However, this posture is more numerous among Asexual figurines in Crete, particularly those made of hard materials in a total of twenty-eight examples (for instance, the marble figurine 1941.200, Fig. 9). Also, nine examples of Asexual figurines are possibly depicted in a standing position but without showing leg differentiation (e.g. 59/9, and L62/L722; Ucko 1968, fig. 36; Gavrilaki 2017, fig. 8). In Crete, twenty-four figurines of hard materials appear standing, while two made of steatite are squatting (e.g. 59/153; Evans 1964, pl. 66, 4), four are sitting (e.g. 60/183; Evans 1964, pl. 66, 5), and another of marble is sitting with legs crossed (09.408; Fig. 11). Therefore, the standing posture is prevalent in hard materials in Crete. However, the presence of squatting and 'sitting with legs crossed' postures may indicate that the depiction of other postures was not difficult to achieve in hard materials. Four Female and five Probably Female figurines also display a standing position with leg differentiation.

In Thessaly, Female figurines are mainly depicted as standing. Eight Female and two Probably Female figurines appear standing with leg differentiation. In most examples (13), Female figurines appear 'standing with undifferentiated legs'. The figurines without leg differentiation depict the lower body as a flat rounded or cylindrical base, perhaps designed to stand on a flat surface. In some instances, Female figurines with wide flat bases may depict elements of clothing, particularly skirts or dresses, for instance, the largest Female figurine from Platia Magoula Zarkou (Fig. 3) or figurine ML.THE.726 from Chara 1 (Gallis and Orphanidis 1996, fig. 241). The 'standing with undifferentiated legs' posture appears more frequently in the Late and Final Neolithic phases in figurines with scanty details like arm-stumps. Not surprisingly, this is the main posture modelled on Asexual figurines in 42 examples (Table 5). Late and Final Neolithic acroliths, schematic marble and clay figurines, which tend to be Asexual, display this posture. This engages with the trend seen in the later Neolithic of depicting figurines which display general images of the human body with arm stumps as gesture and undifferentiated legs as posture, without showing specific details on their bodies, 'inviting generality more than particularity' (Nanoglou 2008, 324). Rather than depicting detailed figurine bodies, the emphasis is on the head, especially on acroliths with examples which bear rich painted ornamentation and facial features (e.g. acrolith heads ML.KR.10 and MB.2748a from Final Neolithic Rachmani; Papathanassopoulos 1996, figs. 216–217). Asexual figurines are also represented in other postures in Thessaly, such as 'sitting' (2), 'standing with differentiated legs' (2) and with a flat base with no recognisable posture (2) (Table 5). The latter lack the depiction of legs, for instance, Female ML.THE.642 from Zappeio 2 (Gallis and Orphanidis 1996, fig. 226), which depicts only the torso.

Fig. 11: Neolithic marble figurine 09.408 with the 'hands to the chest' gesture and 'sitting with legs crossed' posture from Late Neolithic Knossos (Photograph by the author, © Ashmolean Museum, University of Oxford).

Fig. 12: Clay Female figurine AE.729 in kneeling posture, from Neolithic Knossos (Photograph by the author, © Ashmolean Museum, University of Oxford).

Fig. 13: Clay Asexual figurine 1938.658 in kneeling posture from Neolithic Knossos (Photograph by the author, © Ashmolean Museum, University of Oxford).

Fig. 14: Female figurine ML. THE.1062 with legs drawn up, from Chara 1 (after Gallis and Orphanidis 1996, fig. 143).

Two Female figurines from Crete show a 'sitting with legs crossed' posture (AMH.249 from Ierapetra and 09.408 from Knossos; Ucko 1968, fig. 169; Fig. 11). This was probably a posture only used for Females. Likewise, in Thessaly, this posture is only associated with Females, although in our assemblage, it only appears on two Probably Female figurines: ML. THE.446 from Chara 1 (Orphanidis and Gallis 2011, fig. 608) and a figurine from Tsangli (unknown inv. no.; Wace and Thompson 1912, fig. 71a). Both have only legs remaining and, therefore, have been classified as Probably Females.

Other postures mostly attested on Female and Probably Female figurines in Crete are squatting and kneeling, although there are examples of Asexual figurines in these postures. The squatting posture appears on two Probably Females (*e.g.* AMH.2715; Ucko 1968, fig. 121), on one Female and another Asexual. The kneeling position appears on two Female figurines, AMH.2718 (Ucko 1968, fig. 68) and AE.729 (Fig. 12) and on two Asexual (AMH.2722 and 1938.658; Ucko 1968, fig. 44; Fig. 13).

The posture 'sitting with the legs to the right side' is also associated with Females and Probably Females in Thessaly. Figurine ML. THE.535 from Rachmani (Orphanidis and Gallis 2011, fig. 575) is represented with the legs to the right side but only preserves the legs and, therefore, has been classified as Probably Female. The Female figurine ML. THE.1062 from Chara 1 (Fig. 14) has an unusual posture with the legs drawn up, exposing the genitalia. It perhaps represents a birth-giving position, as Gallis and Orphanidis suggest (1996, fig. 143), although their claim that the baby's head is visible remains speculative. However, Female figurines in Thessaly are
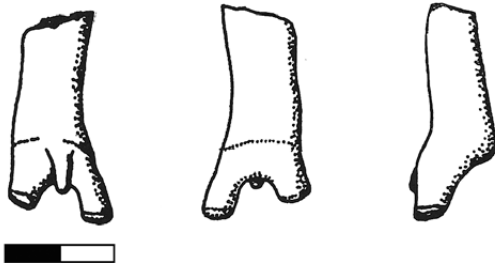
Fig. 15: Drawing of the front, back and side of Male figurine 1927.3261 in sitting or standing posture, from Neolithic Knossos (after Ucko 1968, fig. 39).
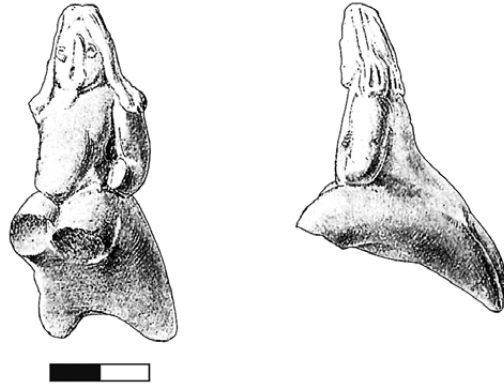
Fig. 16: Probably Male clay figurine EAM.5947 from Early or Middle Neolithic Sesklo 'sitting on a stool' (after Tsountas 1908: fig. 33, 4).

mainly depicted as standing, in most examples with undifferentiated legs, in a total of thirteen figurines (Table 5).

The number of male figurines from Crete and Thessaly is generally low and accounts for only 7 % of the total in the assemblage (see Ramirez-Valiente 2023, 11–13, fig. 2). In Crete, two Male figurines from Neolithic Knossos 60/232 (Ucko 1968, fig. 5) and 1927.3261 (Fig. 15) may either be standing or sitting; their legs are inclined towards the front, which means they are unable to stand and need a miniature stool to sit on or were meant to be put against a wall to stand. Considering that Male figurine 18717 (Papathanassopoulos 1996, fig. 252) is probably sitting on a stool, other Male figurines perhaps had the same posture, although the stool was not attached to their bodies. In Thessaly, Male figurines are mostly depicted in the 'sitting on a stool' posture. This is typically the posture of Male figurines in the Early and Middle Neolithic phases. In our assemblage, the exception is Male figurine ML.THE.689 from Sitochoro 1 which is shown standing with differentiated legs, but of unknown date (Gallis and Orphanidis 1996, fig. 139). The figurines in the 'sitting on a stool' posture represent the lower body as four legs, and the stool is only recognisable by the modelling of the buttocks' end, while the figurines' legs fuse with those of the stool. The legs sometimes show the feet rendered by incisions at the end. Six Male figurines of this type have been found at our selected case study sites: three at Sesklo MB-M.4340 (Hourmouziadis 1973, fig. 7 b), BE.4667 (Papathanassopoulos 1996, fig. 203) and MB-M.5109 (Fig. 7), one at Tsangli (M.2430; Wace and Thompson 1912, fig. 75 e), at Tsani Magoula (MB-M.5108; Hourmouziadis 1973, pl. 9), and Zappeio 2 (ML.THE.1285; Orphanidis and Gallis 2011, fig. 488). A further figurine sitting on a stool, but without genitalia depicted, was found at Early or Middle Neolithic Sesklo (EAM.5947; Fig. 16). Forty-two figurines from Neolithic Thessaly can be included in this 'sitting on a stool with four legs' category, excluding the fragmentary examples of possible figurines of the same type where the posture is not clearly shown. The majority lacks contextual information, which prevents us from knowing how they were deposited, their use and more precise chronology. However, those with a known archaeological context were deposited in the Early and Middle Neolithic periods. The distribution of this type is wide, ranging from the south-eastern to the north-eastern part of Thessaly (Nanoglou 2010, 218). Regarding their sex, sexual attributes are not always represented. However, phalli or indications of detached phalli occur on twenty-nine figurines, only breasts in two, one figurine may depict a sexual triangle with no further sex indication, another has female genitalia, while four examples depict both phalli and breasts, and a further one may ambiguously portray breasts and a phallus.

The figurines depicting both breasts and phalli have been classified as Double-sex figurines. In our assemblage, there are three examples of Double-sex figurines from Chara 1 (ML.

THE.1070; Gallis and Orphanidis 1996, fig. 132), Zappeio 2 (ML. THE.644; Fig. 8) and Nees Karyes (ML. THE.68; Gallis and Orphanidis 1996, fig. 131), representing only 1% of the total of sex categories from Crete and Thessaly (Ramirez-Valiente 2023, 12, fig. 2). These figurines are represented in the same posture as the Early and Middle Neolithic Males, that is, sitting on a stool. The archaeological contexts of Double-sex figurines are unknown as they are surface and casual finds and, therefore, cannot be dated on the basis of their stratigraphical associations. However, they possibly date to the same periods as the Male figurines sitting on a stool and perhaps embody or symbolise a similar concept. This means that Double-sex figurines and Males share, in two cases, gestures and postures, perhaps representing a close gender relationship. The only other figurine represented sitting on a stool from the assemblage is the 'kourotrophos' figurine from Late Neolithic Sesklo EAM.P-5937 (Tsountas 1908, fig. 31, 2), but with clearer separation between the stool and the female body than the Male figurines in the same posture. Furthermore, this composite figure is richly decorated in brown-on-buff, while the examples of decorated Male figurines are always in red-on-white. In the transition from the late Middle to early Late Neolithic, Probably Male figurines are depicted with four legs but show no sexual traits, which probably is the same depiction of the posture sitting on a stool seen in the Early and Middle Neolithic Male figurines. However, these figurines are depicted more schematically, and the posture shows no differentiation between the legs and the stool (Gallis 1985). Examples of this type are the two Probably Male figurines in the Platia Magoula Zarkou house model (ML. PMZ.619; Fig. 3).

The representation of figurines 'sitting on a stool' indicated individuals emphasising a static posture, perhaps with an inactive role for work, while their associated social role was probably related to a position of status. The Probably Male figurines found in the Platia Magoula Zarkou house model were represented schematically in the same posture with a four-legged body even though they were lying on the ground, which means that the stool had become a symbol or a concept. Likewise, the 'kourotrophos' figurine from Late Neolithic Sesklo was sitting on a stool, which probably signified the high status of this woman and her child given the richly ornate attires. Some Double-sex figurines sitting on a stool may represent women or a third gender with a position of high status or prestige or perhaps associated with a gender role assigned to males like ritual practitioners or head of a household.

Posture	Female	Probably Female	Male	Probably Male	Asexual	NI
Standing with differentiated legs	4	5	1	3	12	3
Sitting	6	4	0	0	4	8
Sitting with legs crossed	2	0	0	0	0	0
Standing with no leg differentiation	2	1	0	0	8	2
Sitting/Standing	0	0	2	0	0	0
Seated (on a stool?)	0	0	1	0	0	0
Kneeling	3	0	0	0	3	2
Squatting	0	2	0	0	1	1
Total	**16**	**8**	**4**	**3**	**31**	**17**

Table 4. Sex and posture of the figurines from Neolithic Crete.

Posture	Female	Probably Female	Male	Probably Male	Asexual	Doublesex
Standing, undifferentiated legs	13	1	0	0	42	0
Standing legs differentiated	8	2	1	0	2	0
Sitting on a stool	1	0	6	4	0	3
Sitting	4	0	0	1	2	0
Sitting legs crossed	0	2	0	0	0	0
Sitting, legs to the right side	0	1	0	0	0	0
Legs drawn up	1	0	0	0	0	0
Flat base	3	0	0	0	2	0
Total	**30**	**6**	**7**	**5**	**48**	**3**

Table 5. Posture and sex of figurines from Neolithic Thessaly.

Conclusions

The study of figurines through an analysis of the gestures and postures has uncovered some insights into the figurines' sex, age, and gender that, in turn, may help us understand the social organisation and the construction of social identities in the societies of Neolithic Crete and Thessaly. The results of examining figurines' gestures and postures in combination with their sex show a correlation indicating gendered bodily expressions. This means that the conventions in bodily comportment in the Neolithic Aegean are differentiated by gender with diverse ways in which bodies occupy space associated to their sex.

Regarding the representation of gestures on figurines from Crete, Females are associated with 'arms to the chest under the breasts', rounded arm-stumps, arms to the sides and on the abdomen. Asexual figurines are mainly represented with arm-stumps, particularly triangular stumps, no arms, and 'arms to the chest'. Probably Females appear mostly with the 'arms to the chest touching or covering the breasts'. In the case of Thessaly, there are some similarities as Female figurines are mostly depicted with 'arms to the abdomen', 'arms to the chest below the breasts' and 'arms to the chest touching or covering the breasts', while Males appear with the 'hands to the thighs or knees' and Probably Males are represented without arms.

Considering the analysis of postures as related to sex, the results show that Female figurines are associated with sitting, kneeling, and sitting with legs crossed postures in Crete. Asexual figurines are mostly represented standing with differentiated and undifferentiated legs and kneeling. Probably Females appear squatting and sitting, while Males are sitting or standing and perhaps, in one example, sitting on a stool. In Thessaly, figurines sitting on a stool are mostly Males and Probably Males. Females appear standing with differentiated and undifferentiated legs, sitting, with a flat base or with the legs drawn up. Probably Females are some figurines sitting with legs crossed and with the legs to the right side. Asexual figurines are mainly depicted standing with undifferentiated legs or with a flat base.

Therefore, the results show avenues to identify the figurine's gender by analysing their specific gestures and postures even when no sexual traits are depicted. The sharing of gestures and postures between sex categories such as Females or Probably Females with Asexual, or between Males and Probably Males with Asexual figurines may indicate that those figurines without sexual traits may represent the same gender, perhaps showing individuals of younger ages to those definitely sexed. However, Asexual figurines need to be analysed on a case-by-case basis to understand if they share other traits with figurines of definite sex that allow for a possible gender classification.

Regarding the incorporation of age as part of the analysis, gestures that conceal or emphasise sexual attributes are possibly associated with different age-stages. For instance, the 'arms to the chest under the breasts' may be associated with adult females considering their larger size and ageing traits such as broad bodies and torsos present in these figurines. Conversely, 'arms to the chest covering or touching the breasts' may be associated with younger girls, particularly in Crete, where those figurines depict sex more ambiguously. This differentiation may reveal a difference in age stages of the figurines with the different sex categories Male/Female, Probably Female/Male and Asexual, sometimes representing adults, young girls or boys and children respectively. In these cases, figurines may have been used in transition or coming-of-age rituals. However, figurines were multifunctional objects and there was not a unique way of using and disposing of figurines.

Shared gestures and postures among figurines of different sex categories may represent similar gender identities or roles. For instance, the 'sitting on a stool' posture may represent an inactive role in society that is particularly associated with elderly or older Males and Double-sex figurines, perhaps indicating that some Double-sex figurines are indeed males, such as the figurine from Zappeio 2, or that they embody a similar concept or gender role that is mostly associated to males.

The chronology and materials used to manufacture the figurines need to be considered as part of the analysis, as these parameters are related to specific postures and arm-positions. Such is the case of the association between hard materials with the depiction of arm-stumps, particularly triangular arm-stumps in Crete, or with the representation of figurines in a standing position.

Acknowledgements

References

Alram-Stern, E., K. Gallis and G. Toufexis (eds.). 2022. *Platia Magoula Zarkou. The Neolithic period: environment, stratigraphy and architecture, chronology, tools, figurines and ornaments. Oriental and European Archaeology (OREA),* 23. Vienna: Austrian Academy of Sciences.

Davaras, K. 1979. "Σπηλαιο Πελεκητων." *ArchDelt* 34, Chron.: 402–404.

Evans, J. D. 1964. "Excavations in the Neolithic settlement at Knossos 1957–1960." *BSA* 59: 132–240.

Gallis, K. 1985. "A Late Neolithic foundation offering from Thessaly." *Antiquity* 59 (225): 20–24.

Gallis, K., and L. Orphanidis. 1996. *Figurines of Neolithic Thessaly,* Vol. I. Athens: Academy of Athens.

Gallou, C. 2018. "White hair and feeding bottles: exploring children-elderly interactions in the Late Bronze Age Aegean." In *Across the generations: the old and the young in past societies,* edited by G. Lillehammer and E. Murphy, 61–76, *AmS-Skrifter* 26, *Childhood in the Past Monograph Series* 8. Stavanger: Museum of Archaeology, University of Stavanger.

Gavrilaki, I. 2017. "Τα ειδώλια κυκλαδικού τύπου από το σπήλαιο Γερανίου στο Ρέθυμνο." In *Cycladica in Crete. Cycladic and Cycladicizing figurines within their archaeological context: proceedings of the International Symposium, Museum of Cycladic Art, Athens, 1–2 October 2015,* edited by N. C. Stampolidis and P. Sorirakopoulou, 107–121. Athens: Museum of Cycladic Art; Rethymno: University of Crete.

Gimbutas, M. 1982. *The goddesses and gods of Old Europe, 6500–3500 BC. Myths and cult images.* London: Thames and Hudson.

Herdt, G. 1994. "Introduction: third sexes and third genders." In *Third sex, third gender: beyond sexual dimorphism in culture and history,* edited by G. Herdt, 21–81. New York: NY Zone Books.

Hitchcock, L. A. 1997. "Engendering domination: a structural and contextual analysis of Minoan Neopalatial bronze figurines." In *Invisible people and processes: writing gender and childhood into European archaeology,* edited by J. Moore and E. Scott, 113–130. London: Leicester University Press.

Hitchcock, L., and M. Nikolaidou. 2013. "Gender in Greek and Aegean prehistory." In *A companion to gender prehistory,* edited by D. Bolger, 502–525. Chichester: Wiley-Blackwell.

Hourmouziadis, G. 1973. *Η ανθρωπόμορφη ειδωλοπλαστική της νεολιθικής Θεσσαλίας: προβλήματα κατασκενλης, τυπολογίας και ερμηνείας.* Volos: Εταιρεία Θεσσαλικών Ερευνών.

Kanta, A., and M. Kokosali. 2017. "Marble figurines in Crete: the beginnings." In *Cycladica in Crete. Cycladic and Cycladicizing figurines within their archaeological context: proceedings of the International Symposium, Museum of Cycladic Art, Athens, 1–2 October 2015,* edited by N. C. Stampolidis and P. Sorirakopoulou, 65–88. Athens: Museum of Cycladic Art; Rethymno: University of Crete.

Koukouli-Chrysanthaki, C., H. Todorova, I. Aslanis, I. Vajsov, and M. Valla. 2007. "Promachon-Topolnita: a Greek-Bulgarian archaeological project." In *The Struma/Strymon river valley in prehistory. In the steps of James Harvey Gaul 2,* edited by H. Todorova, M. Stefanovich, and G. Ivanov, 43–67. Sofia: Gerda Henkel Stiftung.

Mina, M. 2008. *Anthropomorphic figurines from the Neolithic and Early Bronze Age Aegean: gender dynamics and implications for the understanding of early Aegean Prehistory, BAR-IS* 1894. Oxford: Archaeopress.

Morris, C. 2001. "The language of gesture in Minoan religion." In *Potnia. Deities and religion in the Aegean Bronze Age, Proceedings of the 8th International Aegean Conference; Göteborg, Göteborg University, 12–15 April 2000,* edited by R. Laffineur and R. Hägg, 245–251, *Aegaeum* 22. Liège: Université de Liège.

Nanoglou, S. 2005. "Subjectivity and material culture in Thessaly, Greece: the case of Neolithic anthropomorphic imagery." *CAJ* 15(2): 141–156.

Nanoglou, S. 2008. "Qualities of humanness. Material aspects of Greek Neolithic anthropomorphic imagery." *Journal of Material Culture* 13(3): 311–334.

Nanoglou, S. 2010. "The representation of phalli in Neolithic Thessaly, Greece." *Documenta Praehistorica* 37: 215–225.

Nanoglou, S. 2012. "Trapped in postures." In *Visualising the Neolithic: abstraction, figuration, performance, representation. Neolithic Studies Group Seminar Papers* 13, edited by A. Cochrane and A. Meirion Jones, 279–290. Oxford: Oxbow Books.

Orphanidis, L. and K. Gallis. 2011. *Figurines of Neolithic Thessaly. A presentation,* Vol. II. Athens: Academy of Athens.

Orphanidis, L., and Z. Malakasioti. 2011. *Figurines of Neolithic Thessaly. A presentation, Vol. III: The A. Bastis Collection.* Athens: Academy of Athens.

Papathanassopoulos, G. A. (ed.) 1996. *Neolithic culture in Greece.* Athens: N. P. Goulandris Foundation and Museum of Cycladic Art.

Perlès, C., and M. Johnson. 2004. "An overview of Neolithic settlement patterns in eastern Thessaly." In *Explaining social change: studies in honour of Colin Renfrew,* edited by J. Cherry, C. Scarre, and S. Shennan, 65–79. Cambridge: McDonald Institute for Archaeological Research.

Pomadère, M. 2012. "Dressing and adorning children in the Aegean Bronze Age: material and symbolic protections as well as marks of an age group?" In *Kosmos. Jewellery, adornment and textiles in the Aegean Bronze Age. Proceedings of the 13th International Aegean Conference, 21–26 April 2010,* edited by M.-L. Nosch and R. Laffineur, 433–439, *Aegaeum* 33. Liège: Peeters.

Ramirez-Valiente, P. 2023. "Sex and gender in Neolithic figurines from Greece." In *To gender or not to gender? Exploring gender variations through time and space,* edited by B. Gaydarska, K. Rebay-Salisbury, P. Ramírez Valiente, and J. E. Fries. *EJA:* 1–28.

Reingruber, A., G. Toufexis, N. Kyparissi, M. Anetakis, Y. Maniatis, and Y. Facorellis. 2017. "Neolithic Thessaly: radiocarbon dated periods and phases." *Documenta Praehistorica* 44: 34–53.

Skafida, L., and G. Toufexis. 1994. "Figurines de la fin de l'époque néolithique en Thessalie, (Grèce Centrale)." In *Relations thraco-Illyro-helléniques, Actes du XIVe Symposium International de Thracologie, Bgaile Herculane, 14–19 Septembre 1992,* edited by P. Retomanu and M. Alexianou, 12–24. Bucureşti: Institut Roumain de Thracologie.

Ucko, P. 1962. "The interpretation of prehistoric anthropomorphic figurines." *JRAI* 92(1): 38–54.

Ucko, P. 1968. *Anthropomorphic figurines of Predynastic Egypt and Neolithic Crete, with comparative material from the prehistoric Near East and mainland Greece.* London: Andrew Szmidla.

Talalay, L. 1993. *Deities, dolls, and devices: Neolithic figurines from Franchthi Cave, Greece.* Bloomington: Indiana University Press.

Theocharis, D. 1973. *Neolithic Greece.* Athens: National Bank of Greece.

Tsountas, C. 1908. *Ai Proistorikai Akropoleis Diminiou kai Sesklou.* Athens: Sakellarios.

Vasič, M. 1908. "South-east elements in pre-historic Servia." *BSA* 14: 319–342.

Wace, A. J. B., and M. S. Thompson. 1912. *Prehistoric Thessaly.* Cambridge: Cambridge University Press.

Wijnen, M. H. J. M. L. 1981. *The Early Neolithic I settlement at Sesklo: an early farming community in Thessaly, Greece, Analecta Praehistorica Leidensia* 14. Leiden: Leiden University Press.

'Hands on Abdomen': Unveiling the Polysemy
of an Aegean Gesture

Christos Kekes

Abstract   *The present study focuses on a widely known Aegean gesture, mainly depicted in Aegean female and rarely male figurines, here referred to as 'Hands on Abdomen'. In this gestural type, the figures bring their arms towards their belly, on which they lay their hands. The gesture is performed by figurines dated from the Protopalatial through the Post-palatial period in Crete and by Mycenaean figurines of the LH III A–B period. The 'Hands on Abdomen' gesture has been interpreted variously in the past as a gesture of religious reverence, adoration or supplication, as a shamanic movement to heal a sick part of the devotee's body (the belly), as a dance movement, or as a gesture performed by Aegean women while praying to a fertility goddess to have a safe pregnancy or conceive. In the present study I attempt to confirm some of the above interpretations based on the archaeological and ethnographical data, as well as to explore other symbolic ideas that may be expressed by the gesture. The 'Hands on Abdomen' gesture is thus mainly approached as an expression of the agents' reverence and as an indicator of female coming-of-age rites performed in Aegean sanctuaries. Furthermore, the gesture might also indicate male and female social status.*

Introduction

The present study is based on part of my recently completed PhD dissertation (Kekes 2021). It focuses on a widely known Aegean gesture, mainly depicted in Aegean clay or bronze figurines from domestic contexts, peak sanctuaries, and caves, here referred to as 'Hands on Abdomen'. In this gestural type (Fig. 1), standing or seated figurines lay their open palms or closed fists on their belly, sometimes with their hands touching each other. The variety in the morphology of the gesture may entail equivalent differentiations in its semantics, although these are not clear or easy to identify. For example, open hands laid on the belly without touching each other could symbolize the gesturers' intention to protect their belly (perhaps the fetus in the case of women) and express their vulnerability and humility towards the powerful divine entities. Fists touching each other on the abdomen could be interpreted as a forceful movement that projects the gesturers' authority. Moreover, the various morphological differentiations could just be different renditions of the same gesture depending on the craftsperson's choice or skill and the material of the artifact, without bearing any special meaning. On the contrary, these morphological differentiations could even constitute totally different gestures. The 'Hands on Abdomen' gesture is usually performed by female figurines, although rarely male figurines place their hands on their abdomen too. Figurines performing the 'Hands on Abdomen' gesture are dated from the Protopalatial through the Postpalatial period in Crete, while in mainland Greece this gesture is performed by Mycenaean figurines of the LH III A–B period.

Concerning the female figurines, this gesture is usually interpreted as a movement related to fertility, by which Minoan women invoked the worshiped deity to help them have a safe pregnancy or conceive (see *e.g.* Platon 1951, 157; Giannaki 2008, 319–320, 355–356; see also Morris and Peatfield 2014, 60–61). Indeed, many figurines performing this type of gesture display enlarged bellies (Fig. 4; see also an unpublished clay female figurine from the Vrysinas peak sanctuary: Archaeological Museum of Rethymno, inv. no. Π16696). For pregnant female figurines in
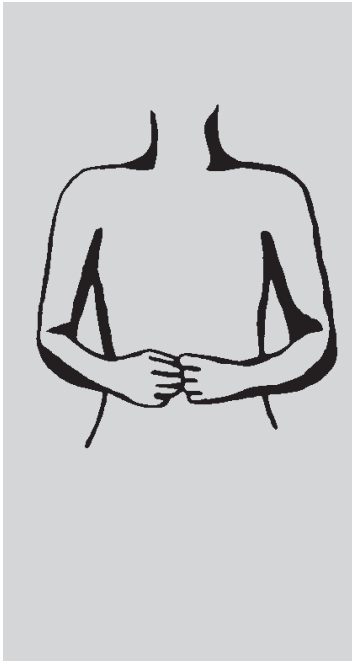
Fig. 1: The 'Hands on Abdomen' gesture (drawing by Christina Antoniadou).

Fig. 2: Protopalatial clay female figurine from the Vrysinas peak sanctuary. Archaeological Museum of Rethymno (after Papadopoulou and Tzachili 2010, 461, fig. 11; courtesy of Iris Tzachili).
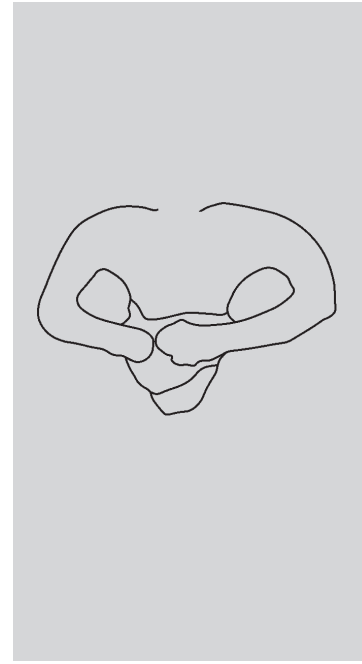
Fig. 3: Protopalatial clay female figurine found at Petsophas peak sanctuary. Archaeological Museum of Heraklion, inv. no. 4876 (drawing by Maria-Louiza Karagiorgou after Rutkowski 1991, pl. XXI: 2).

general see *e.g.* Rutkowski 1991, 86, no. 30; 88, no. 41; 91, no. n2; 94, no. 18, pls. XLI: 5, XLIV: 4, XLIV: 6), a fact that supports the interpretation of prayer to a deity to protect the fetus. What usually escapes researchers' attention when analyzing the 'Hands on Abdomen' gesture, however, is that the same or similar movements are performed, albeit rarely, by male figurines. This means that we must search for other potential symbolic functions of the gesture, without rejecting the above interpretations.

An Overview of the 'Hands on Abdomen' Gesture in Aegean Art

The 'Hands on Abdomen' gesture is represented in Aegean art as early as the Neolithic period (see *e.g.* Mina 2014, 130, 142, fig. 4; 143, fig. 5; 160, table 1). However, in the present study emphasis is placed on artifacts dating mainly to the Middle and Late Bronze Age originating from Minoan Crete and Mycenaean Greece.

During the Protopalatial period in Crete, the 'Hands on Abdomen' gesture is frequently performed by clay figurines from peak sanctuaries. An example of this type of figurine is a standing female figurine of the Protopalatial period found at the peak sanctuary of Vrysinas, Rethymno (Fig. 2). Only the upper part of the body and the top of her skirt are preserved. The figurine brings her arms towards her abdomen and lays her hands on it, touching each other. The palms are not depicted in detail, so it is not certain if they are to be perceived as open or closed in fists.

A figurine of uncertain gender (Fig. 3) was found at the Petsophas peak sanctuary and is now in the Archaeological Museum of Heraklion (Rutkowski 1991, 72, no. 57). According to Bogdan Rutkowski (1991, 72, no. 57), it is a male torso which was probably deposited at the sanctuary as a votive human body part. This means that it belongs to the category of human limb and body part models that were deposited at peak sanctuaries and indicated a disease of the corresponding parts of the devotees' bodies, for the healing for which they prayed or thanked the divinities for (see *e.g.* Myres 1902/3, 374–375, 381; Platon 1951, 109–110, 114, 120–121,

Fig. 4: Clay shrine-model found at Galatas, MM III A, Archaeological Museum of Heraklion, inv. no. 32613 (after Rethemiotakis 2010, 294, fig. 28:1; courtesy of Giorgios Rethemiotakis).
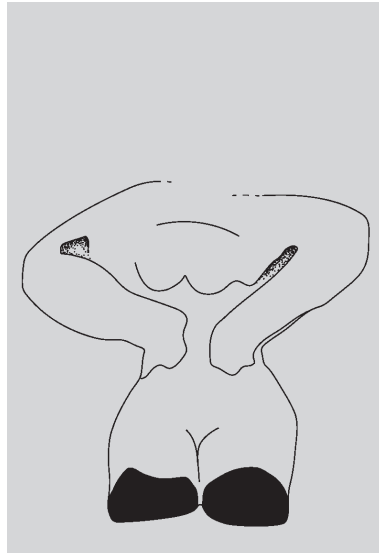

Fig. 5: Clay seated female figurine from Phaistos, LM I period, Archaeological Museum of Heraklion, inv. no. 1775 (drawing by Maria Chadou after Rethemiotakis 1998, pl. 1:122a).
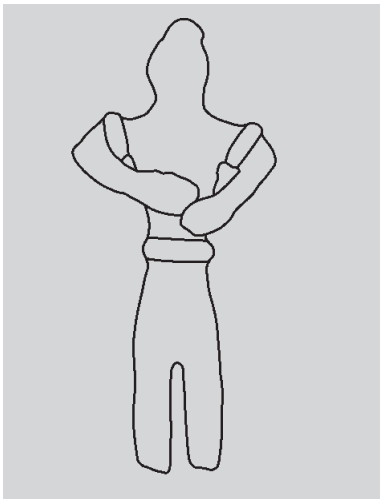

Fig. 6: Postpalatial bronze male figurine found in the Psychro Cave, Ashmolean Museum, Oxford, inv. no. AE 19 (drawing by Maria-Louiza Karagiorgou after Verlinden 1984, pl. 60:135).
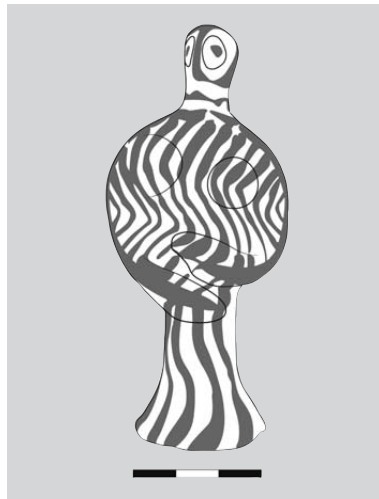
Fig. 7: Mycenaean clay female 'phi' figurine from Argos, LH III A, Musées royaux d'Art et d'Histoire, Brussels, inv. no. A 1191 (drawing by Maria Chadou after French 1971, pl. 15:b).

143, 145, 156–157; Rutkowski 1991, 32–34, 57; Jones 1999, 5–6, 13, 24, 33, tables 1–2; Papadopoulou and Tzachili 2010, 454; Sakellarakis 2013, 71–72; Morris and Peatfield 2014). The figurine slightly extends the arms and turns the forearms towards the belly. It lays the left hand, palm open, on the abdomen, on the kilt, and the right hand to the right of the belly. The hands are not touching each other.

The conoid-shaped end of the torso could indicate that the figurine is, in fact, a female rather than a human limb or a male figurine, on which the breasts are not rendered (at least not plastically). The torso would be joined to a hollow skirt and at the point of the join a belt would

be applied, of which a small part is still preserved. At least, this is what may be concluded from the examination of clay female figurines of similar technological characteristics derived from peak sanctuaries (see *e.g.* Morris, O'Neill and Peatfield 2019, 56–58, figs. 5, 7).

A special find came to light during the excavation of the Galatas palatial complex (Fig. 4), in a building of MM III A date and religious character (Rethemiotakis 2010, 293). It is a clay shrine-model, partly preserved, containing a seated female figurine. The model is interpreted as a shrine based on the pair of the structures of uncertain significance commonly termed 'horns of consecration' surmounting the entrance. The seated female figurine is placed inside the entrance and lays her arms on her enlarged belly, the hands not touching. She is interpreted by the excavator as a goddess related to fertility (Rethemiotakis 2010, 296).

A fragmentary, headless, clay seated female figurine of LM I date with 'Hands on Abdomen' comes from Phaistos (Fig. 5) and is now in the Archaeological Museum of Heraklion (Rethemiotakis 1998, 37, 126, no. 122). It was probably found in Room 10 of the West Wing (Pernier 1902, 43; Rethemiotakis 1998, 54), a bench sanctuary according to Geraldine Gesell (1985, 127). The figurine brings the arms diagonally towards the belly, on which she places her hands. The hands are not depicted in detail, so it is not certain if the figure lays her open palms or closed fists on the belly. The legs of the figurine are not preserved.

Bronze figurines perform the 'Hands on Abdomen' gesture too. One such standing male figurine (Fig. 6) was found in the Psychro Cave and is now in the Ashmolean Museum (Verlinden 1984, 206, no. 135). The figurine is standing with its arms extended. The forearms are turned diagonally towards the abdomen, on which the open palms are placed. The right hand is placed a little higher than the left. The figurine was dated by Colette Verlinden (1984, 146, no. 135) to the beginning of the Postpalatial period (14th century BC).

The form of the Mycenaean 'phi' figurines (Fig. 7) assimilates the gesture examined in the present study. The female figurines of this type turn the arms towards the belly in a semicircular movement, although in some cases it is not certain whether they are indeed laying them on the abdomen or placing them on the hips.

Approaching the Symbolic Function(s) of the 'Hands on Abdomen' Gesture
Previous interpretations

Usually, figurines from sanctuaries (Figs. 2–3, 6) are perceived as representations of the visitors to these sacred sites and referred to as adorants or supplicants; consequently, their gestures are often interpreted as movements of reverence, adoration, supplication, prayer or thanks to the worshipped deities (see *e.g.* Myres 1902/3, 368, 380; Platon 1951, 157; Verlinden 1984, 51, 57; Rutkowski 1986, 87–88; 1991, 55–56; Marinatos 1993, 117; Sfakianakis 2016, 210).

Some researchers follow alternative interpretative paths. Characteristically, Christine Morris and Alan Peatfield (2002, 2004, 2014; Peatfield and Morris 2012) emphasize the experienced, embodied character of Minoan gestures, considering them to be body movements that the visitors to the peak sanctuaries performed during shamanic rituals, in order to communicate with the transcendent world or to achieve the healing of a disease. In this context they discuss the 'Hands on Abdomen' gesture as a shamanistic movement for the healing of a disease in the devotee's belly (see also Giannaki 2008, 319–320, 355–356). Moreover, Dimitris Sfakianakis (2016, 210), studying the anthropomorphic figurines from the Vrysinas peak sanctuary, suggests that this could be a dance movement.

The female figurines with 'Hands on Abdomen' (Figs. 2, 5) are further interpreted as representations of devotees praying to a (female) deity for a safe pregnancy, especially when the figurines display enlarged bellies, or to conceive (see *e.g.* Platon 1951, 157; Giannaki 2008, 319–320, 355–356; Morris and Peatfield 2014, 60–61). Moreover, experiments have shown that this gesture is generally perceived by modern viewers (and possibly by ancient viewers and performers as well) as a movement related to fertility, nurturing, and motherhood (Steel 2020, 8–9). However,

we must bear the possibility in mind that the various morphological versions of the gesture served different symbolic functions.

Venerating the divine in the Aegean Bronze Age

The gesture I examine here falls into the 'closed' gesture type, in which the hands are turned towards the person performing the gesture or touch a part of their body. It is a movement that focuses the viewer's interest on a particular part of the performer's body, their belly. The 'Hands on Abdomen' gesture belongs to those movements that usually are called 'auto-contact' or 'self-touching' movements. Self-touching movements that hug the body, according to social anthropologists and psychologists (Morris 1977, 102, 134; Argyle 1988, 198), express the insecurity of the performers and their need for comfort and self-protection. Desmond Morris (1977, 102, 134–135) refers to this kind of gesture as 'body-cross' movements, that is, movements that create a protective barrier with the arms across the front of the body. These gestures are always performed by people entering the personal space of other people (Morris 1977, 135). People approaching their social superiors or standing in front of them perform self-touching gestures more often, as Michael Argyle (1988, 198) notes.

I have stated elsewhere (Kekes 2018, 228; 2021, 59) that gestures of this type may project:

a) A performer's emotion (see also Morris 1977, 102–105; Argyle 1988, 198; Giannaki 2008, 320). For example, in Egyptian art when a figure touches its head with one or both hands, it expresses sorrow (see *e.g.* Wilkinson 1992, 35).

b) A physical state of the performers. For example, when a figure turns its open palm towards its mouth this could mean that the figure is speaking (Kekes 2016, 2–7).

c) A property of the performers and their social identity. For example, the gesture of female figures touching or revealing their breasts may be related to fertility or identify them as adult women or mothers/nurturers (see *e.g.* Weilhartner 2012, 292; Platon 2014).

Based on the above observations, the 'Hands on Abdomen' gesture could initially be perceived as an expression of humility and respect on the part of devotees approaching the worshipped deity or standing in front of them.

The Aegean human figurines of this type, both male and female, primarily focus the viewer's attention on their abdomen, one of the most vulnerable parts of the human body, if not the most vulnerable. The arms/hands laid on the body is a passive stance that may show the person in front of whom it is performed that the gesturer is harmless. If the Aegean figurines are placed in a religious context, by projecting their passivity and vulnerable nature they may express their humility and reverence to a superior: that is, the honored transcendent entity whom they approach.

A further typical example showing the vulnerability of the human body is the bronze male figurine of the Postpalatial period found in the Cave of Psychro (Fig. 6). The form of the figurine intensely projects a sense of passivity, respect and/or thanksgiving, by the way it touches its belly with its open palms.

The 'Hands on Abdomen' gesture as an index of female coming-of-age rites

The above interpretation does not appear to concern all the figurines performing the 'Hands on Abdomen' gesture. It probably cannot be applied, for example, in the case of the seated female figurine inside the shrine-model from Galatas (Fig. 4), which is usually taken to be a goddess. If we interpret the gesture as a movement of respect, then to whom does a goddess show reverence? And if the figurine is not actually a goddess, but a mortal woman, then why is she placed inside a shrine? As we will see, the gesture can accommodate various other interpretations, even in the case of the seated figurine. This does not mean that the interpretative approach of the performers' religious reverence is to be rejected.

In the case of female figurines (or at least some of them), the focus on the abdomen through the placement of the hands on this area – in this way the gesture acquires *indexical* properties – could be symbolically connected with pregnancy, as other researchers have proposed (see above). This is more apparent in the case of figurines that display enlarged bellies (Fig. 4). Moreover, Katerina Giannaki (2008, 356–359) states that when the arms/hands are turned inwards, the votaries are expecting to receive or receiving divine energy and reserving it for themselves. Could the laying of hands on the belly be a movement that symbolically renders them a ritual conduit of divine energy in order for the votary to conceive? Based on Giannaki's interpretation, this is possible. So, by laying their hands on their belly, Aegean female figurines might *indexically* project their physical state of pregnancy.

The 'Hands on Abdomen' gesture in the case of seated figurines (Figs. 4–5) could just be due to the anatomy of the human body, without having any particular symbolism. When one is seated, one rests one's hands on the belly or the thighs. Other seated male and female figurines, however, perform various gestures (see *e.g.* Platon 1951, pl. E':1; Dimopoulou-Rethemiotaki 2005, 105). Consequently, the 'Hands on Abdomen' gesture must be a deliberate choice by the craftsperson. That is, the gesture appears from the start to be preselected and meaningful. Furthermore, Mycenaean standing or seated figurines with their 'Hands on Abdomen' ('phi' figurines) are dated to LH III A–B; afterwards, the figurines mainly perform the 'Upraised Arms' gesture ('psi' figurines) (Steel 2020, 2). According to Louise Steel (2020, 9), the various gestures performed by Mycenaean female figurines per period are associated with significant social roles which some (or all) Mycenaean women acquired. Based on the figurines' gesture, it appears that in the Mycenaean perception of the LH III A–B period, nurturing and motherhood, social and physical reproduction, were the most significant female social roles (Steel 2020, 9).

Mycenaean figurines are often found in religious spaces and graves (see *e.g.* Vetters 2016, 45–46). Consequently, the gesture is further imbued with both a religious and a chthonic symbolic meaning. The latter is probably related to the expectation of the deceased's rebirth through the fertile properties of the goddess. Melissa Vetters (2016, 44–46) also imbues these figures with a protective role of liminal spaces, as many of them are found in hearths and at entrances of domestic spaces, and at tomb entrances.

The figurine inside the clay shrine-model from Galatas (Fig. 4) may represent a female divinity, since the model is probably a religious building, as it is surmounted by a pair of 'horns of consecration'. Deities or deified humans in models are also found elsewhere, for example in the famous clay house or shrine-model from Tholos Tomb A of Kamilari (see *e.g.* Dimopoulou-Rethemiotaki 2005, 171). The divine nature of the woman in the shrine-model from Galatas is also denoted by her seated posture and the use of a footstool on which she places her feet. These are two familiar characteristics of the iconography of divine figures (or of their representatives, priests and priestesses) in Aegean art (Marinatos 1993, 190; Rehak 1995; Morris 2001, 248; Rethemiotakis 2010, 297; Günkel-Maschek 2016). Based on her gesture, emphasizing the abdomen, it is probable, as Giorgos Rethemiotakis (2010, 296) states, that the female divinity is associated with fertility: she is a pregnant goddess and a protector of pregnant women. However, in my opinion, it is not improbable that childbirth is represented inside a specially shaped space, in which Minoan women would be isolated to give birth or during menstruation, as evidenced by ethnographic data (see below).

The female figurines from peak sanctuaries performing the 'Hands on Abdomen' gesture are interpreted as devotees invoking the goddess to help them have a safe pregnancy, as we have seen. When the figurines do not display iconographical evidence that would indicate their pregnant status (such as enlarged bellies or shaped breasts), they are probably praying to the goddess for her intervention in order to conceive.

Moreover, the votive human limbs found at peak sanctuaries underline the invocation (or thanks) of the devotees for the satisfaction of their needs, for their well-being and the healing of various diseases from which they suffered (Myres 1902/3, 381; Platon 1951, 114, 120–121,

156–157; Rutkowski 1991, 57; Marinatos 1993, 117; Sakellarakis 2013, 71–72; Morris and Peatfield 2014). The divine reciprocation is the primary aim of prayer (Rutkowski 1991, 55). The worshippers offer something to the deities and entreat them to accept their offerings, expecting something from them in return (Platon 1951, 157; Sakellarakis 2013, 70). This has to do with the three 'obligations' of the 'gift', as Marcel Mauss (1966, 37–41) defined them: the 'obligation to give' (on behalf of humans), the 'obligation to receive' and the 'obligation to repay' (on behalf of the divinities). According to Yannis Sakellarakis (2013, 72), the votive limbs are deposited as a token of thanks, after the satisfaction of the devotees' needs, such as the healing of their illnesses, by the divinities. In this case, it is the deities who offer and the mortals who receive and return the offering. This interpretation also concerns the male figurines that place their hands on their abdomen. By performing this gesture, Aegean men and women might have been showing the worshipped deity or deities the sick part of their body to be cured.

It is very likely, however, that, besides the religious rituals, rites of passage were also performed at the peak sanctuaries, or at least some of them, and at other kinds of sanctuary (see *e.g.* Marinatos 1993, 123; Lembesi 2002, 281; Platon 2014). For example, at Piskokephalo specific groups of figurines are probably related to coming-of-age rites and others to wedding ceremonies (Platon 2014, 66–68, 70–77). Moreover, the archaeological evidence from the Psychro Cave and the Kophinas peak sanctuary indicates the performance of male rites of passage at these religious sites (Watrous 1996, 52–53, 89–90, 95, table 4; Rethemiotakis 2014; Spiliotopoulou 2015, 286–290; 2018, 1:143–146, 163–167, 200–225). Might the female figurines performing the 'Hands on Abdomen' gesture fall into this ritual context? And how might the gesture be interpreted in this light?

From ancient times to the modern day, it is usual for the passage from one stage in the life of an individual to another (either an age or a social group) to be officialized through specific public rituals (see *e.g.* van Gennep 1960; Kopaka 2009, 186–187; Mavroudi 2016). An individual's entrance into the Christian community is signaled by their baptism. The acquisition of a university degree is officially validated by the swearing-in ceremony. Stages considered significant in a woman's life are, for example, birth, menarche, marriage, pregnancy and labor.

As I have already said, the 'Hands on Abdomen' gesture could be related to the stage of pregnancy. Nevertheless, the gesture could also be linked to another of the above intermediate stages: menstruation. Menstrual pain sometimes leads to the placement of the hands on the belly. In this light, the female figurines found at peak sanctuaries and performing the 'Hands on Abdomen' gesture could *indexically* denote that the women are in pain, that they are menstruating. Especially the female figurines that do not display enlarged bellies or fully developed breasts, an indication of their young age, could be interpreted as girls entering the stage of menstruation, that is, of fertility. The rendition of breasts on the figurines does not negate the above interpretation, since menstruation appears, of course, in the lives of girls at an early age (usually between 12–14) but follows them through most of their lives, when they are biologically fully developed women. Since the figurine from Petsophas (Fig. 3) appears to actually represent a female, based on the technological characteristics I described previously, it strengthens my hypothesis that young girls can perform the 'Hands on Abdomen' gesture, too, as the figurine does not display breasts (at least not plastically). In this case, the gesture might function as an *index* of menstrual pain.

In this context, perhaps menstruating women could participate, during their menarche or periodically, in associated public rituals (van Gennep 1960, 67–69, 87; Kopaka 2009, 186–187). The women may have visited the religious sites seeking the blessing of a fertility goddess or for the alleviation of their pain. Besides, the healing of various illnesses was one of the reasons one would visit a peak sanctuary, as I have already mentioned.

Meanwhile, perhaps young girls experiencing their first menstruation dedicated their 'impure' or 'powerful' menstrual blood (as it is usually perceived in various cultural environments) or other kinds of symbolic offerings to a fertility goddess (as a Theran wall painting I will discuss later may imply), followed by purification rites. Menstruating women in Ancient Egypt were iso-

Fig. 8: The Adorants Fresco, Xeste 3, Akrotiri, Thera, LM IA (modified by the author after Marinatos 2014, 132–133, 137; courtesy of Nanno Marinatos).

lated in special huts outside the settlements, built specifically for this purpose, or in specific spaces inside their houses (McDowell 1999, 35, no. 11; Meskell 2000, 427–428). Menstruating women and/or menstrual blood were perceived as 'impure' by the ancient Egyptians (Tyldesley 1995, 149). The Egyptian term referring to menstruation ('ḥsmn') sounded similar to an Egyptian word for 'clean/purify', as well as that for 'natron' (Faulkner 1991, 178; Frandsen 2007, 82–84), which was used as a purification material during the mummification of the deceased (Kousoulis 2004, 103–104), suggesting that Egyptian women were in a period of purification during their menstruation (Tyldesley 1995, 149; Frandsen 2007, 82–84).

Correspondingly, in past cultures or in modern traditional societies menstrual blood is often perceived as 'unclean', as well as 'powerful', having magical, healing or destructive, properties (*e.g.* Pliny, *Natural History,* XXVIII. 77–86; Delaney, Lupton and Toth 1976, 7–13; Knight 1991, 375–376; Hoskins 2002; Das 2008; Dammery 2016, 92–113; Maharaj and Winkler 2020, 163–167; Rothchild and Piya 2020, 922). Menstrual blood can also be offered to a divinity (Delaney, Lupton and Toth 1976, 7); rarely, however, since menstrual blood is often perceived as 'impure' and is not a proper offering to the divine. This phenomenon can be observed in past cultures,[1] as well as in modern traditional societies or unconventional religious communities. A characteristic modern example of this practice is a group of Neopagan women, raised as Catholics, who visit churches dedicated to Mary Magdalene, whom they consider the 'protector of menstruation blood', and ritually dedicate the blood of their first or every menstruation to 'Mother Earth' (Fedele 2014).

There are other examples in Aegean art that may be symbolically linked with menstruation. A characteristic example is the Theran Adorants Fresco in Xeste 3 (Fig. 8). Drops of blood can be observed on the surface of the 'horns of consecration' surmounting the building on the right. According to Nanno Marinatos (1984, 74–84), the red drops on the 'horns of consecration' indicate the performance of blood libations; she connects this activity with initiation rituals, the burgeoning of nature, animal sacrifice, and human bleeding (Marinatos 1984, 74–84). Irini Papageorgiou (2011–2012, 46) also perceives the 'horns of consecration' as the ritual center of li-

---

1 Matthew Dillon (1997, 202) initially stated that Athenian girls dedicated their menarche clothes to Artemis Brauronia, although in a later publication he argued that the clothes did not actually have menstrual blood on them (Dillon 2002, 250, 359, n. 73). However, other scholars, too, have suggested that some of the clothes dedicated to the goddess were used as sanitary bandages during men-

struation (Giuman 1999, 59–61; 2002, 100–101; Calame 2002, 57–61).

2 The two miniature stone 'horns of consecration' found in a lustral basin at Phaistos were also painted red (Gesell 1985, 128). Red pigment was probably used by Minoans for coloring cult material (Gesell 1985, 23). Yet might the red color on the 'horns' symbolize blood?

bations with the blood of a recently sacrificed animal. Christos Doumas (1992, 129) also claims that the scene involved blood flowing on the 'horns' and relates it to an initiation ritual, without any further analysis. On the contrary, Gesell (2000, 954) considers the red drops to be saffron styles gathered by the saffron-gatherers depicted in the upper zone and relates their deposition to coming-of-age rituals. Her opinion is not widely accepted by other scholars (see *e.g.* the discussion of her paper in Gesell 2000, 957; see also Poole 2020, 148, n. 65).

Katerina Kopaka (2009, 188–189) considers the young girl wearing a veil to have experienced her menarche. She is probably walking away from the building that she was isolated in during her menstruation. Might the blood on the 'horns of consecration' represent the menstrual blood of the young girl, which has been dedicated to a transcendent entity related to fertility?[2] On the contrary, Marinatos in some recent publications connects the blood on the 'horns' with the seated female figure who is bleeding, whom she interprets as the Goddess of Nature, also depicted in the Saffron-gatherers Fresco (Marinatos 2014, 134–135; 2015; she also proposed this theory in her recent lecture in Vienna, 2021, titled "Wounded Goddess and Rituals of Blood"). However, we must bear in mind the iconographic composition of the wall painting and the proxemics of the figures; it would be more sensible to connect the blood on the 'horns' with the young girl wearing a veil, as she is depicted closer to the gate crowned by the 'horns of consecration' than the other figures, and she is probably walking away from the gate, as she is turning her head in that direction (see also Boulotis 2011, 267).

Another element that could link the activities represented in the wall paintings of this specific space with menstruation is the symbolic connection of saffron with menstrual blood. Besides being an offering to Potnia, the Goddess of Nature, saffron may also have been used as a palliative medication for menstrual pain (see also Marinatos 1984, 65; Papageorgiou 2011–2012, 51, 105, n. 1; Mavroudi 2016, 11). Moreover, during historical times, the young girls (of prepubescent age) who served Artemis Brauronia wore saffron tunics, their color referring to human blood.[3] The girls removed the tunics when they stopped serving the goddess, as they had experienced their menarche (Dillon 1997, 202; Papageorgiou 2011–2012, 105, n. 1).

Even if this hypothesis is true, it does not necessarily prove the dedication of the blood of the menarche, or of menstrual blood in general, to a Minoan divinity during a female coming-of-age rite at Minoan sanctuaries. Despite the fact that the Theran wall painting (Fig. 8) cannot be directly linked with the archaeological material and the gesture I examine here, it is worth noting that the 'horns of consecration' bearing drops of blood are connected with the female gender, as is also the case with the shrine-model from Galatas (Fig. 4).[4] Moreover, one of the probably various symbolic aspects of the 'horns' symbol might be related in the Aegean perception to vegetation (symbolically connected with fertility), as many scenes of women offering plants (see *e.g.* *CMS* I, nos. 86, 279, 410; V Suppl. 1B, no. 113) or the representation of 'horns' on altars combined with plants (see *e.g.* *CMS* I, no. 231; III, nos. 262, 345) demonstrate. Another element that might symbolically and functionally link the building depicted in the wall painting with the shrine-model is their archaeological context. The Adorants Fresco decorates the walls of a lustral

---

3 Saffron stems are reddish-orange and yellow. Saffron tunics symbolized the blood of a bear killed in Artemis' sanctuary at Brauron, although the service of the young girls to the goddess Artemis as 'arktoi' (bears) was a clear initiation rite to puberty (Sourvinou-Inwood 1988, 119–134; Dillon 1997, 201–202; Giuman 2002; Papageorgiou 2011–2012, 105, n. 1).

4 However, the 'horns' in Aegean art are frequently related to the male gender, too, usually having a religious symbolism. The most characteristic scenes are to be found on *CMS* I, no. 292, where a standing male figure greets a floating male figure, probably a god, who is appearing in front of a building surmounted by 'horns', and *CMS* V Suppl. 1A, no. 142, the so-called Master Impression (Hallager 1985), where a male figure, probably a god, is represented standing on buildings crowned by 'horns of consecration'. A male figure, perhaps an adorant, is standing before a sanctuary with 'horns of consecration' on *CMS* II 8, no. 272. The 'horns of consecration', as the buildings surmounted by them, probably served various functions depending on the archaeological and ritual contexts, the social identity of the participants, the cultural environment, the chronological context, etc. In the present study I intend to further explore one of the probably many potential symbolic aspects of this symbol in relation to the female gender.

basin, an 'adyton', 'a place of separation' according to Marinatos (1984, 73–74), and the shrine-model was found in a building that also includes a ritual space of this kind (Rethemiotakis 2010, 293). Lustral basins, according to Dario Puglisi (2012), might be spaces related to female initiation rituals. Kopaka (2009, 191) also considers that lustral basins would be 'ideal places to "hide" female events, for a limited attendance, and could thus be used like "women's rooms" hosting menstrual and/or birthing seclusion, and cleansing and changing of clothes'.

Without negating the religious character of the 'horns of consecration' symbol, I am suggesting that, at least in some cases, buildings surmounted by them could be special spaces in which Bronze Age Aegean women were isolated during rites of passage related to menarche or childbirth, before they could be reintegrated into their communities. Besides, a space may have various secular and/or ritual uses of very different character, as Vangelis Kyriakidis has shown (Kyriakidis 2007, 14–15. See also Goffman 1966, 21; Kekes 2021, 63). As Puglisi (2012, 207) notes, decorative 'horns of consecration' or models of this symbol have also been found in lustral basins at Zakros, Phaistos and the Little Palace at Knossos (see also Gesell 1985, 93, 128, 140; 2000, 954–955). In this light, the seated female figurine inside the shrine-model from Galatas could be interpreted not as a pregnant goddess, but as a mortal woman who has been isolated in a special space to give birth. Even if she is indeed a goddess related to fertility, this does not invalidate my previous suggestion.

In this context, the female figurines performing the 'Hands on Abdomen' gesture probably represent women who visit holy places during their menarche or during every menstruation, to invoke a fertility goddess and/or beg her to make their menstruation easier or even to dedicate their menstrual blood or other offerings to her, as I hypothesized previously. Moreover, young girls, as well as mature women, might visit these holy sites to be secluded from the rest of the community during their menstruation.

Throughout the ages and in various cultural environments, menstruating women are isolated in special spaces either inside or outside the settlements or inside their houses for a few days or even for a much longer period, before they can be reintegrated into the community.[5] In extreme cases, this period can be a very painful one for young girls, as they undergo both psychological and physical violence (Delaney, Lupton and Toth 1976, 29–30; Rothchild and Piya 2020, 922–924). At the other end of the menarche ritual spectrum are the celebrations performed to honor young girls during their menarche or their reintegration in the community after their seclusion, when they have acquired a new social (and not only social) status (Fane 1975, 70–71, 95–96, 101–102; Delaney, Lupton and Toth 1976, 30–31; Dammery 2016, 65–91; Gottlieb 2020, 150). Indeed, in southern India, menarche is related to rituals in honor of a menstruating goddess, and girls experiencing their first menstruation are perceived as goddesses too (Cohen 2020, 121–122).

If such rites of passage were performed in Minoan sanctuaries, during menarche or later, these were probably special occasions, gatherings of the female population of the local communities: if not all the women of a community, then at least those belonging to the immediate circle of the initiates. Through these ritual activities the bonds between the women of a community would be solidified, the female identity crystallized, and the power of the female gender projected to the males.[6]

---

5 Eliade 1958, 41–44; van Gennep 1960, 67–68, 87; Delaney, Lupton and Toth 1976, 8, 24–32; Buckley 1982; McDowell 1999, 35, no. 11; Meskell 2000, 427–428; Hoskins 2002, 318–320; Cicurel and Sharaby 2007; Ellen 2012, 107–129. See also the chapters concerning the menarche rituals of various tribes of India in Nanjundayya and Iyer 1928.

6 See *e.g.* Buckley 1982; Cicurel and Sharaby 2007;

Perianes and Ndaferankhande 2020. Characteristically, Chris Knight (1991, see esp. Chapters 11–14) attempts a Marxist approach to the collective, synchronized menstruation in hunter-gatherer societies as a form of 'sexual strike', a demonstration of the solidarity and power of the female gender, which has the potential to define when and if there will be coitus with the men of the community in exchange for food, as they are motivated to hunt prey for the women.

Their archaeological context is crucial for understanding the symbolic function of the gesture of female figurines, as those from caves may also have a chthonic symbolic meaning (see also Davaras 1976, 43; Rutkowski 1986, 64–65; Kanta 2011, 29). Consequently, the 'pregnancy' interpretation in this case appears to be more suitable if the figurines are symbolically linked with rebirth. However, in this case, too, the gesture could indicate menstruation (which is certainly related to fertility) and the isolation of menstruating women or their visit to the cave to offer their blood or other more proper offerings to a female deity with chthonic attributes.

Gesture(s) of authority and social identity?

One last point must made concerning the potential social dimensions of the 'Hands on Abdomen' gesture and of its morphological variations. The economic value of the bronze figurine from Psychro Cave (Fig. 6) projects the financial status of the devotee. Might the figurine's gesture also have indicated the devotee's high social status?

The large quantity of votive weaponry found in the Psychro Cave, according to Watrous (1996, 52–53, 89–90, 95, table 4), demonstrates the performance of male rites of passage in the cave during Postpalatial times. The above bronze male figurine could be a votive offering of a young Minoan who had reached adulthood. Its gesture, can be perceived, on the one hand, as a movement of reverence and thanksgiving, as we have already seen. On the other hand, if we place the figurine in the context of a male rite of passage, the gesture might accommodate other symbolic meanings. As the votary was the center of attention during the ritual, the gesture of the figurine might express his awkwardness and (temporary) social status and identity, as an initiate.

The same could be said of the female figurines, too. I previously interpreted their gesture as an indicator of their physical state (menstruation or pregnancy). Furthermore, as the menstruating girls might participate in a coming-of-age rite, the figurines' gesture could also demonstrate to the viewer their social identity as initiates to adulthood.

As I have already mentioned, the morphological variations of the 'Hands on Abdomen' gesture observed in the Aegean figurines could be different versions of the same gesture, with or without differentiated symbolism, or they could even be perceived as totally different gestures. Sometimes the figurines appear to place their fists instead of the palms on their belly. This could be the case with the clay female figurine from the Vrysinas peak sanctuary (Fig. 2) if it is resting its fists rather than its flat hands on the belly. This representation is probably due to the material of the figurine and the craftsperson's choice not to render the hands in detail. However, one must explore the possibility that this rendition is deliberate and meaningful. If this is the case, then the fists placed on the belly might be seen as a dynamic movement, in contrast to the passive posture of laying the palms on the abdomen. This vigorous rendition of the hands might further project the high social status and authority of the gesturer.

Elsewhere, I have interpreted the fist that is placed on the belly – a gesture performed by bronze male figurines at the end of Neopalatial and in Postpalatial times – as a gesture of reverence and/or an *index* of social status (Kekes 2021, 630–634). Thus, it is possible that the votary who offered this female figurine (as well as the votaries dedicating other figurines of this type) belonged to the elite of the local community/-ies or, as I said above, acquired a (temporary) high social status, as an initiate to adulthood.

The hands of the above figurine are slightly touching each other. One could perceive this rendition as a different gesture to that which I examine in this paper. The gesture of the hands joined in front of the belly is observed more clearly on a male Neopalatial bronze figurine from the peak sanctuary of Agios Georgios sto Vouno, Kythera (Sapouna-Sakellaraki 2012, 60, fig. 64a). Its gesture may indicate the votary's high social and possibly religious status. The figurine wears a hieratic garment, so could be a priest praying respectfully to the worshipped deity. The figurine's economic value clearly shows us that the votary who deposited the figurine belonged to a higher social class. By analogy, the figurine from Vrysinas may be praying to a deity, with her gesture also identifying her as a member of the local elite, perhaps a priestess.

345

Conclusion

Generally, researchers interpret the Aegean 'Hands on Abdomen' gesture variously, based on the identification of the social identity of the figurines performing the gesture or the ritual actions taking place at the sites where they have been found. Some researchers consider the figurines to be representations of the votaries, and consequently approach their gesture as being relevant to the religious practices performed at the Minoan peak sanctuaries (gesture of reverence, adoration, or supplication). Others focus on embodied practices and perceive the gesture as a shamanic movement intended to heal a sick part of the devotee's body. This interpretative approach is similar to my hypothesis that the hands are placed on the abdomen in order to indicate the area in which the men and women devotees feel pain – menstrual pain in the case of women – also seeking comfort and cure. Above and beyond all the different aspects, the 'Hands on Abdomen' gesture appears to express the vulnerable, mortal nature of human beings.

In conclusion, as is commonly the case, the social identity of Aegean figurines and their archaeological and ritual context largely define the symbolic meaning of their gestures. A sense of religious reverence towards the divine is apparent from the way some figurines place their hands on their belly. Placing the figurines of this type in a religious context, their gesture could be perceived as a passive movement expressing humility and respect towards the divine.

In the case of female figurines, whether mortals or deities, the 'Hands on Abdomen' gesture sometimes appears to further indicate their fertility and physical state (menstruation, pregnancy, or childbirth). Moreover, through the gesture the social status of the women represented by the figurines is semiotically projected to the viewer. Aegean menstruating women probably participated in public (coming-of-age and other) rituals. They could visit holy sites to offer their first (or every) menses or other more proper offerings to a fertility goddess, or to pray to or thank the goddess for the magical gift of fertility. Furthermore, they might be isolated from the rest of the community at these sites or in specific places within their settlements or homes during menstruation (or childbirth). In this light, they could acquire a significant social status; in the case of young girls, as individuals entering adulthood. Indeed, as I have mentioned previously, in modern India young girls experiencing their menarche are perceived as goddesses. Their significant (although temporary) social status originates from their physical state of menstruation. It is possible that Aegean women, too, acquired, on specific occasions, a significant (but temporary) social status due to their fertility and their physical state (menstruation, pregnancy).

If the male figurines, too, are placed in the context of male rites of passage performed at Aegean religious sites, then in their case, too, the gesture may have functioned semiologically as an indicator of male social status, as it demonstrated the social identity of the performers as initiates to adulthood. In fact, Puglisi (2020) talks about the possible existence of an 'age class' system in Minoan Crete, where the social status and roles of Minoans were determined by their age. By entering adulthood, Minoan men and women acquired a significant social status, and potential rituals of coming-of-age signaled their passage.

Based on the above analysis, the 'Hands on Abdomen' gesture sometimes appears to express the authority and social identity of the performers. However, given that even the slightest differentiation in the gesture's form could mean that it is a different gesture or convey a totally different symbolism, we must bear in mind that touching hands placed on the belly may actually be a different gesture to that which I discuss here.

Acknowledgements

References

Argyle, M. 1988. *Bodily communication.* 2nd ed. London: Routledge.

Boulotis, C. 2011. "'Στρέφοντας πίσω το κεφάλι'. Το ταξίδι ενός αφηγηματικού μοτίβου από το 'αγγείο των θεριστών' μέχρι μία σαρκοφάγο από την Τανάγρα." In *Κρήτης Μινωίδος. Tradizione e identità Minoica tra produzione artigianale, pratiche cerimoniali e memoria del passato. Studi offerti a Vincenzo La Rosa per il Suo 70o compleanno,* edited by F. Carinci, N. Cucuzza, P. Militello, and O. Palio, 259–284. *Studi di Archeologia Cretese* 10. Padova: Centro di Archeologia Cretese, Bottega d'Erasmo.

Buckley, T. 1982. "Menstruation and the power of the Yurok women: methods in cultural reconstruction." *American Ethnologist* 9(1): 47–60.

Calame, C. 2002. "Offrandes à Artémis Braurônia sur l'Acropole: rites de puberté?" In *Le orse di Brauron: Un rituale di iniziazione femminile nel santuario di Artemide,* edited by B. Gentili and F. Perusino, 43–64. Pisa: Edizioni ETS.

Cicurel, I., and R. Sharaby. 2007. "Women in the menstruation huts: variations in preserving purification customs among Ethiopian immigrants." *Journal of Feminist Studies in Religion* 23(2): 69–84.

Cohen, I. 2020. "Menstruation and religion: developing a Critical Menstrual Studies approach." In *The Palgrave Handbook of Critical Menstruation Studies,* edited by C. Bobel, I. T. Winkler, B. Fahs, K. A. Hasson, E. A. Kissling, and T.-A. Roberts, 115–129. Singapore: Palgrave Macmillan. https://doi.org/10.1007/978-981-15-0614-7

Dammery, S. 2016. *First blood: a cultural study of menarche.* Clayton: Monash University Publishing.

Das, M. 2008. "Menstruation as pollution: taboos in Simlitola, Assam." *Indian Anthropologist* 38(2): 29–42.

Davaras, C. 1976. *Guide to Cretan antiquities.* 3rd rev. ed. Athens: Eptalofos S. A.

Delaney, J., M. J. Lupton, and E. Toth. 1976. *The curse: a cultural history of menstruation.* New York: E. P. Dutton and Co. Inc.

Dillon, M. 1997. *Pilgrims and pilgrimage in ancient Greece.* London and New York: Routledge.

Dillon, M. 2002. *Girls and women in Classical Greek religion.* London and New York: Routledge.

Dimopoulou-Rethemiotaki, N. 2005. *The Archaeological Museum of Herakleion.* Athens: John S. Latsis Public Benefit Foundation. https://www.latsis-foundation.org/content/elib/book_12/heraklion_en.pdf.

Doumas, Ch. 1992. *Οι τοιχογραφίες της Θήρας.* Athens: Ίδρυμα Θήρας, Πέτρος Μ. Νομικός.

Eliade, M. 1958. *Rites and symbols of initiation: the mysteries of birth and rebirth.* New York: Harper and Row.

Ellen, R. 2012. *Nuaulu religious practices: the frequency and reproduction of ritual in a Moluccan society.* Leiden: KITLV.

Fane, H. 1975. "The female element in Indian culture." *Asian Folklore Studies* 34(1): 51–112.

Faulkner, R. O. 1991. *A concise dictionary of Middle Egyptian.* Oxford: Griffith Institute, Ashmolean Museum.

Fedele, A. 2014. "Reversing Eve's curse: Mary Magdalene, Mother Earth and the creative ritualization of menstruation." *Journal of Ritual Studies* 28(2): 23–36.

Frandsen, P. J. 2007. "The menstrual 'taboo' in ancient Egypt." *JNES* 66(2): 81–106.

French, E. 1971. "The development of Mycenaean terracotta figurines." *BSA* 66: 101–187.

Gesell, G. C. 1985. *Town, palace, and house cult in Minoan Crete.* SIMA 67. Göteborg: Paul Åströms Förlag.

Gesell, G. C. 2000. "Blood on the horns of consecration?" In *The wall paintings of Thera.* Proceedings of the first international symposium, Thera, August–September 1997. Vol. II, edited by S. Sherratt, 947–957. Athens: Petros M. Nomikos, Thera Foundation.

Giannaki, K. 2008. "Cheironomy of the female figure in Minoan art." Ph.D. diss., University of Sydney.

Giuman, M. 1999. *La Dea, la Vergine, il Sangue: Archeologia di un culto femminile.* Milano: Longanesi & C.

Giuman, M. 2002. " 'Risplenda come un croco perduto in mezzo a un polveroso prato'. Croco e simbologia liminare nel rituale dell'*arkteia* di Brauron." In *Le orse di Brauron: Un rituale di iniziazione femminile nel santuario di Artemide,* edited by B. Gentili and F. Perusino, 79–101. Pisa: Edizioni ETS.

Goffman, E. 1966. *Behavior in public places: notes on the social organization of gatherings.* New York: The Free Press.

Gottlieb, A. 2020. "Menstrual taboos: moving beyond the curse." In *The Palgrave Handbook of Critical Menstruation Studies,* edited by C. Bobel, I. T. Winkler, B. Fahs, K. A. Hasson, E. A. Kissling, and T.-A. Roberts, 143–161. Singapore: Palgrave Macmillan. https://doi.org/10.1007/978-981-15- 0614-7.

Günkel-Maschek, U. 2016. "Establishing the Minoan 'Enthroned Goddess' in the Neopalatial Period: images, architecture, and elitist ambition." In *Metaphysis. Ritual, myth and symbolism in the Aegean Bronze Age,* edited by E. Alram-Stern, F. Blakolmer, S. Deger-Jalkotzy, R. Laffineur, and J. Weilhartner, 255–261. *Aegaeum* 39. Leuven: Peeters.

Hallager, E. 1985. *The Master Impression: a clay sealing from the Greek-Swedish excavations at Kastelli, Khania. SIMA* 69. Göteborg: Paul Åströms Förlag.

Hoskins, J. 2002. "The Menstrual Hut and the Witch's Lair in two eastern Indonesian societies." *Ethnology* 41(4): 317–333.

Jones, D. W. 1999. *Peak sanctuaries and sacred caves in Minoan Crete: comparison of artifacts.* Jonsered: Paul Åströms Förlag.

Kanta, A. 2011. "Η λατρεία της Ειλειθυίας στο σπήλαιο του Τσούτσουρου." In *Ελονθία Χαριστήιον: το ιερό σπήλαιο της Ειλειθυίας στον Τσούτσουρο,* edited by A. Kanta and K. Davaras, 28–37. Irakleio: Δήμος Μινώα Πεδιάδας.

Kekes, C. 2016. "Αιγαιακές χειρονομίες (συν)ομιλίας και δέησης: αιγυπτιακές επιρροές και διαχρονικότητα." In *Πεπραγμένα του ΙΒ΄ Διεθνούς Κρητολογικού Συνεδρίου:* 1–15. https://12iccs.proceedings.gr/el/proceedings/category/38/32/263.

Kekes, C. 2018. "Διαβάζοντας την ανθρώπινη 'σωματική συμπεριφορά': μια μεθοδολογική προσέγγιση των χειρονομιών του αρχαίου κόσμου." *Θέματα Αρχαιολογίας* 2(2): 222–39. https://www.themata-archaiologias.gr/?p=8647.

Kekes, C. 2021. "Ομιλούντα σώματα: μια προσέγγιση των αιγυπτιακών και των αιγαιακών τελετουργικών χειρονομιών της Εποχής του Χαλκού." Ph.D. diss., University of the Aegean.

Knight, C. 1991. *Blood relations: menstruation and the origins of culture.* New Haven, London: Yale University Press.

Kopaka, K. 2009. "Mothers in Aegean stratigraphies? The dawn of ever-continuing engendered life cycles." In *Fylo. Engendering prehistoric 'stratigraphies' in the Aegean and the Mediterranean,* edited by K. Kopaka, 183–194. *Aegaeum* 30. Liège: Université de Liège.

Kousoulis, P. I.M. 2004. *Αναζητώντας την αιώνια ζωή: θάνατος και ταρίχευση στην αρχαία Αίγυπτο.* Athens: Εκδόσεις Αρχέτυπο.

Kyriakidis, E. 2007. "Finding ritual: calibrating the evidence." In *The archaeology of ritual,* edited by E. Kyriakidis, 9–22. Los Angeles: Cotsen Institute of Archaeology, University of California.

Lembesi, A. 2002. *Το Ιερό του Ερμή και της Αφροδίτης στη Σύμη Βιάννου.* Vol. III, *Τα χάλκινα ανθρωπόμορφα ειδώλια.* Athens: Η εν Αθήναις Αρχαιολογική Εταιρεία.

Maharaj, T., and I. T. Winkler. 2020. "Transnational engagements: cultural and religious practices related to menstruation." In *The Palgrave Handbook of Critical Menstruation Studies,* edited by C. Bobel, I. T. Winkler, B. Fahs, K. A. Hasson, E. A. Kissling, and T.-A. Roberts, 163–174. Singapore: Palgrave Macmillan. https://link.springer.com/book/10.1007/978-981-15- 0614-7.

Marinatos, N. 1984. *Art and religion in Thera: reconstructing a Bronze Age society.* Athens: D. and I. Mathioulakis.

Marinatos, N. 1993. *Minoan religion: ritual, image, and symbol.* Columbia: University of South Carolina Press.

Marinatos, N. 2014. *Ακρωτήρι, Σαντορίνη: η βιογραφία μιας χαμένης πολιτείας.* Athens: Μίλητος.

Marinatos, N. 2015. *Akrotiri, Thera, and the East Mediterranean.* Athens: Μίλητος.

Mauss, M. 1966. *The gift: forms and functions of exchange in archaic societies.* Translated by Ian Cunnison. London: Cohen and West Ltd.

Mavroudi, N. 2016. "Όψεις των διαβατήριων τελετών ενηλικίωσης στην προϊστορική Κρήτη." In *Πεπραγμένα του ΙΒ΄ Διεθνούς Κρητολογικού Συνεδρίου:* 1–16. https://12iccs.proceedings.gr/el/proceedings/category/38/32/353.

McDowell, A. G. 1999. *Village life in Ancient Egypt: laundry lists and love songs.* New York: Oxford University Press.

Meskell, L. 2000. "Cycles of life and death: narrative homology and archaeological realities." *WorldArch* 31(3): 423–441.

Mina, M. 2014. "Don't throw the baby out with the bathwater: integrating sex in the study of Greek Neolithic anthropomorphic figurines." In *Anthropomorphism and symbolic behaviour in the Neolithic and Copper Age communities of South-Eastern Europe,* edited by C.-E. Ursu and S. Ţerna, 123–160. *Studies into South-East European Prehistory* I. Suceava: Karl A. Romstorfer.

Morris, C. 2001. "The language of gesture in Minoan religion." In *Potnia. Deities and religion in the Aegean Bronze Age. Proceedings of the 8th International Aegean Conference, Göteborg University, 12–15 April 2000,* edited by R. Laffineur and R. Hägg, 245–250. *Aegaeum* 22. Liège and Austin: Université de Liège and University of Texas at Austin.

Morris, C., B. O'Neill, and A. Peatfield. 2019. "Thinking through our hands: making and understanding Minoan female anthropomorphic figurines from the peak sanctuary of Prinias, Crete." In *Experimental archaeology: making, understanding, story-telling,* edited by C. Souyoudzoglou-Haywood and A. O'Sullivan, 53–62. Oxford: Archaeopress.

Morris, C., and A. Peatfield. 2002. "Feeling through the body: gesture in Cretan Bronze Age religion." In *Thinking through the body: archaeologies of corporeality. Based on the Thinking through the Body Workshop Held at the University of Wales, Lampeter, June 1998,* edited by Y. Hamilakis, M. Pluciennik, and S. Tarlow, 105–120. New York: Kluwer Academic, Plenum Publishers.

Morris, C., and A. Peatfield. 2004. "Experiencing ritual: shamanic elements in Minoan religion." In *Celebrations: sanctuaries and the vestiges of cult activity,* edited by M. Wedde, 35–59. Bergen: Norwegian Institute in Athens.

Morris, C., and A. Peatfield. 2014. "Health and healing on Cretan Bronze Age peak sanctuaries." In *Medicine and healing in the ancient Mediterranean world,* edited by D. Michaelides, 54–63. Oxford and Philadelphia: Oxbow Books.

Morris, D. 1977. *Manwatching: a field guide to human behavior.* New York: Abrams.

Myres, J. L. 1902/3. "The sanctuary site of Petsofa." *BSA* 9: 356–387.

Nanjundayya, H. V., and L. K. A. Iyer. 1928. *The Mysore tribes and castes.* Vol. II. Mysore: Mysore University.

Papadopoulou, E., and I. Tzachili. 2010. "Ανασκαφή στο Ιερό Κορυφής του Βρύσινα Νομού Ρεθύμνης." *Αρχαιολογικό Έργο Κρήτης* 1: 452–463.

Papageorgiou, I. 2011–2012. "Ιστορίες ενηλικίωσης στο προϊστορικό Ακρωτήρι: δρώμενα και εικονογραφικοί συσχετισμοί." *ΑΛΣ* 8: 24–111.

Peatfield, A. A. D., and C. Morris. 2012. "Dynamic spirituality on Minoan peak sanctuaries." In *Archaeology of spiritualities,* edited by K. Rountree, C. Morris and A. A. D. Peatfield, 227–245. New York: Springer.

Perianes, M. B., and D. Ndaferankhande. 2020. "Becoming female: the role of menarche rituals in 'making women' in Malawi." In *The Palgrave Handbook of Critical Menstruation Studies,* edited by C. Bobel, I. T. Winkler, B. Fahs, K. A. Hasson, E. A. Kissling, and T.-A. Roberts, 423–439. Singapore: Palgrave Macmillan. https://doi.org/10.1007/978-981-15-0614-7.

Pernier, L. 1902. "Scavi della Missione Italiana a Phaestos 1900–1901. Rapporto preliminare." *MonAnt* 12: 5–142.

Platon, E. 2014. "Η χειρονομία της «αποκάλυψης»: ένα άγνωστο μέχρι σήμερα στιγμιότυπο των μινωικών τελετουργιών ενηλικίωσης." *CretChron* 34: 65–81.

Platon, N. 1951. "Το Ιερόν Μαζά (Καλού Χωριού Πεδιάδος) και τα μινωικά Ιερά Κορυφής." *CretChron* 5: 96–160.

Pliny, *Natural History* – with an English translation in ten volumes. Vol. VIII, *Libri XXVIII–XXXII,* edited by W. H. S. Jones, 1963. Cambridge and London: Harvard University, William Heinemann Ltd.

Poole, S. E. 2020. *A consideration of gender roles and relations in the Aegean Bronze Age interpreted from gestures and proxemics in art. BAR-IS* 2980. *UCL Institute of Archaeology PhD Series* 3. Oxford: BAR Publishing.

Puglisi, D. 2012. "Ritual performances in Minoan lustral basins. New observations on an old hypothesis." *ASAtene* 90, Serie III, 12: 199–211.

Puglisi, D. 2020. "Rites of passage in Minoan palatial Crete and their role in structuring a *House Society.*" In *Oikos. Archaeological approaches to House Societies in the Bronze Age Aegean,* edited by M. Relaki and J. Driessen, 63–80. Louvain: Presses Universitaires de Louvain.

Rehak, P. 1995. "Enthroned figures in Aegean art and the function of the Mycenaean megaron." In *The role of the ruler in the prehistoric Aegean,* edited by P. Rehak, 95–117. *Aegaeum* 11. Liège and Austin: Université de Liège and University of Texas at Austin.

Rethemiotakis, G. 1998. *Ανθρωπομορφική πηλοπλαστική στην Κρήτη από τη Νεοανακτορική έως την Υπομινωική περίοδο.* Athens: Η εν Αθήναις Αρχαιολογική Εταιρεία.

Rethemiotakis, G. 2010. "A shrine-model from Galatas." In *Cretan offerings: studies in honour of Peter Warren,* edited by O. Krzyszkowska, 293–302. *BSA Studies* 18. London: BSA.

Rethemiotakis, G. 2014. "Images and semiotics in space: the case of anthropomorphic figurines from Kophinas." *CretChron* 34: 147–162.

Rothchild, J., and P. S. Piya. 2020. "Rituals, taboos and seclusion: life stories of women navigating culture and pushing for change in Nepal." In *The Palgrave Handbook of Critical Menstruation Studies,* edited by C. Bobel, I. T. Winkler, B. Fahs, K. A. Hasson, E. A. Kissling, and T.-A. Roberts, 915–929. Singapore: Palgrave Macmillan. https://doi.org/10.1007/978–981-15–0614-7.

Rutkowski, B. 1986. *The cult places of the Aegean.* New Haven and London: Yale University Press.

Rutkowski, B. 1991. *Petsophas: a Cretan peak sanctuary.* Warsaw: Art and Archaeology.

Sakellarakis, G. 2013. *Κύθηρα: Ο Άγιος Γεώργιος στο Βουνό. Μινωική λατρεία και νεότεροι χρόνοι.* Athens: Η εν Αθήναις Αρχαιολογική Εταιρεία.

Sapouna-Sakellaraki, E. 2012. "Χάλκινα ειδώλια." In *Κύθηρα: το μινωικό Ιερό Κορυφής στον Άγιο Γεώργιο στο βουνό.* Vol. 2, *Τα ευρήματα,* edited by G. Sakellarakis, 1–212. Athens: Η εν Αθήναις Αρχαιολογική Εταιρεία.

Sfakianakis, D. 2016. "Κεραμεική και ανθρωπόμορφα ειδώλια." In *Η κεραμεική της ανασκαφής 1972−1973: Συμβολή στην ιστορία τον Ιερού Κορυφής,* edited by I. Tzachili, 185–228. ΒΡΥΣΙΝΑΣ ΙΙ. Athens: Τα Πράγματα.

Sourvinou-Inwood, C. 1988. *Studies in girl's transitions: aspects of the Arkteia and age representation in Attic iconography.* Athens: Kardamitsa.

Spiliotopoulou, A. 2015. "Νέα ματιά στο υλικό της κεραμικής και των ανθρωπόμορφων ειδωλίων από το Ιερό Κορυφής Κόφινα Αστερουσίων." *Αρχαιολογικό Έργο Κρήτης* 3 Α': 281–292.

Spiliotopoulou, A. 2018. "Τα πήλινα ανθρωπόμορφα ειδώλια των μινωικών Ιερών Κορυφής: τυπολογικές, τεχνο-τροπικές και ερμηνευτικές παρατηρήσεις με βάση το υλικό του ιερού του Κόφινα Αστερουσίων." Vol. I–II. Ph.D. diss., University of Athens.

Steel, L. 2020. "'Little Women': gender, performance, and gesture in Mycenaean female figurines." *JAnthArch* 58(article 101161): 1–15. https://doi.org/10.1016/j.jaa.2020.101161.

Tyldesley, J. 1995. *Daughters of Isis: women of Ancient Egypt.* London: Penguin Books.

van Gennep, A. 1960. *The rites of passage.* Translated by M. B. Vizedom and G. L. Caffee. Chicago: The University of Chicago Press.

Verlinden, C. 1984. *Les statuettes anthropomorphes crétoises en bronze et en plomb, du IIIᵉ millénaire au VIIᵉ siècle av. J.-C.* Providence/Louvain: Brown University/Institut Supérieur d'archéologie et d'histoire de l'art, Collège Érasme.

Vetters, M. 2016. "All the same yet not identical? Mycenaean terracotta figurines in context." In *Metaphysis. Ritual, myth and symbolism in the Aegean Bronze Age,* edited by E. Alram-Stern, F. Blakolmer, S. Deger-Jalkotzy, R. Laffineur, and J. Weilhartner, 37–48. Aegaeum 39. Leuven: Peeters.

Watrous, V. L. 1996. *The cave sanctuary of Zeus at Psychro: a study of extra-urban sanctuaries in Minoan and Early Iron Age Crete. Aegaeum* 15. Liège and Austin: Université de Liège and University of Texas at Austin.

Weilhartner, J. 2012. "Gender dimorphism in the Linear A and Linear B tablets." In *Kosmos. Jewellery, adornment and tex-tiles in the Aegean Bronze Age,* edited by M.-L., Nosch and R. Laffineur, 287–295. Aegaeum 33. Liège: Peeters.

Wilkinson, R. H. 1992. *Reading Egyptian art: a hieroglyphic guide to Ancient Egyptian painting and sculpture.* London: Thames and Hudson Ltd.

Minoan Waist-to-Hip Ratios, Exposed Breasts, and Sexual Selection: Applying Sociobiology and Evolutionary Psychology to the Iconography of the Human Body in Bronze Age Crete

Michele Mitrovich

Abstract   *The present paper is an interdisciplinary study that analyzes the iconography of the human body in Minoan Crete by means of concepts and tools utilized in disciplines such as Sociobiology and Evolutionary Psychology. Among these is a metrical methodology of waist-to-hip ratio (WHR), used for assessment of health, physical fertility, sexual attractiveness, and mate preferences in culture-specific social environments. The findings and their possible implications on the inter-gender relationships, on religious regulation of sex, mate selection, and procreation, and on social dynamics in Bronze Age Crete are discussed. Some aspects of gestures, stances, comportment, and bull-leaping sports are analyzed as these relate to the modes of interaction and communication between the sexes. This paper hypothesizes that the iconography of human representations in Bronze Age Crete might be largely centered around sexual desirability to potential mates. It is proposed that social and religious regulation, control, sanctification, and ritualization of mate selection strategies, sex, and modes of their outward expression through artistic media constituted some of the core mechanisms of Minoan religious practices, social cohesion, and cultural identity. A hypothesis of the centrality of sexual selection through female choice in Minoan culture and religion is proposed.*

Introduction

Study of sexuality and gender is a relatively recent but exponentially growing area of inquiry in Aegean prehistory today (German 2000; Rautman and Talalay 2000; Alberti 2002; Talalay 2005; Nikolaidou and Kokkinidou 2007, 44; Alexandri 2009; Cadogan 2009; Goodison 2009; Kopaka 2009; Hitchcock and Nikolaidou 2012; Steel 2020). It produced a wealth of valuable insights but there are also a number of challenges with which the discipline has been grappling, some of which include falling into the trap of "anachronistic projections from classical antiquity" (Hitchcock and Nikolaidou 2012, 503) and those from modern religious, cultural, and ethical notions, with methodologies either focused on searching for traces of non-binary iconography or rooted in the default patriarchal family system. As anthropologist Barbara Voss (2008, 318) expressed it "Most archaeological texts still read as if they were written to be approved by a morals committee for the promotion of family values", with the biological sex-drive and sex as an essential human pleasure-seeking behavior linked solely with the function of procreation or omitted from a discussion altogether. The limited nature of available evidence largely shaped the discussion of engendered experiences and inter-gender interactions in the Aegean Bronze Age within the general matriarchal or patriarchal framework or that of religious activities promoting fertility as an ambiguously abstract and symbolic concept. A good example of this is the so-called Mother Goddess or Great Goddess cult which has been traditionally linked both with the concept of matriarchy and with fertility-centered religious practices (Evans 1921, 3–5, 160–161, 513, 656–657; 1930, 467–476; van Straaten 1986; Gimbutas 1989; Muhly 1990; Keller 1998). The popular Mother Goddess theory is still quite influential in the field of Aegean archaeology today, despite the glaring absence of 'kourotrophos' scenes in Minoan Crete (Olsen 2014, 5; 1998, 380–381; Rutter 2003; Budin 2011, 269, 283; Adams 2013, 5). However, largely missing from

the discussion is the framework of the very activity that is essential for promoting fertility in a physical sense. The overlooked physicality of human instincts, nature, and behavior relates to the idea expressed by Lynn Meskell (2000, 20) that "most archaeological studies on the body leave their bodies uninhabited and without materiality." As a result, Minoan body and sexuality has been detached from sex and desires, and Minoan fertility dissociated from mate selection strategies, with few exceptions, such as Robert Koehl's (1986, 2016) exploration of possible homoerotic activities within the Minoan 'rites of passage'. The paradox of the abundance of research and discussions centered around fertility in the Bronze Age Aegean accompanied by the shortage of conversations about sex, in part, is due to the fact that until this day, no clear and indisputable images from Minoan Crete that depict a complete nuclear family, sexual intercourse, or intimacy between the sexes have been uncovered.[1] However, it is not the question of *if* Minoans had sex or participated in the activity that led directly to their physical procreation, rather, it is the question of *how* this fundamental sphere of human experience was framed and mediated by their society and religion. It appears that there has not been a single ancient, modern, western, eastern, urban, rural, or tribal cult or religion in human history that would not include some rules and regulations dedicated to explanation, signification, restriction, sanctioning, and control of human sexual behavior. Therefore, it is an essential aspect of Bronze Age Aegean society that needs to be investigated. Walter Burkert (1996, 17) aptly noted that "human sexuality as such has a clear biological function and pedigree. During adolescence humans everywhere and at all times will spontaneously discover sexuality along with new feelings and behavior, while cultural and educational efforts to repress them normally fail. … The biological program develops on its own according to pre-determined patterns, which reach back far beyond the emergence of humans and have long been inscribed in the genetic code". So, attempting to understand and apply this biological code to Minoan society by means of engagement with human physiology, sociobiology, and psychology, combined with a qualitative and quantitative iconographic analysis and overarching synthesis, can provide a solid foundation upon which a better understanding of sexuality, gender roles, gender interactions, societal structure, as well as religious organization of people in Bronze Age Crete can be built. Evolutionary psychologist Geoffrey Miller (2000, 24) agreed with archaeologist Steven Mithen (1996) who argued in *The Prehistory of the Mind* that it is essential to interpret the evidence of human prehistory within a framework of evolutionary psychology where bones, stones, and sherds need to be combined with studies of modern humans, latest advances in evolutionary biology, and data produced by psychology laboratories. This is the approach which the present paper attempts to pursue as part of a larger ongoing study.

Waist-to-Hip Ratio (WHR)

Application of diagnostic methodologies borrowed from a diverse range of disciplines can provide valuable tools for a more insightful reading of Minoan images of female bodies and what these can reveal about the sexuality as well as the religious and social organization in Minoan Crete. One such methodology is the assessment of the Waist-to-Hip ratio, conventionally referred to as WHR, which is widely utilized not only in sociobiology and evolutionary psychology but also in medical sciences. The WHR is a ratio between the circumference of the body at the waist and that at the hips which measures a particular way of how adipose tissue (fat cells) is distributed in a body (Fig. 1). It is identified as a secondary sexual trait which is unique to humans (Bovet and Raymond 2015, 1; Furnham et al. 1998, 313). The World Health Organization developed a detailed protocol for WHR measuring procedures (World Health Organization 2011, 5–6) but in practical terms, the circumference of the waist is measured at its smallest point or about

---

[1] Cadogan 2009, 227; Budin 2011, 276, 282–284; Adams 2013, 5. The Jewel Fresco from Knossos that is often quoted as a rare example of intimacy between the sexes (Adams 2013, 8) is quite fragmentary and ambiguous, the preserved fragment is not sexual or sexually intimate per se and might be part of a formal religious scene of presenting jewellery offerings to a goddess or any other religious ceremony, possibly in a public setting.

1" (2.54 cm) above the belly button and the hip circumference is measured at the widest point of the buttocks or hips and then the waist value is divided by that of the hips (Fig. 1). The evolutionary significance of this metric was discovered by psychologist Devendra Singh (1993, 1994; Singh and Young 1995). The WHR is an extensively-studied subject and among its numerous applications, it has been linked with health and risks of developing certain diseases. The WHR has been found to be significantly more effective in predicting cardiovascular disease that the body-mass index (BMI) or circumference of the waist alone (Mørkedal et al. 2011, 457–461). The specific pattern of body fat distribution associated with a high WHR in women as opposed to the total quantity of body fat can predict more effectively hypertension, heart attack, stroke, diabetes, gallbladder disease, hirsutism, elevated plasma triglycerides, and cancer of the endometrium, ovaries, and breasts (Bjorntorp 1987; Seidell 1992; Furnham et al. 1998, 313). Lower WHR

Fig. 1: Measurement and calculation of Waist-to-hip ratio (Valua Vitaly/Shutterstock, with digital alterations by the author).

values have been connected to maintaining regular menstrual and ovulatory cycles (Singh 2002). Moreover, high WHR values were proven to raise the mortality rates of both clinically obese and very lean older women (Folsom et al. 1993). The normal range of WHR for western women today is between 0.67 and 0.80 (Furnham et al. 1998, 313; Bovet and Raymond 2015, 9).

The health advantages of low WHR values in females have been linked to mating preferences of heterosexual males which is considered to be an evolutionary adaptation developed in order to recognize potential mates with higher probabilities of producing a healthy offspring and remaining healthy and alive for a period that is long enough to raise the offspring into their adulthood when they become fully autonomous. WHR is a well-researched component of female morphology within the framework of men's mate-assessment algorithms. Numerous studies have shown that female figures with low WHR (greater difference between the waist and the hips) were rated consistently as more attractive than figures with higher WHR (Sugiyama 2004; Singh 2006; Singh et al. 2010; Bovet and Raymond 2015). However, physical health is not the only parameter that explains men's preference for mates with low WHRs. A very significant finding showed that lower waist-to-hip ratios in women activate neural reward centers in men, similar to mood-altering drugs, while high WHR numbers have no such effect on the brain (Buss 2018; Platek and Singh 2010).

Another study by William Lassek and Steve Gaulin (2008) showed that WHR is an important indicator that can predict cognitive ability in women as well as in their offspring. Upper-body fat has been proven to have negative effects on the supply of long-chain polyunsaturated fatty acids (LCPUFAs) that are essential for neurodevelopment of the brain while gluteofemoral fat of the lower body is the main storage of the neurodevelopmental resources (Lassek and Gaulin 2008). The correlation between these two fat deposit types is expressed particularly well by WHR numbers. Lower WHR values are associated with higher levels of the omega-3 docosahexaenoic acid (DHA), a type of LCPUFA which is crucial for fetal and infant brain development (Del Prado et al. 2000; Lassek and Gaulin 2008). The study showed that "women with lower WHRs and their children have significantly higher cognitive test scores, and teenage mothers with lower WHRs and their children are protected from cognitive decrements associated with teen births" due to competition between the still-developing teen mothers and their children for the same neurodevelopmental resources (Lassek and Gaulin 2008, 26). Taking into consideration a general tendency in ancient societies for marriages and first pregnancies to occur quite early, during women's teenage years, life expectancy to be relatively low, and mortality rates associated with childbirth to be relatively high, men's potential preference for partners with low WHRs can be understood as an especially important biological mechanism to increase the chances of produ-
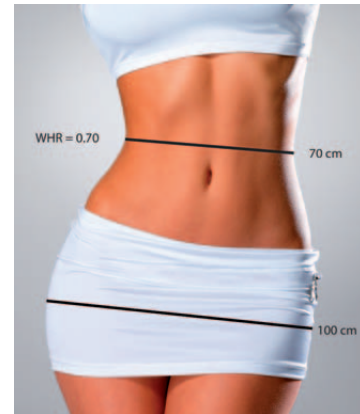
cing a healthy and intelligent offspring which provides superior chances of their survival and pro-liferation of genes. Hence, the reasons behind the rather common elements in female fashions throughout history such as tight belts, girdles, corsets, and/or voluminous draping, padding, or flounces around the hips designed to lower women's perceived WHRs can be understood from this fundamental biological perspective. This naturally raises a question just how universal the low WHR preference in male sexual selection is throughout various geographical regions, time periods, and cultural environments. A large corpus of studies on correlation of female WHR and sexual attractiveness exists today and includes both contemporary industrialized (Furnham et al. 1997; Rozmus-Wrzesinska and Pawlowski 2005) and non-industrialized societies, such as various tribes from Papua New Guinea (Dixson et al. 2010b; Sorokowski and Sorokowska 2012), Indonesia (Singh and Luis 1995), Sub-Saharan Africa, South America, and Western Siberia (Butovskaya et al. 2017; Marlowe et al. 2005). A small portion of such studies appears to represent exceptions (Westman and Marlowe 1999; Marlowe and Westman 2001), however, sometimes, divergent results are produced due to faults in methodology. For example, two studies of the Hazda hunter-gatherer ethnic group of Tanzania produced results suggesting that the Hazda men's preference for a high female WHR was diametrically opposed to that of men in the industrialized West and to the hypothesis of the biologically and evolutionary-driven universality of a low female WHR (Westman and Marlowe 1999; Marlowe and Wetsman 2001). The test-subjects were shown only frontal line drawings of women with different WHRs. However, Marlowe, Apicella, and Reed showed in 2005 that the Hazda men did indeed prefer the low female WHR values in line with men in the United States once the study's methodology was corrected to account for the Hazda men's favoring of higher BMIs and lower profile WHRs, *i.e.* more adipose tissue deposited in women's buttocks than hips (Marlowe et al. 2005). In fact, presented with line drawings of women in profile, the Hazda men preferred lower WHR values (0.6) than men in the United States (0.65) in all three categories: "attractive," "healthy," and "wife" (Marlowe et al. 2005, 463–464). Overall, the majority of studies in this field displays largely consistent findings despite the vastly diverse geographic, cultural, and socio-economic environments (Singh and Luis 1995; Singh et al. 2010; Furnham et al. 1997; Rozmus-Wrzesinska and Pawlowski 2005; Singh 2006; Dixson et al. 2008, 2010a, 2010b; Sorokowski and Sorokowska 2012), especially when such studies are scaled to local environmental context (Sugiyama 2004). Environmental factors as well as fashion or aesthetic trends related to WHRs may fluctuate occasionally, both in time and space, but the persistent underlying evolutionary, physiological, and psychological mechanisms harken back to tens of thousands of years and can provide a solid reference point in our understanding of humans, both ancient and modern.

Waist-to-Hip Ratio (WHR) in Female Images in Minoan Crete

Applying the WHR methodology to the study of human body representations in the Bronze Age Aegean, some significant and insightful indicators emerge. Images that are useful for this study are those from Minoan Crete itself and those from the Mycenaean mainland which directly emulate and are nearly indistinguishable iconographically from the Minoan canon.[2] Starting from MM III A on Crete, women are depicted with large exposed breasts, narrow waists, and wide hips, wearing long, often flounced, skirts (German 2000, 98). This convention became truly embedded as a nearly exclusive format of female depictions in the Neopalatial period (German 2000, 98), which continued into the Postpalatial period. An extensive group of female bronze figurines published in a volume by Colette Verlinden (1984) provides a useful sample for analysis

---

2 Images that depict the standing upright pose in the unobstructed frontal or equivalent-to-frontal view which make WHR measurement process straight-forward are preferred for methodological consistency. Since two-dimensional images and silhouette drawings are used in the ma-jority of WHR studies of attractiveness and mate selection, consistently, only two-dimensional images of two and three-dimensional artifacts are analyzed in the present study.

No.	Object	WHR*
1.	Bronze female figurine (Verlinden 1984, #33), (Fig. 2a).	0.42
2.	Bronze female figurine (Verlinden 1984, #37).	0.43
3.	Bronze female figurine (Verlinden 1984, #35).	0.47
4.	Bronze female figurine (Verlinden 1984, #67).	0.47
5.	Bronze female figurine (Verlinden 1984, #34), (Fig. 2b).	0.48
6.	Faience 'Snake-goddess' figurine with an animal-topped headdress, from Temple Repositories, Knossos (Fig. 3).	0.43
7.	Faience 'Snake-goddess' figurine with a conical headdress, from Temple Repositories, Knossos.	0.43
8.	Isopata gold signet-ring, frontal figure, far left, *CMS* II 3, no. 51 (Fig. 4).	0.28
9.	Isopata gold signet-ring, frontal figure, center, *CMS* II 3, no. 51 (Fig. 4).	0.29
10.	'Mother of the Mountains' seal impression from Knossos, *CMS* II 8, no. 256 (Fig. 5).	0.39
11.	'Sacred Grove and Dance' fresco from Knossos, female figure with preserved waist and hips.	0.33

*Table 1: Waist-to-hip ratios (WHR) of Minoan female depictions. * The measurements were taken from a combination of electronic and print images, selecting the highest resolution available for each object and some cases, magnifying the scale electronically for greater accuracy. All WHR values of Minoan objects provided here are approximate by nature, since choosing a place where the widest point of the hips should be (concealed by a skirt) and adjusting the image scale can produce a slightly different resulting value which, however, does not significantly affect the general outcome of low WHRs in relation to the normal human range for women of 0.67–0.80 (Bovet and Raymond 2015, 9; Furnham et al. 1998, 313).*

(Figs. 2a–c). Out of thirty-nine total iconographically consistent female figurines dating between the Protopalatial and Postpalatial periods, thirty figurines are methodologically suitable and sufficiently preserved to be metrically analyzed for WHRs.[3] The WHR average of the thirty figurines is 0.54 which is significantly lower than the human female normal range of 0.67–0.80 (Bovet and Raymond 2015, 9). However, what is more representative of the Minoan iconographic model or canon, are the most 'naturalistic' and detailed figurines of the group which possess WHRs between 0.42 and 0.48 (Table 1.1–5). To compare these values to the WHRs of Minoan female representations in other media, images of the two faience Snake Goddess figurines from the Temple Repositories at Knossos (Evans 1921, 501–504, figs. 359–362, 377; Foster 1979, 70–78,
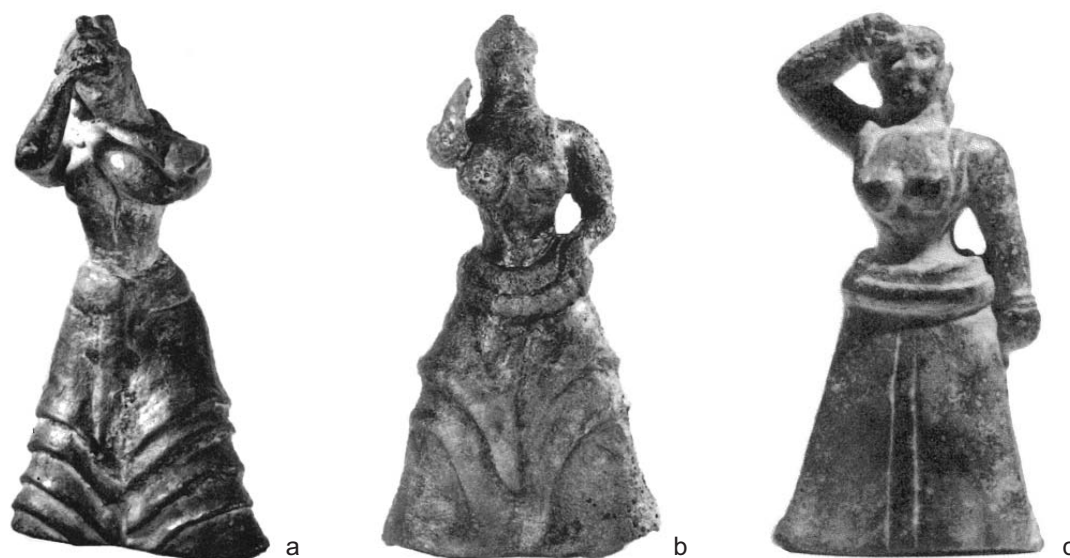

Fig. 2: a) Female figurine, bronze, LM I A (after Verlinden 1984, pl. 16, no. 33); b) Female figurine from Agia Triada, bronze, LM I A (after Verlinden 1984, pl. 17, no. 34); c) Female figurine, bronze, LM I A (after Verlinden 1984, pl. 32, no. 67).

3 All measurements are approximate, taken by the author from the fully frontal or rear-view photographs, recording the narrowest width of the 'natural' waist and the point which corresponds to the widest point of the hips of each figurine; the catalogue numbers in Verlinden 1984 include: 6, 13, 15–16, 33–35, 37, 67–68, 70–72, 99–100, 109, 119, 121–124, 126–127, 143, 172, 174–175, 184, 188–189.

pls. 7–11; Panagiotaki 1993, 1995; Alberti 2001, pl. 1, figs. 1–2; Jones 2016) have been measured using the same methodology and the results showed WHRs of approximately 0.43 for each (Table 1.6–7; Fig. 3). A wide range of female figures depicted on Late Minoan seals have been also measured for this study, including the famous Isopata gold signet-ring (Table 1.8–9; Fig. 4; *CMS* II 3, no. 51; Evans 1930, 68, fig. 38; Cain 2001), the so-called Mother of the Mountain seal impression *CMS* II 8, no. 256 (Table 1.10; Fig. 5), and numerous other seals, signet-rings, and sealings.[4] The WHR values of these are even more exaggerated than in figurines, most range within 0.24–0.36, however, there are even lower values that lie outside of this range (as low as 0.05). A similar tendency towards an emphasis on excessively low WHRs is seen in the female figure in the original section with preserved waist and hips on the Sacred Grove and Dance miniature fresco from Knossos (Evans 1930, 66–67, pl. XVIII; Davis 1987, 158) which shows WHR of approx. 0.33 (Table 1.11). The overall corpus of such images commonly displays a particularly heightened attention given to garments which highlight and/or visually enhance the key secondary sex characteristics of the female body and facilitate the display of a low WHR, hence, communicating its value in respect to fertility, health, and other related factors. Therefore, the exaggerated focus on one of the most significant stimuli in evaluation of female sexual attractiveness that is seen in Minoan imagery, especially cult-related iconography, may point to the cultural and religious significance of sexual selection for reproductive potential in Minoan society.

WHR and Female Breast Size

An influential study by Singh and Young (1995, 489) showed that female figures with low WHR were perceived by heterosexual male participants more attractive regardless of their breast size, however, large breasts increased attractiveness ratings of slender figures with high WHR over similar figures with small breasts. Independently, large breasts stimulus was compared to that of smaller breasts with all other criteria being equal which showed statistically significant, more than triple increase in men's courtship solicitation events (Gueguen 2007). Larger breasts also "significantly enhance the ratings for slender figures with low WHR compared to figures with high WHR" and it was relevant for both short-term and long-term mating strategies (Singh and Young 1995, 490–492). Also, "slender figures with high WHR and large breasts were rated as healthier than slender figures with the same WHR but small breasts," (Singh and Young 1995, 491) an important factor that also relates to the women's perceived fertility level and sexual desirability. Other studies confirmed the significance of WHR and breast size combination compared to other combinations of variables, which received higher ratings on reproductive capacity, healthiness, and physical attractiveness (Furnham et al. 1998, 2006). The evolutionary significance of these morphological traits in females and how gynoid shape is processed and analyzed by heterosexual males in regards to potential mate value, fertility, and health has also been studied by means of pupillometric research and eye-tracking procedures that quantify eye movements, number of visual fixations, and dwell time on these stimuli (Dixson et al. 2011). An important study by Grażyna Jasieńska et al. (2004) shows that women who are characterized by both large breasts and narrow waists have 26 % higher mean 17-β-oestradiol (E2), 37 % higher mean mid-cycle E2 levels, and increased progesterone levels which are associated with higher fecundity and probability of conception than women with other combinations of body-shape variables.

Female Breasts in Minoan Crete

Many scholars duly noted the most striking aspect of the Minoan iconography of women's bodies, as Ellen Adams (2013, 7) phrased it, "females possess unrealistically large breasts, narrow waists and wide, swinging hips." The consistently low WHR numbers in Minoan female representations are accompanied by a clear predilection towards larger-size breasts which can be seen across various media, especially in figurines and seals (Fig. 2 b–c, 3–5). The fact that Minoan wo-

---

4 Including *CMS* I, no. 191; II 3, no. 326; IX, no. 154; XI, 27, etc.

Fig. 4: The gold signet-ring from the Isopata necropolis, Knossos (CMS *II 3*, no. 51; courtesy of the CMS *Heidelberg*).

Fig. 5: 'Mother of the Mountains' seal impression from Knossos (CMS *II 8*, no. 256; courtesy of the CMS *Heidelberg*).

men's breasts are usually depicted exposed acts as a particularly strong and direct sexual stimulus which would naturally elicit a physiological arousal response in men. As William Masters and Virginia Johnson (1966) describe, the volume of breasts increases during female sexual arousal and erection of the nipples occurs, this in turn, provides a clear visual cue for men. Neuroscience research shows that stimulation of women's nipples lights up in functional MRI images all three sensory maps in the parietal cortex of the brain corresponding to clitoris, vagina, and cervix (Komisaruk et al. 2011). From a functional standpoint, this means that beside child-nursing aspects of the breast, it also functions as a sexual organ. Undoubtedly, breasts are less eroticized in tribal societies where women go topless than in the modern industrialized environment, however, even in such subsistence societies, breasts are not devoid of sexual significance and are commonly stimulated during foreplay (Ford and Beach 1951; Barber 2013). It can be debated whether women in Bronze Age Crete were topless on a daily basis or revealed their breasts only for special religious occasions, however, the latter might be somewhat more likely since Minoan society was closer to an industrialized than a tribal subsistence society, and it maintained significant cultural interactions with the neighboring Near East and Egypt where breasts were generally concealed.

Since the Victorian age of Arthur Evans, some scholars have been fascinated and titillated by the Minoan iconographic element of exposed breasts while others have dismissed or avoided confronting its conspicuous and provocative nature directly, being influenced either by a modern version of 'aidos' (*i.e.* shame, modesty) and contemporary religious and social ethics or by progressive feminism that can sometimes interpret such display not only as a symbol of female empowerment but also as objectification of a female body. The basic symbolism of the exposed female breasts in Minoan Crete has been well understood and described since the times of Evans and often discussed in the context of the Great Goddess or Mother Goddess (James 1959; Gimbutas 1974), as did Erich Neumann in his 1955 (1972) analysis of this archetype. Neumann (1972, 46–47, 123–126) connected the female breast symbolically to a vessel, bowl, or chalice, the concepts of containing and nourishing, and the idea of giving-outward and donating. The uncovering of the breasts in Minoan context is something that he considered a sacred action associated with the cult and thought that the priestesses of the Great Goddess displayed their breasts full of milk as "symbols of the nourishing life stream" (Neumann 1972, 128) and as a physical mode of worshiping the Goddess. Andrew Stewart (1997, 34) describes the faience Snake Goddess figurines from Knossos as "voluptuously bare breasted" and includes them into a general discussion on female nudity and eroticism. Christine Morris (2009a, 247) in the *Iconography of the Bared Breast in Aegean Bronze Age Art* states cautiously that it cannot be assumed either that this imagery had an erotic dimension or that it was entirely devoid of sexual connotations. Also,

Adams (2013, 15) believes that "breasts are highlighted or celebrated: not in terms of a single function such as nurture or erotica, but as a status symbol." Benjamin Alberti (2001, 200) points out that the glazes of different colors were used for the faces and breasts of the Knossian Snake Goddesses and believes that this "alludes to the status of the breasts as distinct or detachable from the rest of the body". As if afraid of his own intellectually unmediated autonomic response to the fleshiness of the breasts which are highlighted in the lightest color glaze creating the focal points of the figurines, projecting forward, and intruding into the viewers personal space, he attempts to neutralize their power and dissociate them from a living human body being depicted, describing the breasts as "an integral part of the costume" and part of "the dress and ornamentation of the figurines" (Alberti 2001, 200). Alberti sees the breasts almost as inanimate and detachable objects that together with clothing, adornments, and other external factors such as the medium, context, placement, and performativity of the figurines produce a conditional sexed body, not as an organic and intrinsic part of a sexed Minoan body as a whole. Bernice Jones (2001, 264) suggests that the Minoan open bodice was meant to "facilitate breast-feeding" and rituals connected to "fertility and/or sexuality," thus only implying but not directly engaging with the subject of eroticism (Jones 2001, 264). As noted by Senta German (2000, 103), "women's bodies appear to be strategically clothed to reveal and accentuate" the breasts. Morris (2009a, 243) aptly drew attention both to the centrality of bared breasts in Minoan costume and to the lack of focused scholarly attention that it received, "it is perhaps surprising that there has not been more extended discussion of what is a highly distinctive costume, one which not only exposes, but also sometimes shapes, and always frames and draws attention to the breast area." She suggests that it is generally rather unusual for clothing to be specifically *designed* to display the breasts in a very deliberate and direct way, unlike the accidentally "slipped chiton" and the symbolism of sexual vulnerability in Classical Greece (Morris 2009a, 244).

Female breasts are at the core of the most important aspects of the human experience: love, sex, attraction, child-birth, nourishment, and beauty. While the rich and numerous layers of symbolic meaning of the breasts are important to understand, the most fundamental biological response which they elicit is not to be dismissed, suppressed, or ignored. The raw, primeval, and arousing power of female breasts represents an evolutionary force which is even stronger than the survival instinct. A desire for a particular sexual partner and an object of one's love is capable of overriding all other human desires and pursuits. It can even override the most fundamental human instinct, that of self-preservation, and drive humans to do irrational, reckless, and life-threatening things (Miller 2000, 255), exhibit homicidal (Morrall 2006) and suicidal (Love et al. 2018; Yaseen 2012; ABS-CBN News 2011) behavior, and perform heroic acts of sacrificing their own life for the sake of their mate which inspires so many songs, poems, myths, plays, folk tales, and literary masterpieces throughout human history.

Nudity and Sex

Full female nudity is practically absent in Bronze Age Crete (Budin 2011; Hitchcock and Nikolaidou 2012, 511; Vetters and Weilhartner 2018, 552). Unlike the Egyptian sheath dress which tightly clings to the body and accentuates the pubic triangle, or the full-frontal nudity associated with the iconography of the Near Eastern goddesses Astarte, Ishtar, or Inanna (Bahrani 1993; Budin 2001), Minoan women's lower body is almost always concealed by a floor-length, opaque, bell-shaped, and sometimes flounced skirt (Jones 2015, 57–65). There is only a handful of exceptions from this rule: rather atypical examples of seated terracotta figurines published by Stephanie Böhm (1990); an anthropomorphic clay vessel from Gournia, Crete dated to the LM III A2/B period which represents a crouching female with an enlarged vulva (Rethemiotakis 2001, 24–25, fig. 27); and a bronze figurine from Makrygialos dated to the LM I B period which was featured by Eleni Mantzourani in her 2012 publication as the only bronze female figurine and one of few meager exceptions in any medium that depict full female nudity. The figurine has a crude-looking and nearly rectangular-shaped depression with a spherical protrusion on its ventral surface which is

thought to depict a woman's clitoris (Mantzourani 2012, figs. 12.2–3), however, the figure is not truly nude. The woman is depicted wearing the customary long skirt which completely obscures her lower body below the belted waist. Even if the craftsperson attempted to break the social and religious taboo of full female nudity, he or she seemingly avoided overstepping that boundary entirely by removing the skirt.[5]

*Fig. 6: Seal from Galana Harakia, Viannos, Crete (*CMS *II 1, no. 446a; courtesy of the* CMS *Heidelberg).*

*Fig. 7: Gold signet-ring (*CMS *VII, no. 68; courtesy of the* CMS *Heidelberg).*

Strategic exposing of certain body parts, such as breasts, and concealment of others can indicate some degree of ritualization and symbolism attached to the garment. Possibly, the pubic area was concealed in Bronze Age Crete for the same reason why unambiguous depiction of an intercourse and intimacy between the sexes was forbidden or discouraged. There are two pieces that are sometimes considered to be exceptions but both of these rather illustrate the old proverb in which an exception proves the rule. The first one, an EM III–MM I A seal from Galana Harakia in the Viannos region of Crete (*CMS* II 1, no. 446a) is referred to by Gerald Cadogan (2009, 228) as "just one certain depiction" of a copulating couple before the Final Palatial period (Fig. 6). It shows two anthropomorphic creatures which appear to be embracing, however, they are definitely not fully human. These two figures have pronounced avian features such as large beaks and three sharp claws on each foot, and since they are both flat-chested, their gender is ambiguous or, possibly, male in both cases. The scene might be implying sexual intimacy or a mere friendly hug but it is almost as if the craftsperson tried to circumvent a taboo by including enough animal features to avoid violating the rules for human representations. Depictions of sexual intercourse between animals are rare but likely not forbidden, as can be seen in images on seals such as *CMS* VII, no. 68 (Fig. 7), *CMS* II 2, no. 306a, and possibly *CMS* II 1, no. 369, as well as few examples in other media, such as a miniature terracotta figurine (Rehak 2009, 15, pl. IIg). The second piece that is considered an exception from the human intimacy rule, or rather the rule of its absence in pictorial representations, is the LM III B clay model from Lastros, Siteia (Platon 2016) depicting a man and a woman inside of a large bathtub. However, there is no touch or interaction between the figures, these two are placed on the opposite ends of the long tub, far away and out of reach of each other (Platon 2016, figs. 1, 4). The man has what looks like an erect penis, however, the female is not fully nude but wearing a full-length skirt (Platon 2016, figs. 4–6).

Visual representations are in a very intricate and tightly interconnected relationship with real life and this relationship is not a constant construct but a continuous process (Adams 2013, 4). Iconography reflects reality, conscious and subconscious thought patterns, cultural practices, etc., but images also influence realty, impact people's understanding of life, of themselves, of culture-specific norms, and codes of behavior on a continuous basis, both unconsciously and as part of a deliberate strategy (Adams 2013, 4, 17–18). Mediating of mate selection modes and procrea-

---

5 To add to this discussion, Senta German (2000, 105–108) identifies a number of sealings from the unique Zakros Master workshop group as representations of female nudity and the only erotic images in Minoan Crete. However, none of these figures are fully human, they all represent fantastic hybrid creatures or even mere emblems consisting of animal and human body parts. The sealing with an ox-headed figure with bird's wings and tail, and human female breasts and legs, which German (2000, fig. 8.5) gives as an example of nudity and erotica, hardly represents either since depiction of any type of sexual organ is entirely absent between the creature's squatting spread-out legs.

tion strategies occurs in every society, however, a degree of importance, regulation, and focus which is placed on this sphere varies in different time periods, geographic topoi, and cultures. The subject of regulation and control of sexuality is extensively studied in the context of modern societies and organized religions (Inglis 2005; Bouhdiba 2007; Wiesner-Hanks 2010) where along with texts, the iconographic sphere historically gets controlled and molded by means of framing visual modes and narratives, shaping emotional and intellectual responses of viewers, suppressing or amplifying instinctual responses, manipulating context, prohibiting, including, and excluding. However, this subject is far less understood in the context of Aegean prehistory due to the objective lack and fragmentary nature of available evidence. When it comes to such a fundamental part of life as human intimacy and sex, its iconographic omission (Rehak 1998, 193; Cadogan 2009, 227–228; Vetters and Weilhartner 2018, 553) is no less, if not more important and informative than its inclusion. It appears to be a deliberate decision, a conscious choice which reflects both a great importance of this sphere and attention given to its mediation and control.

Both subtle representations of intimate gestures and explicit depictions of sex were produced in Egypt (*e.g.* the canonical embracing pose of a pharaoh and his wife; the Turin Erotic Papyrus #55001 from Deir el-Medina: Omlin 1973; Shokeir and Hussein 2004), and the Near East (*e.g.* Mesopotamian terracotta plaques with embracing couples and sexual intercourse: Leick 2008) but Minoan Crete clearly chose to reject these external iconographic influences (Vetters and Weilhartner 2018, 553). The virtual absence of nursing scenes or *kourotrophoi* in Minoan art (Olsen 1998, 380–381; 2014, 5; Cadogan 2009, 228; Adams 2013, 5), the scenes which were quite prominent in their Mediterranean neighbors' and trade partners' (Panagiotopoulos 2001) iconographies, shows the same selectivity, a deliberate choice rather than an accident. Stephanie Budin (2011) also points out that it seems, Minoans actively resisted a temptation to mimic the iconographic expression of these cultural and religious customs of their neighbors. If despite the awareness about foreign iconographic approaches to this important human sphere, the Minoans merely considered it too religiously or culturally irrelevant to depict in their own context, it would have been almost impossible not to find at least a handful of occasional artistic experiments or informal images depicting such common and universal concepts as female nudity, breastfeeding, intimacy, and sex, unless there was at least some level of a centralized effort to suppress, ban, or discourage such depictions. Thousands of Minoan artisans over many centuries were spending long hours in their workspaces in towns and villages all over the island and utilized their observations of the surrounding nature, people, and their daily life in their work, experimenting with composition, style, techniques, and subject matter. Practically, the only way of preventing every single craftsman, ultimately, a regular man with human instincts, biology, creativity, and inquisitive mind, in every corner of Minoan Crete from producing depictions of what he might have fantasized about/felt towards/did in bed with his wife or partner, of seeing her bathing in the nude or while breastfeeding their child – the most common and natural activities – would have to have been an upbringing and education in the culturally and/or religiously-inspired ideological environment where images related to sex and procreation were regulated and restricted. The iconographic control of sex and child-nursing seems to be an important tool of managing religious and social order, of formation and retention of cultural identity, and of social cohesion in Minoan Crete. It appears that sex and breast-feeding were considered to be sacred, ritualized, and concealed in secrecy, possibly something too sacred to depict. Interconnectedness of sex, love, and religion (Goldberg 1932), viewing sex as a deeply sacred and secret ritual, and considering life, sexual pleasure, and love as gifts of the Goddess is a long-standing concept (Eisler 1995, 15–16, 58–62). So, while this likely prohibition and secrecy are unusual if compared to the larger Mediterranean context in the Bronze Age, these attitudes are not lacking their own intrinsic logic, rationale, and purpose. After all, this is only one of many ways in which Minoan Crete differed from its neighbors.

Minoan Garments

When it comes to the luxurious and elaborately decorated female attire in Minoan Crete, it would have taken a significant investment of time and material to create, therefore, unlikely to have been worn everyday while performing strenuous and messy labor tasks such as tending to domestic animals, crops, food preparation, or crafts. The special religious significance of Minoan dress can be seen in the faience plaques from the Temple Repositories at Knossos in the shape of the ornate female garments (Evans 1921, 506, fig. 364a–b; Foster 1979, 86–89, pl. 17, figs. 17–18; Panagiotaki 1993, 1995; Adams 2013, 14–15, fig. 4c). It is depicted worn by goddesses and women primarily in religious contexts, so the exposing of the breasts in public by Minoan women possibly was reserved exclusively for ritual activities and religious events. Biologically speaking, the ritualized revealing of breasts in a public setting can be seen as an action utilized for sexual arousal of men, fertility display, and a signal for the start of the competition for mating privileges. The long skirt in Minoan costume, on the other hand, acts as a formidable wall, a fortress that needs to be scaled to be brought down in order to get inside, to the 'holy of holies'. In the case of older women wearing the same garments, like those seen on the Thera frescoes (Davis 1986, 403–404; Doumas 1992) where the women are seen in clearly ritualized and religious contexts, their dresses might symbolize the fertility goddess who presides over the mate selection rituals or these might signify their priesthood status/service to the goddess and/or their teaching capacity and facilitation of fertility and mate selection rituals for younger participants as if in a right-of-passage cycle of generations (Karageorghis 1990).

The primary male garments are a short kilt, a loincloth and a codpiece worn with a belt (Rehak 1996, 42–45; Lee 2000, 116). However, there is a pronounced preference for the codpiece or as Mireille Lee (2000, 116) aptly identified it, a "phallic sheath," in figures depicted in the so-called worshiper pose which is primarily associated with and/or addressed to a female, especially in Minoan glyptic, such as *CMS* II 8, no. 256 (Fig. 5) and *CMS* V, no. 199 (Fig. 8a). Men participating in public rituals are usually depicted wearing nothing besides a loincloth or a codpiece that accentuates their phalluses and allows them to exhibit their slender, toned, and youthful physiques, for example, as can be seen in the famous Sacred Grove and Dance Fresco from Knossos (Evans 1930, 66–67, pl. XVIII; Davis 1987, 158). The gold signet-ring *CMS* V, no. 199 (Fig. 8a) is an even more direct illustration of a male physical and sexual fitness display represented by the man's enlarged erect penis exhibited to a seated female who has exposed breasts and points to or holds one of her breasts with her hand. Similarly, a gold signet-ring from Kumköy (Kilyos; *CMS* XI, no. 28) displays a man with an erect phallus addressing a bare-breasted female (Fig. 8b).

Male Body in Minoan Crete

In Minoan Crete, males are depicted almost exclusively with lean, youthful, athletically-built, and idealized bodies, possessing broad shoulders, thin waists, and long toned legs. Probably, the most common and fundamental male stance is the worshipper pose which is associated with Minoan cult activities. The men are depicted standing upright, with their shoulders lowered and brought back, chests and/or groin protruding forward, and hand gesture in which the right hand is placed to the forehead and the left one rests along the side of the body (Figs. 5, 9a–c). A possibly related gesture displays both
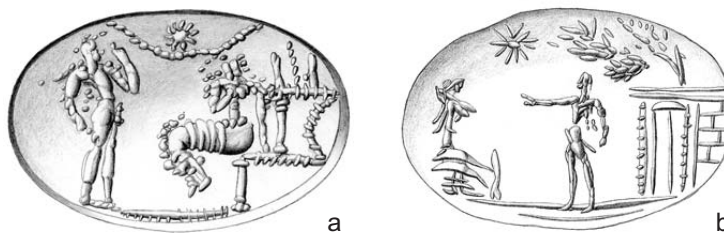

Fig. 8: a) Gold signet-ring from Thebes, Boeotia (CMS *V, no. 199; courtesy of the* CMS *Heidelberg); b) Gold signet-ring from Kumköy (Kilyos) (*CMS XI, no. 28; courtesy of the* CMS *Heidelberg).*

Fig. 9: a) Male figurine, bronze, end of MM III–LM I A after Verlinden 1984, pl. 12, no. 28); b) Male figurine, bronze, from Tylissos, end of MM III–LM I A (after Verlinden 1984, pl. 28, no. 56); c) Male figurine, bronze, end of MM III–LM I A after Verlinden 1984, pl. 10, no. 24).

Fig. 10: Clay figurine from Petsophas (after Andreadaki-Vlazaki et al. [eds.] 2008: 222, #177).

hands placed on the chest with bent arms positioned at about 90-degree angle to the body (Fig. 10). Slight variations of these two gestures are also present. These are usually understood as gestures of "prayer or adoration" (Lee 2000, 116; Morris 2009 b, 182). Yet, the worshipper stance and its variations are not those of modesty or bodily shame. There is no attempt to hide the body, quite the contrary, the body in its youthful physical prime is proudly displayed and celebrated. Interpreting the canonical stance of Minoan males through kinesics, a field in psychology that studies nonverbal communication and behavior, this pose in its context can be understood as communicating a range of messages centered around assertiveness, self-presentation as part of impression management, display of fitness, of readiness, and/ or of valor, competitiveness, pride, and self-dedication (Birdwhistell 1970; Knapp et al. 2013). This stance is far from submission and humility before gods as the term 'worshipper' may imply. Instead, this characteristic display of the body projects confidence and solicits evaluation of physical fitness, health, strength, and reproductive fitness, hence, may be related to sexual selection. Such nonverbal human behavior has been linked with a common animal behavior where an expanded and brought-forward chest communicates strength and pugnacity to other males in sexual competition for a female and displays sexual fitness to a potential mate (Buss 2016, 13).

Minoan male figures often display an emphasized erect reproductive organ, either nude or more often, accentuated by a codpiece or a loincloth garment, which is seen especially frequently in religious contexts. It appears that the worshipper stance is associated with a specific performative aspect of religious practice which was focused on displaying male procreative fitness to a female goddess and human women of fertile age who could have been viewed both as potential mates and as representatives, avatars, or embodiments of the goddess. The male worshiper figurines were most commonly produced in bronze and clay and their function is most commonly identified as votive (Lee 2000, 116). An extensive representative sample published in the volume on anthropomorphic bronze figurines from Bronze Age Crete by Verlinden (1984) has been analyzed by the author for the present study. There are ninety-four

identifiable and preserved below the waist male figurines in total from the Protopalatial to Postpalatial period, 67 of which exhibit an erect, enlarged, and/or emphasized penis,[6] which is 71% of the total (Fig. 9a–c). Out of the remaining figurines, fifteen are too schematic and crude or poorly preserved to clearly identify their anatomy and in twelve, the penis is not visible or concealed by a garment. Out of the ninety-four total, five figurines conform to the male worshiper iconography and masculine body proportions but contain both a phallus and female-like, accentuated breasts, which might represent either hermaphrodite, homosexual, or non-binary status.[7] These appear to perform the male gender role.

A similar emphasis on the male primary sex characteristic is seen in numerous clay figurines from Minoan peak sanctuaries, such as male torsos from the peak sanctuary of Vrysinas (Tzachili 2012, figs. 25.1–2), the "Vrysinas Ephebe" (Sphakianakis 2012, figs. 22.1–2), and worshiper-type figurines found in the Minoan peak sanctuary at Petsophas (Rutkowski 1991, 58–73, pls. A–B, III–X, XII–XIII, XV–XVIII, XX, XXII; Nowicki 2012). Whether wearing a phallus sheath or being nude, many of the Petsophas figurines display an emphasis on the groin area, and the penis appears erect and exaggerated in size. This fact can be confirmed by means of a comparative analysis of numerical ratios.[8] A representative example of the male clay figurines from the peak sanctuary at Petsophas is the MM II Agios Nikolaos AM #9953 (Fig. 10; Platon 1951, 120–122; Rutkowski 1972, 73–98; Zographaki 2008, 222, #177). The ratio of the height of the figurine to the erect penile length is 5.54, which is less than half of the average human ratio of 13 (see footnote 3 for the calculations), hence, clearly shows the significantly enlarged relative size of the phallus. The ratio of the figurine's height to penile diameter is 18, which is 2.6 times lower than the corresponding ratio of the 46.17 average recorded in human males. Similarly, the ratio of the height to penile length of another nude figurine from the same context, Agios Nikolaos AM #9955 (Platon 1951, 120–122; Zographaki 2008, 223, #178), is 6.92. Quantifiably, this seems to indicate that the male sexual organ and procreative potential are greatly emphasized and appear to represent an important aspect of Minoan religious practice.

Gender Roles and Interactions

In Bronze Age Cretan iconography, men seem to display their procreative fitness to women, possibly competing amongst each other for a mate, while women appear as decision-makers, choosing if the men should be allowed access to the evolutionary prize of procreation which they themselves control physically and female divinities control on a symbolic level. These power dynamics can be recognized in images carved on seals, where men appear in an obeisant, adorant, or supplicating position and women are depicted either physically elevated above men (Fig. 5), seated, often on a platform, while a man stands before them (Figs. 8a–b, 11–12), and/or hierarchically larger in scale (Figs. 11–12; Graeber and Wengrow 2021, 485). Louise Hitchcock and Marianna Nikolaidou (2012, 508) suggest that "female identity is associated with collectivity while male identity is defined by individuality". However, it might be somewhat anachronistic and unjustly dismissive of femineity to consider men's participation in warfare, hunting, and sports to represent "individual 'real-life' achievements" in contrast to "the stereotypical symbolism surrounding femininity" (Hitchcock and Nikolaidou 2012, 510) as an indication of superior importance or

---

6 Verlinden 1984, cat. #11, 22, 24, 28, 31, 41–42, 44–49, 52, 54–58, 60, 62, 77, 80–81, 84, 87–88, 93–94, 97–98, 101–108, 110–113, 115, 128, 133, 135, 139, 140, 142, 144–146, 150–151, 153–156, 159, 161–164, 167, 179, 187.

7 Verlinden 1984, cat. #11, 154, 180, 185, 187.

8 Compiled data of 21 independent studies completed between 1985 and 2014 among volunteers from sixteen different countries in Europe, North America, Asia, Africa, and the Middle East, collectively including

15,521 men produced the total average erect penile length of 13.12 cm, 13.24 cm total average stretched penile length, and 3.71 cm total average erect penile diameter (Veale et al. 2014, 981, table 1). Using data from a 2016 study which calculated the World average height of males as 171.28 cm (NCD-RisC 2016; Roser, Appel, and Ritchie 2013), the ratio of the average male height to the erect penile length is 13.05 and to the average stretched penile length is 12.94 (13 is the average of these two ratios).

Fig. 11: Gold signet-ring from My-
cenae (CMS I, no. 101; courtesy
of the CMS Heidelberg).

Fig. 12: Lentoid seal, chlorite (?)
(CMS X, no. 261; courtesy of the
CMS Heidelberg).

leading role of men in Mi-
noan society. Men providing
protection, doing the most
physically taxing and danger-
ous work, serving fruits of
their labor to women, as well
as competing with each other
and supplicating women for
procreative privileges may not
have been viewed by the Mi-
noan society in the same way
as it is viewed in the modern
Western society today. As far
as the greater "individuality"
of men in Minoan iconog-
raphy, the Grandstand Fresco
from Knossos (Fig. 13; Evans
1930, 46–57, figs. 28–34, pls.
XVI–XVII) shows rather the
opposite, *i.e.* men are repre-
sented as a uniform crowd, a
mass of identical heads, while
most women are represented
fully as individuals, with dif-
ferent poses and gestures,
dress details, seated centrally
and leisurely conversing with
each other (Adams 2013, 9–

Fig. 13: The Grand Stand fresco, Knossos (after Evans 1930, pl. XVI).

10), or standing on elevated stepped platforms high above the crowd. Modern sciences beyond ar-
chaeology might provide a helpful key for better understanding of Minoan gender roles and rela-
tionship dynamics.

Sexual Selection

Charles Darwin's groundbreaking discoveries published in his works *The Origin of Species* and
The Descent of Man (1936) which were related to the theory of the natural selection quickly re-
ceived world-wide acceptance. However, his theory of sexual selection through female choice was
largely rejected and suppressed due to the profound ideological biases and sexism of the Victor-
ian England and the 19th century Western world at large. For many decades, until the 1970's,
the concept that the females were the decision-makers, in control of the fundamental evolution-
ary mechanism, was considered unthinkable and was either harshly criticized or ignored alto-
gether. In the late 1970s and 1980s a breakthrough in theoretical application of sexual selection
to humans was pioneered by evolutionary psychologist David M. Buss, who, along with a num-
ber of his colleagues, was at the forefront of the creation of a new discipline, evolutionary psy-
chology (Buss 1994, 1995). A significant advancement in human-mating research came with
Buss' extensive cross-cultural study of human mating behavior, published in 1989, that included
10,047 individuals from Europe, North and South Americas, Asia, Middle East, Australia and
Africa, from both urban and rural backgrounds, of various ages, levels of education, and social,
political and economic systems, with collaborators from across 37 cultures (Buss 1989), which
was replicated in 2020 across forty-five countries, engaging 14,399 respondents (Walter et al.
2020). Both studies confirmed previous evolutionary hypotheses and showed a robust and consis-
tent set of universal sex differences in preferences for mate attractiveness, some of which can be

successfully utilized in the field of the Aegean prehistory. The original study showed that in thirty-six out of thirty-seven cultures, women rated men's ability to acquire and confer resources as the most important factor in their mate selection, and in thirty-four out of thirty-seven cultures men preferred partners characterized by physical attractiveness, a value which corresponds with a high reproductive potential (Buss 1989, 1–14). The most recent study followed closely and confirmed these findings (Walter et al. 2020, 408–423). These values are a product of millions of years of human evolutionary history, and their roots can be found deeply in animal sexual selection processes. Sexual courtship has been understood since the age of Darwin as "one of the riskiest, most exhausting, most complex activities in the animal world", as evolutionary psychologist Geoffrey Miller (2000, 50) aptly described it in his influential book *The Mating Mind: How Sexual Choice Shaped the Evolution of Human Nature.* One may not agree with a rather reductionist view of sociobiologist Edward Williams (1975, 138) that "in its game of life the masculine sex is playing for higher stakes", which diminishes the high stakes of a female's mate choice that determines survival and procreative success of herself and her offspring, however, the risks of male-to-male competition for a mate and displays of sexual fitness to females are undeniable. In the animal world, the bizarre and conspicuous forms of sexual competition go as far as endangering survival of individuals and entire species (Buss 2016, 3). Because it is adaptive to males to feign fitness, whether or not they are truly fit, the adaptive response of the females is "to be resistant to courtship – thereby evoking further and stronger displays – in order to discriminate genuinely fit males" (Symons 1979, 24). This animal behavior forms the foundation of the human sexual selection through female choice where men compete and attempt to display their procreative fitness and capability to acquire resources to women and women often fend off initial courtship and play hard to get in order to scrutinize the suitors' fitness and decide who is worthy to be granted the privileges of mating and procreation.

Conclusion

The dangerous competitiveness of animal sexual selection can be directly linked to human sports. Such human activities can be seen as a highly risky behavior which does not always justify the benefit of improving physical fitness or fighting skills purely from the standpoint of a survival strategy. Sports may overamplify the risks to a participant's health and life, historically, without an explicit monetary prize, providing only a symbolic prize of status, at the same time, "each sport could be viewed as a system for amplifying minor differences in physical fitness into easily perceivable status differences, to make sexual choice easier and more accurate" (Miller 2000, 253). Male contests serve as an important mechanism of human sexual selection (Puts 2010). The Minoan sport of bull-leaping (Younger 1976; Marinatos 2005, 155–158; McInerney 2011; Shapland 2013) would not prepare one for a military combat and would be too risky and inefficient to merely increase physical fitness or appease a divinity. It is more likely that the reproductive advantages and access to a pool of sexual partners at the top of their fertile prime were the fundamental rationales for the bull-leaping sport in Bronze Age Crete. Likely, it operated as a part of an overarching social fabric and religious apparatus which was structured around sexual selection. In fact, males of all species of mammals in the animal kingdom risk incurring injury or death in ritualized sexual competition, following a very specific and repeated format and sequence of steps in mating games (Miller 2000, 255). Just as in the animal world, men compete, women choose. Women determine which male is fit to mate and to leave their genetic imprint through their offspring, and which males will remain genetic dead ends. Just as nature intended, women are in control of the evolutionary course. This most fundamental and meaningful mechanism of sexual selection appears to be at the core of Minoan society and religion which is reflected in the notably prominent and at times hierarchically superior position of women in the Minoan iconographic tradition, be it on seal-stones, frescoes, or in other media. The separation of the sexes often seen in Minoan imagery, such as the Grandstand Fresco from Knossos (Fig. 13; Evans 1930, 46–57, figs. 28–34, pls. XVI, XVII), potentially acted as the mechanism to systema-

tically control the access and mode of interaction between the sexes, to heighten anticipation and excitement, as well as to intensify and mediate the emotional and physical response to the ritualized coming together of the sexes. The apparent restrictions placed on depiction of human intimacy and sex in Minoan Crete seem to have served a similar function. In the striking absence of such common Egyptian and Near Eastern motifs in the Minoan iconographic canon as a self-aggrandizing male ruler smiting his enemies, promoting his military accomplishments, or advertising his closeness to gods, it appears that the political and religious ruling elites on Crete were using a different mechanism of maintaining social cohesion and control, one that utilized ritualization, mediation, and control of the people's sexual selection and modes of procreation, and following nature's course, a significant role in this mechanism was reserved for women. A synthesis of the main iconographic features in Minoan representations of male and female bodies presents numerous indicators supporting this hypothesis. As it has been proposed above, the ultra-low female WHR values, the large-size and exposed female breasts which, both alone and especially in combination with the low WHR numbers, act as a heightened sexual stimulus as well as a display of general health and physiological fertility (linked with the levels of female hormones), the emphasis on erect and prominent male penises in the ritual, competitive, and female-oriented contexts, the so-called worshipper pose and bull-leaping sport acting as displays of male physical and procreative fitness to females – all these features seem to point to the centrality of sexual selection and physical fertility in Minoan society and religion. Hence, the ritualized practice, symbolic reenactment, and celebration of the natural process of sexual selection in Minoan culture can be seen as carrying a deep logic, wisdom, and something not only culturally distinctive but also relatable for us both as scholars and human beings.

Acknowledgements

References

ABS-CBN News. 2011. "Love is number one reason for suicide: expert." https://news.abs-cbn.com/lifestyle/09/26/11/love-number-one-reason-suicide-expert.

Adams, E. 2013. "Representing, objectifying, and framing the body at Late Bronze Age Knossos." *BICS* 56 (1): 1–25.

Alberti, B. 2001. "Faience goddesses and ivory bull-leapers: the aesthetics of sexual difference at Late Bronze Age Knossos." In *Archaeology and Aesthetics. WorldArch* 33(2): 189–205.

Alberti, B. 2002. "Gender and the figurative art of Late Bronze Age Knossos." In *Labyrinth revisited: rethinking Minoan archaeology,* edited by Y. Hamilakis, 98–117. Stanford: Stanford University Press.

Andreadaki-Vlazaki, M., G. Rethemiotakis, and N. Dimopoulou-Rethemiotaki, eds. 2008. *From the Land of the Labyrinth: Minoan Crete, 3000–1100 B.C.* Catalogue. New York and Athens: Alexander S. Onassis Public Benefit Foundation, in collaboration with the Hellenic Ministry of Culture and the Archaeological Museum of Crete

Bahrani, Z. 1993. "Notes in the history of art." In *Essays on nudity in antiquity in memory of Otto Brendel,* Vol. 12 (2), 12–19. Chicago: The University of Chicago Press.

Barber, N. 2013. "Sexual wiring of women's breasts: neuroscientists establish breasts as sexual organs." *Psychology Today.* https://www.psychologytoday.com/us/blog/the-human-beast/201305/sexual-wiring-womens-breasts.

Birdwhistell, R. 1970. *Kinesics and context.* Philadelphia: University of Pennsylvania Press.

Bjorntorp, P. 1987. "Fat cell distribution and metabolism." In *Human obesity,* edited by R. J. Wurtman and J. J. Wurtman. New York: New York Academy of Sciences.

Böhm, S. 1990. *Die 'nackte Göttin'. Zur Ikonographie und Deutung unbekleideter weiblicher Figuren in der frühgriechischen Kunst.* Mainz: von Zabern.

Bouhdiba, A. 2007. *Sexuality in Islam.* London: Routledge.

Bovet, J., and M. Raymond. 2015. "Preferred women's waist-to-hip ratio variation over the last 2,500 years." *PLoS ONE* 10(4). https://doi.org/10.1371/journal.pone.0123284.

Budin, S. L. 2001. "An identification of the "nude goddess"." *AJA* 105: 302.

Budin, S. L. 2011. *Images of woman and child from the Bronze Age: reconsidering fertility, maternity, and gender in the ancient world.* Cambridge: Cambridge University Press.

Buss, D. M. 1989. "Sex differences in human mate preferences: evolutionary hypotheses tested in 37 cultures." *Behavioral and Brain Sciences* 12 (1): 1–14. https://doi.org/10.1017/S0140525X00023992.

Buss, D. M. 1994. *The evolution of desire: strategies of human mating.* New York: Basic Books.

Buss, D. M. 1995. "Evolutionary psychology: a new paradigm for psychological science." *Psychological Inquiry* 6: 1–30.

Buss, D. M. (ed.) 2005. *The Handbook of Evolutionary Psychology.* Weinheim: Wiley.

Buss, D. M. 2016. *The evolution of desire: strategies of human mating.* Revised and updated ed., New York: Basic Books.

Butovskaya, M., A. Sorokowska, M. Karwowski, A. Sabiniewicz, J. Fedenok, D. Dronova, M. Negasheva, E. Selivanova, and P. Sorokowski. 2017. "Waist-to-hip ratio, body-mass index, age and number of children in seven traditional societies." *Scientific Reports* 7 (1622): 1–9.

Cadogan, G. 2009. "Gender metaphors of social stratigraphy in the pre-Linear B Crete, or is "Minoan gynecocracy" (still) credible?" In *FYLO: Engendering prehistoric 'stratigraphies' in the Aegean and the Mediterranean, Proceedings of an International Conference, University of Crete, Rethymno 2–5 June 2005,* edited by K. Kopaka, 225–232. *Aegaeum* 30. Liège and Austin: Université de Liège and UT-PASP.

Cain, C. D. 2001. "Dancing in the dark: deconstructing a narrative of epiphany on the Isopata Ring." *AJA* 105: 27–49.

Darwin, C. 1936. *The origin of species and the descent of man.* Modern Library Giant, G27 (Random House), New York.

Davis, E. N. 1987. "The Knossos miniature frescoes and the function of the central courts." In *The function of the Minoan palaces. Proceedings of the Fourth International Symposium at the Swedish Institute in Athens, 10–16 June, 1984.* edited by R. Hägg and N. Marinatos, 157–161. Swedish Institute in Athens, Series 4°, 35. Stockholm: Paul Åströms Förlag.

Del Prado, M., S. Villapando, A. Lance, E. Alfonso, H. Demmelmar, and B. Koletzko. 2000. "Contribution of dietary and newly formed arachidonic acid to milk secretion in women in low fat diets." *Advances in Experimental Medicine and Biology 478:* 407–408.

Dixson, B. J., A. F. Dixson, B. Li, and M. J. Anderson. 2007. "Studies of human physique and sexual attractiveness: sexual preferences of men and women in China." *American Journal of Human Biology* 19: 88–95.

Dixson, B. J., A. F. Dixson, P. Bishop, and A. Parish. 2008. "Human physique and sexual attractiveness in men and women: a New Zealand-U. S. comparative study." *Archives of Sexual Behavior* 39: 798–806.

Dixson, B. J., B. Li, and A. F. Dixson. 2010a. "Female waist-to-hip ratio, body mass index and sexual attractiveness in China." *Current Zoology* 56 (2): 175–181.

Dixson, B. J., K. Sagata, W. L. Linklater, and A. F. Dixson. 2010b. "Male preferences for female waist-to-hip ratio and body mass index in the highlands of Papua New Guinea." *American Journal of Physical Anthropology* 141: 620–625.

Dixson, B. J., G. M. Grimshaw, W. L. Linklater, and A. F. Dixson 2011. "Eye-tracking of men's preferences for waist-to-hip ratio and breast size of women." *Archives of Sexual Behavior* 40: 43–50.

Eisler, R. 1995. *Sacred pleasure: sex, myth, and the politics of the body.* San Francisco: Harper.

Evans, A. 1921. *The Palace of Minos at Knossos,* Vol. I, London: Macmillan.

Evans, A. 1930. *The Palace of Minos at Knossos,* Vol. III, London: Macmillan.

Folsom, A. R., S. A. Kaye, T. A. Sellers, C. Hong, J. R. Cerhan, J. D. Potter, and R. J. Prineas. 1993. "Body fat distribution and 5-year risk of death in older women." *Journal of the American Medical Association* 269: 483–487.

Ford, C. S., and F. A. Beach. 1951. *Patterns of sexual behavior.* New York: Harper.

Foster, K. P. 1979. *Aegean faience of the Bronze Age.* New Haven and London: Yale University Press.

Furnham, A., T. Tan, and C. McManus. 1997. "Waist-to-hip-ratio and preference for body shape: a replication and extension." *Personality and Individual Differences* 22: 539–549.

Furnham, A., M. Dias, and A. McClelland. 1998. "The role of body weight, waist-to-hip ratio, and breast size in judgments of female attractiveness." *Sex Roles* 39 (3–4): 311–326.

Furnham, A., V. Swami, and K. Shah. 2006. "Body weight, waist-to-hip ratio and breast size correlates of ratings of attractiveness and health." *Personality and Individual Differences* 41: 443–454.

German, S. C. 2000. "The human form in the Late Bronze Age Aegean." In *Reading the Body. Representations and Remains in the Archaeological Record,* edited by A. E. Rautman. 95–123. Philadelphia: University of Pennsylvania Press.

Gimbutas, M. 1974. *The gods and goddesses of old Europe, 7000 to 3500 B.C.: myths, legends and cult images.* Berkeley and Los Angeles: University of California Press.

Gimbutas, M. 1989. *The language of the goddess: unearthing the hidden symbols of western civilization.* San Francisco: Harper & Row.

Goldberg, B. Z. 1932. *The sacred fire: the story of sex in religion.* Horace Liveright, New York.

Goodison, L. 2009. "Gender, body and the Minoans." In *FYLO. Engendering prehistoric 'stratigraphies' in the Aegean and the Mediterranean, Proceedings of an International Conference, University of Crete, Rethymno 2–5 June 2005,* edited by K. Kopaka, 233–242. *Aegaeum* 30. Liège and Austin: Université de Liège and UT-PASP.

Graeber, D., and D. Wengrow. 2021. *The dawn of everything: a new history of humanity.* Signal: McClelland & Stewart.

Inglis, T. 2005. "Origins and legacies of Irish prudery: sexuality and social control in modern Ireland." *Éire-Ireland* 40 (3–4): 9–37.

James, E. O. 1959. *The cult of the Mother Goddess: an archaeological and documentary study.* New York: Praeger.

Jasieńska, A., A. Ziomkiewicz, P. T. Ellison, S. F. Lipson, and I. Thune. 2004. "Large breasts and narrow waists indicate high reproductive potential in women." *Proceedings of the Royal Society, Biological Sciences* 271 (1545): 1213–1217.

Jones, B. R. 2001. "The Minoan 'Snake Goddess': new interpretations of her costume and identity." In *Potnia. Deities and religion in the Aegean Bronze Age: proceedings of the 8th International Aegean Conference, Göteborg, Göteborg University, 12–15 April 2000,* edited by R. Laffineur and R. Hägg, 259–265. *Aegaeum* 22. Liège and Austin: Université de Liège and UT-PASP.

Jones, B. R. 2015. *Ariadne's threads: the construction and significance of clothes in the Aegean Bronze Age. Aegaeum* 38. Leuven and Liège: Peeters.

Jones, B. R. 2016. "The three Minoan 'Snake Goddesses'." In *Studies in Aegean art and culture: a New York Aegean Bronze Age colloquium in memory of Ellen N. Davis,* 93–112. edited by R. B. Koehl. Philadelphia, Pennsylvania: INSTAP Academic Press.

Keller, M. L. 1998. "Crete of the Mother Goddess: communal rituals and sacred art." *ReVision,* 20, 3, Research Library: 12–16.

Knapp, M. L., J. A. Hall, and T. G. Horgan. 2013. *Nonverbal communication in human interaction,* 8th ed., Cengage Learning.

Koehl, R. B. 1986. "The Chieftain Cup and a Minoan 'rite of passage'." *JHS* 106: 99–110.

Koehl, R. B. 2016. "The Chieftain Cup and beyond: more images relating to Minoan male 'rites of passage'." In *Studies in Aegean art and culture: a New York Aegean Bronze Age colloquium in memory of Ellen N. Davis,* 113–131. edited by R. B. Koehl. Philadelphia, Pennsylvania: INSTAP Academic Press.

Komisaruk, B. R., et al. 2011. "Women's clitoris, vagina, and cervix mapped on the sensory cortex: fMRI evidence." *The Journal of Sexual Medicine,* 8: 2822–2830.

Kopaka, K. (ed.) 2009. *FYLO. Engendering prehistoric "stratigraphies" in the Aegean and the Mediterranean. Proceedings of an International Conference, University of Crete, Rethymno, 2–5 June 2005. Aegaeum* 30. Liège and Austin: Université de Liège and UT-PASP.

Lassek, W. D., and S. J.C. Gaulin. 2008. "Waist-hip ratio and cognitive ability: is gluteofemoral fat a privileged store of neurodevelopmental resources?" *Evolution and Human Behavior* 29: 26–34.

Love, H. A., D. P. Nalbone, L. L. Hecker, K. A. Sweeney, and P. Dharnidharka. 2018. "Suicidal risk following the termination of romantic relationships." *Crisis,* 2018, 39 (3): 166–174. https://doi.org/10.1027/0227-5910/a000484. Epub 2017 Oct 20.

Mantzourani, E. 2012. "Sexuality or fertility symbol? The bronze figurine from Makrygialos." In *Philistor: studies in honor of Costis Davaras,* edited by E. Mantzourani and Ph. P. Betancourt, 105–112. Philadelphia, Pennsylvania: INSTAP Academic Press.

Marinatos, N. 2005. "The ideals of manhood in Minoan Crete." In *Aegean wall painting: a tribute to Mark Cameron,* edited by L. Morgan, 149–158. *BSA Studies* 13: London: The British School at London.

Marlowe, F., C. Apicella, and D. Reed 2005. "Men's preferences for women's profile waist-to-hip ratio in two societies." *Evolution and Human Behavior* 26: 458–468.

Marlowe, F. W., and A. Wetsman. 2001. "Preferred waist-to-hip ratio and ecology." *Personality and Individual Differences* 30: 481–489.

Masters, W. H., and V. E. Johnson. 1966. *Human sexual response.* Boston: Little Brown.

McInerney, J. 2011. "Bulls and bull-leaping in the Minoan world." *Expedition* 53 (3): 6–13.

Meskell, L. M. 2000. "Writing the body in archaeology." In *Reading the body. Representations and remains in the archaeological record,* edited by A. E. Rautman, 13–21. Philadelphia: University of Pennsylvania Press.

Miller, G. 2000. *The mating mind: how sexual choice shaped the evolution of human nature.* New York: Doubleday.

Morrall, P. 2006. "Murder and society: why commit murder?" *Criminal Justice Matters* 66 (Winter 2006/7): 36–37.

Morris, C. 2009a. "The iconography of the bared breast in Aegean Bronze Age art." In *FYLO. Engendering prehistoric 'stratigraphies' in the Aegean and the Mediterranean, Proceedings of an International Conference, University of Crete, Rethymno 2–5 June 2005,* edited by K. Kopaka, 243–249. *Aegaeum* 30. Liège and Austin: Université de Liège and UT-PASP.

Morris, C. 2009 b. "Configuring the individual: bodies of figurines in Minoan Crete." In *Essays on ritual and cult in Crete in honor of Geraldine C. Gesell,* edited by A. L. D'Agata and A. Van de Moortel, 179–187. *Hesperia* Suppl. 42: Princeton, NJ: American School of Classical Studies at Athens.

Muhly, P. 1990. "The Great Goddess and the Priest-King: Minoan religion in flux." *Polymnia Expedition* 32 (3): 54–60.

NCD Risk Factor Collaboration (NCD-RisC) 2016. "A century of trends in adult human height." *eLife:* e13410.

Neumann, E. 1972. *The Great Mother: an analysis of the archetype.* Translated from German by R. Manheim, *Bollingen Series* 47, Princeton: Princeton University Press.

Nowicki, K. 2012. East Cretan peak sanctuaries revisited." In *Philistor. Studies in honor of Costis Davaras,* edited by E. Mantzourani and Ph. P. Betancourt, 139–154. Philadelphia, Pennsylvania: INSTAP Academic Press.

Olsen, B. A. 1998. "Women, children and the family in the Late Aegean Bronze Age: differences in Minoan and Mycenaean construction of gender." *WorldArch* 29 (3): 380–392.

Olsen, B. A. 2014. *Women in Mycenaean Greece: the Linear B tablets from Pylos and Knossos.* London and New York: Routledge.

Omlin, J. 1973. *Der Papyrus 55001 und seine satirisch-erotischen Zeichnungen und Inschriften Turin 21.* Berlin: Akademie Verlag.

Panagiotaki, M. 1993. "The temple repositories of Knossos: new information from the unpublished notes of Sir Arthur Evans." *BSA* 88: 49–92.

Panagiotaki, M. 1995. "Preliminary technical observations on Knossian faience." *OJA* 14 (2): 137–149.

Panagiotopoulos, D. 2001. "Keftiu in context: Theban tomb-paintings as a historical source." *OJA* 20: 263–283.

Peatfield, A. 1992. "Rural ritual in Bronze Age Crete: the peak sanctuary at Atsipadhes." *CAJ* 2: 59–87.

Platek, S. M. and D. Singh. 2010. "Optimal waist-to-hip ratios in women activate neural reward centers in men." *PloS ONE* 5. https://doi.org/10.1371/journal.pone.0009042.

Platon, L. 2016. "«Δυο-δυο, στην μπανιέρα δυο-δυο…». Ένα ενδιαφέρον πήλινο ομοίωμα από την ανατολική Κρήτη, με πιθανές σημασιολογικές διασυνδέσεις με την Κύπρο του τέλους της Εποχής του Χαλκού και της Εποχής του Σιδήρου." In *Proceedings of the 12th International Congress of Cretan Studies, Heraklion,* 21.–25.9.2016.

Platon, N. 1951. "Το ιερόν Μαζά (Καλού Χωριού Πεδιάδος) και τα μινωικά ιερά κορυφής." *CretChron* 5 (1): 96–160.

Puts, D. A. 2010. "Beauty and the beast: mechanisms of sexual selection in humans." *Evolution and Human Behavior* 31: 157–175. https://doi.org/10.1016/j.evolhumbehav.2010.02.005.

Rautman, A. E. and L. E. Talalay. 2000. "Introduction: diverse approaches to the study of gender in archaeology." In *Reading the body. Representations and remains in the archaeological record,* edited by A. E. Rautman. 1–12. Philadelphia: University of Pennsylvania Press.

Rehak, P. 1996. "Aegean breechcloths, kilts, and the Keftiu paintings." *AJA* 100: 35–51.

Rehak, P. 1998. "The construction of gender in Late Bronze Age Aegean art. A prolegomenon." In *Redefining archaeology: feminist perspectives,* edited by M. Casey, D. Donlon, J. Hope, and S. Wellfare, 191–198. Canberra: ANH Publications.

Rehak, P. (ed. J. G. Younger). 2009. "Some unpublished studies by Paul Rehak on gender in Aegean art." In *FYLO. Engendering prehistoric 'stratigraphies' in the Aegean and the Mediterranean, Proceedings of an International Conference, University of Crete, Rethymno 2–5 June 2005,* edited by K. Kopaka, 11–18. *Aegaeum* 30. Liège and Austin: Université de Liège and UT-PASP.

Roser, M., C. Appel, and H. Ritchie. 2013. "Human Height." *OurWorldInData.org.* https://ourworldindata.org/human-height.

Rozmus-Wrzesinska, M., and B. Pawlowski. 2005. "Men's ratings of female attractiveness are influenced more by changes in female waist size compared with changes in hip size." *Biological Psychology* 68: 299–308.

Rutkowski, B. 1972. *Cult places in the Aegean world. Bibliotheca Antiqua* 10, Wroclaw: Ossolineum.

Rutkowski, B. 41991. *Petsophas: a Cretan peak sanctuary. Studies and Monographs in Mediterranean Archaeology and Civilization,* ser. 1, vol. 1. Warsaw: Art and Archaeology.

Rutter, J. 2003. "Children in Aegean prehistory." In *Coming of age in ancient Greece: images of childhood from the classical world,* edited by J. Neils and J. M. Oakley, 31–57. New Haven: Yale University Press.

Seidell, J. C. 1992. "Regional obesity and health." *International Journal of Obesity* 16, Suppl. 2: 531–534.

Shapland, A. 2013. "Jumping to conclusions: bull-leaping in Minoan Crete." *Society & Animals* 21 (2): 194–207.

Shokeir, A. A., and M. I. Hussein. 2004. "Sexual life in Pharaonic Egypt: towards a urological view." *International Journal of Impotence Research* 16 (5, Oct.): 385–388.

Singh, D. 1993. "Adaptive significance of female physical attractiveness: role of waist-to-hip ratio." *Journal of Personality and Social Psychology* 65 (2): 293–307.

Singh, D. 1994. "Ideal female body shape: role of body weight and waist-to-hip ratio." *International Journal of Eating Disorders* 16 (3): 283–288.

Singh, D. 2002. "Female mate value at a glance: relationship of waist-to-hip ratio to health, fecundity and attractiveness." *Neuroendocrine Letters* 23 (Suppl. 4): 81–91.

Singh, D. 2006. "Universal allure of the hour glass figure: an evolutionary theory of female physical attractiveness." *Clinics in Plastic Surgery* 33: 359–370.

Singh, D., B. J. Dixson, T. Jessop, B. Morgan, and A. F. Dixson. 2010. "Cross-cultural consensus for waist-to-hip ratio and women's attractiveness." *Evolution and Human Behavior* 31: 176–181.

Singh, D., and S. Luis. 1995. "Ethnic and gender consensus for the effect of waist-to-hip ratio on judgments of women's attractiveness." *Human Nature* 6: 51–65.

Singh, D., and R. K. Young. 1995. "Body weight, waist-to-hip ratio, breasts, and hips: role in judgments of female attractiveness and desirability for relationships." *Ethology and Sociobiology* 16: 483–507.

Sorokowski, P., and A. Sorokowska. 2012. "Judgements of sexual attractiveness: a study of a Yali tribe in Papua." *Archives of sexual behavior* 41 (5): 1209–1218.

Sphakianakis, D. 2012. "The "Vrysinas Ephebe": the lower torso of a clay figurine in contrapposto." In *Philistor: studies in honor of Costis Davaras,* edited by E. Mantzourani and Ph. P. Betancourt, 201–212. Philadelphia, Pennsylvania: INSTAP Academic Press.

Steel, L. 2020. "Little women": gender, performance, and gesture in Mycenaean female figurines." *JAnthArch* 58: 1–15.

Stewart, A. 1997. *Art, desire, and the body.* Cambridge University Press.

Sugiyama, L. 2004. "Is beauty in the context-sensitive adaptations of the beholder? Shiwiar use of waist-to-hip ratio in assessments of female mate value." *Evolution and Human Behavior* 25, 51–62.

Symons, D. 1979. *The evolution of human sexuality.* New York: Oxford University Press.

Talalay, L. E. 2005. "The gendered sea: iconography, gender, and Mediterranean prehistory." In *The Archaeology of Mediterranean Prehistory,* edited by E. Blake and B. Knapp. Malden, MA: Blackwell.

Tzachili, I. 2012. "Headless, armless but sexuated bodies: some particular figurines from the peak sanctuary of Vrysinas, near Rethymnon, Crete." In *Philistor: studies in honor of Costis Davaras,* edited by E. Mantzourani and Ph. P. Betancourt, 233–238. Philadelphia, Pennsylvania: INSTAP Academic Press.

Umbers, K. D. L., J. Lehtonen, and J. Mappes. 2015. Deimatic displays, *Current Biology* 25 (2): 58–59.

Umbers, K. D. L., and J. Mappes. 2016. "Towards a tractable working hypothesis for deimatic displays." *Animal Behaviour* 30: e1–e3.

van Straaten, Z. 1986. "Philosophical paradigm of fertility cult interpretations: philosophical perspectives on seasonal goddesses." In *Archaeology and fertility cult in the ancient Mediterranean: papers presented at the first international conference on Archaeology of the Ancient Mediterranean, University of Malta 2–5 September 1985,* edited by A. Bonanno, 31–41. Amsterdam: B. R. Grüner Publishing Co.

Verlinden, C. 1984. *Les statuettes anthropomorphes crétoises en bronze et en plomb, du III millénaire au VII siècle av. J.-C.* Providence, RI: Brown University Center for Old World Archaeology and Art.

Vetters, M., and J. Weilhartner. 2018. "Conceptions of gender and body images in the Aegean World and East Mediterranean Societies in the Late Bronze Age." In *Proceedings of the 10th International Congress on the Archaeology of the Ancient Near East 25–29 April 2016, Vienna,* edited by B. Horejs et al., 551–562. Wiesbaden: Harrassowitz Verlag.

Voss, B. L. 2008. "Sexuality studies in archaeology." *Annual Review of Anthropology* 37: 317–336.

Walter, K. V., D. Conroy-Beam, D. M. Buss, et al. 2020. "Sex differences in mate preferences across 45 countries: a large-scale replication." *Psychological science* 31 (4): 408–423.

Westman, A., and F. Marlowe. 1999. "How universal are preferences for female waist-to-hip ratios? Evidence from the Hadza of Tanzania." *Evolution and Human Behavior* 20: 219–228.

Wiesner-Hanks, M. 2010. *Christianity and sexuality in the early modern world.* London: Routledge.

Williams, E. O. 1975. *Sociobiology: the new synthesis.* Cambridge, Mass.: The Belknap Press of Harvard University Press.

World Health Organization. 2011. *Waist circumference and waist-hip ratio: report of a WHO expert consultation, Geneva, 8–11 December 2008.* Geneva: WHO Document Production Services.

Yaseen, Z. S., K. Fisher, E. Morales, and I. I. Galynker. 2012. "Love and suicide: the structure of the affective intensity: rating scale (AIRS) and its relation to suicidal behavior." *PLoS ONE* 7 (8). https://doi.org/10.1371/journal.pone.0044069.

Younger, J. G. 1976. "Bronze age representations of Aegean bull-leaping." *AJA* 80: 125–137.

Zographaki, V. 2008. Catalogue entries #177–178, In *From the Land of the Labyrinth: Minoan Crete, 3000–1100 B.C.* 222–223. Alexander S. Onassis Public Benefit Foundation. In collaboration with the Hellenic Ministry of Culture and the Archaeological Museum of Crete.

VII. Stances of Triumph, Defeat, and Combat

The Last Man Standing – Body Poses of Victorious and Defeated Warriors in Late Bronze Age Aegean Iconography and Their Egyptian Comparanda

Filip Franković – Uroš Matić

Abstract   *This paper analyzes the body poses of victorious and defeated warriors depicted in Late Bronze Age (LBA) Aegean iconography. It argues that early LBA Aegean depictions of victorious swordsmen defeating enemies represent an appropriation of the Egyptian motif of a 'pharaoh smiting his enemies'. Moreover, through a comparative analysis of the depictions of defeated warriors in Egypt and the Aegean, this paper examines cultural connotations that different body poses might have had in different parts of the LBA Eastern Mediterranean. Finally, it addresses the connection between body poses, movement and changing ideologies in the LBA Aegean.*

Introduction

Warrior iconographies played an important role in the formation of male identities in the Late Bronze Age (LBA) Aegean (*e.g.* Hiller 1999; Molloy 2012; Franković and Matić 2020). This paper examines the representations of body poses of victorious and defeated warriors, as well as their mutual relationship. Through a comparative analysis of such representations in Egypt and the Aegean, it aims to provide a better understanding of the cultural connotations of different body poses in different parts of the LBA Eastern Mediterranean. Finally, the paper addresses the connection between body poses, movement and changing ideologies in the LBA Aegean.

The Aegean Victorious Swordsman as a 'Pharaoh Smiting His Enemies'

In early LBA Aegean iconography, swordsmen are treated as superior to warriors armed with other weapons in representations of battle (Franković and Matić 2020, 356–360). More precisely, only swordsmen defeat other swordsmen (*CMS* I, nos. 11 [Fig. 1], 12, 16 [Fig. 2]; II 6, no. 15 [Fig. 6]; V, no. 643; VII, no. 129; IX, no. 158; XII, no. 292; Pylos Combat Agate). The similar is the case with swordsmen fighting lions (*CMS* I, nos. 9, 228, 290; IV, no. 233; V Suppl. 1A, no. 135; XI, no. 208). Differently armed warriors are never depicted defeating swordsmen or clearly defeating a lion. Aegean depictions of victorious swordsmen represent an appropriation of the 'pharaoh smiting his enemies' motif, which is attested in earlier and contemporary Egyptian iconography (Franković and Matić 2020, 362–363; also Marinatos 2010, 173–175) in connection to representations of victorious pharaohs, princes and soldiers. It appears already in Tomb 100 in Hierakonpolis, as well as on the famous Palette of Narmer (Hall 1986, 4–5, figs. 6 and 8). Egyptian soldiers in the same pose are depicted in the Tomb of Inti at Deshasheh, dating to the Old Kingdom Egypt (Bestock 2018, 228, fig. 8.3). The most famous representations from the New Kingdom Egypt are those depicted on various representations dating to the reigns of Sethos I, Ramses II and Ramses III. However, there are also numerous examples contemporary to the early LBA in the Aegean (*e.g.* Hall 1986, 16–28; Heinz 2001, 69–75), such as the depiction on a battle axe representing pharaoh Ahmose, the first king of the 18th Dynasty. It was found in the tomb of Ahhotep I, possibly Ahmose's mother, in Dra Abu el-Naga in western Thebes (Hall 1986, fig. 27).

   The similarities between Egyptian representations of 'pharaoh smiting his enemies' figures and Aegean representations of victorious swordsmen are mostly attested in their dominant stance
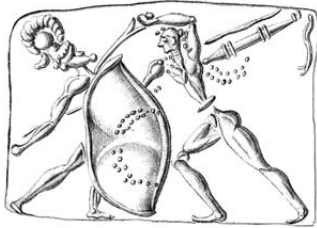
Fig. 1: Sealstone from Mycenae, LH I (CMS I, no. 11; courtesy of the CMS *Heidelberg).*

Fig. 2: Signet-ring from Mycenae, LH I (CMS I, no. 16; courtesy of the CMS *Heidelberg).*
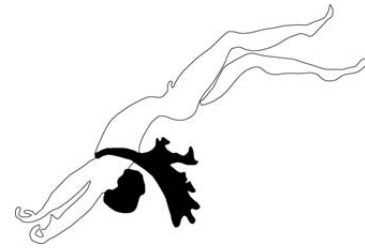
Fig. 3: Falling warrior from the Ship Procession Fresco from Thera, LM I A (redrawn after Morgan 1988, pl. 3).

and movement towards the defeated warrior. They are depicted stepping forward and delivering their deadly blow with a weapon from above. In Egypt, the 'pharaoh smiting his enemies' figure is commonly represented holding the defeated warriors' hair and sometimes their arms. In the Aegean, the victorious warrior is depicted holding his opponent's head (*CMS* I, no. 12; II 6, no. 15 [Fig. 6]), helmet crest (Pylos Combat Agate) or hair (Fig. 2; *CMS* I, no. 16). In some cases, the position of the victorious warrior's hand is not visible, as it is located behind the defeated warrior's shield (*CMS* I, no. 11 [Fig. 1]; VII, no. 129; XII, no. 292). The position and orientation of the victorious warrior's arm suggest that the hand is reaching towards or holding the defeated warrior's neck.

Representations of battles are not present in the iconographic repertoire of the Final Palatial period on Crete. The same is true for most of the Palatial period (*i.e.* LH III A1–LH III B1) on the Greek mainland and other islands, with the exception of an LH II–LH III A1 seal-stone (*CMS* XI, no. 34) from from Attica, probably from Athens. In all regions, representations of warriors are restricted to depictions of marching or running warriors. However, they change again on the Greek mainland at the very end of the LH III B period. LH III B2 frescoes from Pylos (Lang 1969, 71–75) and Mycenae (Rodenwaldt 1921, pls. II–IV) return to representations of warriors engaged in battle. In contrast to the early LBA period, the depictions focus on battles between two groups of warriors instead on accentuating an individual warrior's superiority. Nevertheless, even in this case, one group of warriors clearly dominates the battle.

Defeated Warriors in the Late Bronze Age Aegean Iconography

Defeated warriors are represented on a variety of different media, mostly dating to the early LBA. Most of the depictions show warriors defeated by a swordsman in the 'pharaoh smiting his enemies' pose. The defeated warriors are depicted in several different body poses, *i.e.* falling, kneeling, lying, sitting or fleeing from the battle.

They are often represented falling, most commonly upside-down. Three defeated warriors on the LM I A Ship Procession Fresco from Akrotiri on Thera are represented in a falling body pose (Fig. 3; *e.g.* Morgan 1988, 150). A similar scene is probably depicted on a fragment of a stone vase from Epidaurus (*e.g.* Morgan 1988, 151, fig. 194), the Silver Siege Rhyton (*e.g.* Davis 1977, 227–230, no. 87, figs. 179–180), as well as two seal-stones (*CMS* I, no. 263; IX, no. 158).

Despite the lack of continuity of defeated enemies' depictions in LH III A, fragments of the LH III B Mycenae megaron frieze (Rodenwaldt 1921, pl. 2) and Pylos battle frescoes (Lang 1969, 71–74) suggest that the falling body pose was also associated with the defeated warrior iconography at the end of the LH III B period. In Egyptian iconography, this body pose symbolizes defeat and/or death. Falling warriors are depicted already in the 5th Dynasty Tomb of Inti at Deshasheh and the 11th Dynasty Tomb of Intef at Thebes (Bestock 2018, 228–236, figs. 8.3 and 8.7). In New Kingdom Egypt, warriors falling upside-down appear in the 18th Dynasty mortuary temple of Thutmose II at Thebes (Spalinger 2005, 60, fig. 3a–b, block no. 6 in the image), as well as in various depictions dating between the reigns of Tutankhamun and
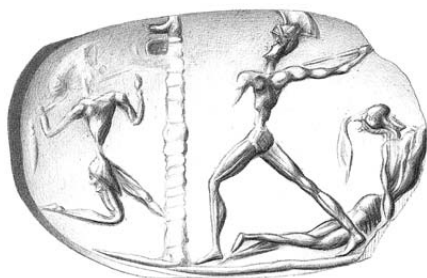
Fig. 4: Sealing from Agia Triada, LM I B (CMS II 6, no. 17; courtesy of the CMS Heidelberg).

Fig. 5: Right side of the chariot of Thutmose IV (1400–1390 BCE) from his tomb (KV 43) (redrawn after Carter and Newberry 2002, pl. X).

Ramses II (Hall 1986). Falling warriors are represented in the depiction of the First Lybian War of Ramses III at Medinet Habu (Heinz 2001, 79–81, fig. 65). Already Gerhart Rodenwaldt (1921, 56–57, fig. 29) noticed the similarities between the falling warrior represented on the LH III B fresco from Mycenae and the defeated warriors on the representation of the Battle of Kadesh.

Four LH I–LH II examples of glyptic art (*CMS* I, nos. 11 [Fig. 1], 12, 16 [Fig. 2]; Pylos Combat Agate) depict defeated warriors falling on their knees. In Egyptian iconography, kneeling enemies appear already on the Palette of Narmer. The scene remains in use in the Old Kingdom Egypt, as attested in the Tomb of Inti at Deshasheh. The most famous New Kingdom representations are those of pharaohs smiting enemies, depicted at various sites dating to the reigns of Ahmose, Hatshepsut, Thutmose III, Sethos I, Ramses II and Ramses III (*e.g.* Hall 1986, 16–42 with corresponding figures; Heinz 2001, 69–75, 235–322 with corresponding figures).

Defeated warriors are depicted lying on the ground on two LM I B sealings from Agia Triada (Fig. 4; *CMS* II 6, no. 17) and Kato Zakro (*CMS* II 7, no. 20), as well as the LH II A Pylos Combat Agate (Stocker and Davis 2017). The LH I Silver Siege Rhyton also depicts the legs of a figure which is possibly lying. Nude lying human figures leaning on their arms are depicted on an LH II A bronze dagger from Vapheio (*e.g.* Evans 1930, 128, fig. 81). In most cases, the warriors lying on the ground are probably dead (*e.g.* Pylos Combat Agate). However, the Vapheio dagger might represent dying, but still alive, individuals.

In Egyptian iconography, dead enemies lying on the ground appear already on the Palette of Narmer. New Kingdom examples include those depicted on the sides of the chariot of Thutmose IV (Fig. 5; Spalinger 2005, 119, fig. 7.2 and 7.3) or in the representation of the Conquest of Satuna at Luxor from the reign of Ramses II (Heinz 2001, 73, fig. 44, cat. no. VIII.17). The latter includes an especially interesting depiction of a defeated warrior, as he seems to still be alive and leaning on one of his arms, in a manner similar to the individual depicted on the Vapheio dagger. A similar depiction is attested already in the Tomb of Inti in Deshasheh.

A defeated sitting warrior represented on an LH I signet-ring from Mycenae (Fig. 2; *CMS* I, no. 16) is alive, but seems to be disabled from further participation in battle. In the LBA Aegean art, this way of representing is also attested in depictions of athletic activities, such as boxing (*e.g.* Warren 1969, 85, no. P 469). Therefore, this body pose probably suggests that the warrior is disabled, but not killed. The best New Kingdom Egypt parallels for the Aegean sitting warrior and boxers are various representations of sitting (and/or squatting) figures dating to the reigns of Thutmose IV (*e.g.* sides of his chariot; see Fig. 5), Sethos I and Ramses II (Heinz
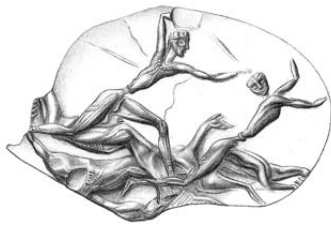
Fig. 6: Sealing from Agia Triada, LM I B (CMS II 6, no. 15; courtesy of the CMS Heidelberg).

Fig. 7: Enemy depicted en face, temple of Thutmose II (1482–1479 BCE), western Thebes (redrawn after Spalinger 2005, 60, fig. 3 a–b, block no. 6 in the image).
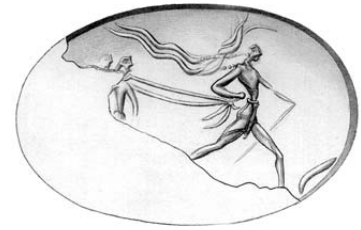
Fig. 8: Sealing from Chania, LM I B (CMS V Suppl. 1A, no. 133; courtesy of the CMS Heidelberg).

2001). Interestingly, there seem to be no clear Egyptian predecessors to the Aegean representations, since Egyptian depictions post-date the Aegean examples.

A male individual armed with a sword in pursuit of another human figure is depicted on an LM I B sealing from Agia Triada (Fig. 6; CMS II 6, no. 15). The other individual is running away from the pursuer. This is the only definite depiction of a person fleeing from battle in LBA Aegean art, although fleeing individuals might have also been represented on the more fragmented part of the LH I Silver Siege Rhyton. The earliest depiction of fleeing enemies in Egyptian iconography originates from the Palette of Narmer. New Kingdom Egypt examples are represented in the Temples of Derr and Beit el-Wali/South dating to the reign of Ramses II (Heinz 2001, 261–263). An interesting feature of the depiction on the Agia Triada sealing (Fig. 6; CMS II 6, no. 15) is the position of the fleeing figure's head, probably represented en face. In the New Kingdom Egyptian art (e.g. temple of Thutmose II in Thebes [Fig. 7]; the Painted Box of Tutankhamun), defeated enemies are represented this way to signify fear (Volokhine 2000).

Since the end of the Old Kingdom Egypt, both male and female prisoners of war are depicted in Egyptian iconography as tied together and pulled after one another, with a rope commonly tied around their necks and waists. The scene is represented already in the 5th Dynasty Tomb of Inti at Deshasheh, but parallels contemporary to the LBA Aegean iconographic sources are attested in the 18th Dynasty Theban Tombs of Huy (TT 40) and Anen (TT 120) (Hallmann 2006). There are two LBA Aegean depictions which might represent tied individuals (see also Marinatos 2010, 174–176). The first is an LM I B sealing from Chania (Fig. 8; CMS V Suppl. 1A, no. 133) depicting a male figure holding a staff in one hand and a leash in the other. The leash is wrapped around the necks of at least two individuals of uncertain gender. The second is a stylistically dated LH I–LH II signet-ring from Athens (CMS V, no. 173), which represents a man holding two women on a leash. Although it is impossible to assert whether the Aegean scenes depict prisoners of war, it can be argued that the leashed individuals are deprived of their freedom.

Concluding Remarks – Bodies, Movement and Appropriation of Ideology

In this paper, we explored the use of body pose, stance and movement in the expression of victory, domination, defeat and submission in the LBA Aegean iconographies of war. In the early LBA, the Egyptian motif of a 'pharaoh smiting his enemies' is appropriated into Aegean iconography in the form of the victorious swordsman. Such depictions accentuate the superior status of the victorious swordsman in comparison to all other warriors. In iconography, this is achieved through his posture and/or aggressive movement towards his enemies. The motif was first intro-

duced into Cretan Neopalatial ideology, possibly as a result of the early LBA Cretan diplomatic visits and correspondence with Egypt accompanied by the exchange of objects and artisans. Nevertheless, the introduction of Aegean-type swords, costumes and beauty ideals in the victorious swordsman iconography suggests a significant adaptation of the scene, as well as the influence of local elite ideologies. The motif was subsequently transferred to the Greek mainland as part of the large consumption of Cretan iconography during the early stages of the LBA. In this gradual process, a considerable change in the understanding of such depictions most probably happened in different parts of the Aegean.

In addition to the possible transference of the iconographic motif of the victorious warrior, it seems that the iconography of defeat was also transferred. In Egyptian iconography, various body poses symbolize defeat, death, fear and deprivation of freedom in representations of war. Defeated warriors in same or similar body poses are represented in early LBA Aegean iconography. While the transfer of a specific motif does not necessarily suggest a simultaneous transfer of meaning, the Egyptian connotation of the victorious warrior was introduced to Aegean iconographic sources, which likely suggests that connotations connected to the iconography of defeated warriors were also transferred.

The absence of battle representations on Crete since the LM II period onwards and on the Greek mainland in LH III A1–LH III B1 suggests that the original connotations of defeated warrior's body poses gradually lose their importance. In the context of Crete, the abandonment of battle iconography is probably connected to the change in the ideological employment of iconography by the newly emerged elite of the Final Palatial period. Since Crete was the main source of iconographic inspiration for depictions distributed on the Greek mainland in the early LBA, such a change on Crete in the later phases of the LBA possibly affected the iconographic production on the Greek mainland as well. However, the Greek mainland also went through a series of sociocultural transformations in the transition from early LBA chiefdoms to state-like polities of the Palatial period. Therefore, notions of domination of a specific individual over others, largely communicated through body pose and movement of depicted figures, were abandoned. Instead, iconographies of the Final Palatial period on Crete and Palatial period on the Greek mainland focus on the military might of the assembled army, usually depicted as marching or running. A different ideological message is also conveyed through the body pose and movement. While body poses of early LBA warriors were used to contrast victorious and defeated individuals, the coordinated movement and similar body poses of later warriors probably express unity and common might of the army in service of the palaces.

Another change is introduced at the very end of the Palatial Period (LH III B2) on the Greek mainland. Defeated falling warriors re-appear in frescoes from Mycenae and Pylos. Current evidence suggests that these examples represent a re-introduction into Aegean iconography, possibly again after Egyptian prototypes, rather than continuity in depiction. However, although the body pose of the falling warriors continues to communicate defeat, its symbolic connotation in Aegean contexts is significantly different than in the early LBA iconographic contexts. More precisely, it is no longer used to communicate superiority or inferiority of individual actors, but rather to communicate the domination of one warrior group over the other.

References

Bestock, L. 2018. *Violence and power in ancient Egypt. Image and ideology before the New Kingdom.* London and New York: Routledge.

Carter, H., and P. E. Newberry. 2002. *The tomb of Thoutmôsis IV.* London: Duckworth

Davis, E. N. 1977. *The Vapheio Cups and Aegean gold and silver ware.* New York: Garland.

Evans, A. 1930. *The Palace of Minos at Knossos. III.* London: MacMillan and Co.

Franković, F., and U. Matić. 2020. "The lion, the weapon and the warlord: historical evaluation of the early Late Bronze Age Aegean iconography." *Egypt and the Levant* 30: 343–375.

Hall, E. S. 1986. *The pharaoh smites his enemy. A comparative study. Münchner ägyptologische Studien* 44. Munich: Deutscher Kunstverlag.

Hallmann, S. 2006. *Die Tributszenen des Neuen Reiches. Ägypten und Altes Testament* 66. Wiesbaden: Harrassowitz Verlag.

Heinz, S. 2001. *Die Feldzugsdarstellungen des Neuen Reiches. Eine Bildanalyse. Denkschriften der Gesamtakademie* 18. *Untersuchungen der Zweigstelle Kairo des Österreichischen Archäologischen Instituts* 17. Vienna: Verlag der Österreichischen Akademie der Wissenschaften.

Hiller, S. 1999. "Scenes of warfare and combat in the arts of Aegean Late Bronze Age: reflections on typology and development." In *Polemos. Le contexte guerrier en Égée à l'Âge du Bronze,* edited by R. Laffineur, 319–330. *Aegaeum* 19. Liège: Université de Liège.

Lang, M. 1969. *The palace of Nestor at Pylos in western Messenia 2. The frescoes.* Princeton: Princeton University Press.

Marinatos, N. 2010. *Minoan kingship and the solar goddess. A Near Eastern koine.* Chicago: University of Illinois Press.

Matić, U. 2021. *Violence and gender in ancient Egypt.* London: Routledge.

Molloy, B. P. C. 2012. "Martial Minoans? War as social process, practice and event in Bronze Age Crete." *BSA* 107: 561–575.

Morgan, L. 1988. *The miniature wall paintings of Thera: a study in Aegean culture and iconography.* Cambridge: Cambridge University Press.

Rodenwaldt, G. 1921. *Der Fries des Megarons von Mykenai.* Halle (Saale): Max Niemeyer Verlag.

Spalinger, A. J. 2005. *War in ancient Egypt. The New Kingdom.* Oxford: Blackwell.

Stocker, S. R., and J. L. Davis. 2017. "The Combat Agate from the grave of the Griffin Warrior at Pylos." *Hesperia* 86: 583–605.

Volokhine, Y. 2000. *La frontalité dans l'iconographie de l'Égypte Ancienne. Cahiers de la Société d'Égyptologie* 6. Geneva: Société d'Égyptologie.

Warren, P. 1969. *Minoan stone vases.* Cambridge: Cambridge University Press.

Gestures of Dominance in Minoan Art: The Influence of Egypt

Nanno Marinatos

Abstract   *This paper concerns Minoan glyptic scenes representing military dominance over defeated foes and discusses the gestures that signify dominance and submission. It is argued that the iconography was borrowed from the Egyptian template of the smiting pharaoh but that certain of the glyptic scenes may be interpreted as abbreviations of larger scale battle representations because they include dead bodies lying on the ground. An actual painting from Akrotiri, Thera, which was executed in the Minoan tradition, shows a naval military engagement with drowned men: this is the equivalent of dead bodies on land battles. The conclusion drawn from the above points is that warrior imagery was present in Crete already during the Neopalatial period expressing the state ideology of Knossos. This reinforces Evans' much discredited hypothesis of some kind of Minoan dominance in the Aegean and part of the Peloponnese.*

The Pharaoh's Triumph

Over many centuries – or rather millennia – the Egyptian pharaoh is represented as raising his arm in a smiting gesture with the intention of smiting and killing a captive enemy who is kneeling. Although there are variations in the postures, it is possible to schematize the smiting pharaoh as follows (Fig. 1): his legs are apart steadily standing on the ground (as for example on the Narmer palette) or he has a dynamic striding posture. One hand is always raised holding a mace or sharp weapon; with the other hand the pharaoh clenches in his fist and holds his enemy steady by the latter's hair. It is generally agreed that this scheme is an almost ideogrammatic expression of the pharaoh's military power regardless of the type of weapon he holds.

One of the oldest examples is the well-known Narmer Palette of the 4th millennium BC, which is mentioned also by other authors in this volume (Lange and Hirmer 1957, pl. 4; good discussion in Kemp 1989, 7–63). The formula of the smiting ruler was adopted by subsequent generations of pharaohs spreading also to neighbouring imperial cultures, as illustrated by an Akkadian diorite fragment of the stele of king Sargon of the 3rd millennium BC. The king holds a net in which his enemies are caught as if they were wild birds (Louvre Sb/2 6053; Nigro 1998, fig. 1; Hulseapple 2018, 10–11, fig. 4). Sargon smites the leader's head with a mace while the seated goddess Ishtar (barely visible to the very edge of the scene) reminds the viewer that although the primary credit for the act of defeat belongs to Sargon, the goddess approves and legitimises the act (Van de Mieroop 2004, 59–79; Winter 2010, 114–115). Let it be noted that Sargon promoted himself as a military man claiming that 5,400 men ate in his presence (Van de Mieroop 2004, 60).

The image of the smiting pharaoh continues throughout the Middle Kingdom (*e.g.* pharaoh Mentu-hotep: Lange and Hirmer 1957, pl. 82) and becomes even more prominent during the New Kingdom, especially during the 18th–20th Dynasties when it features on temple-pylons; Tuthmoses III and Ramses II–III are frequently thus depicted (Lange and Hirmer 1957, pl. 136; Keel and Uehlinger 1992, 92–94, figs. 96–101b).

The popularity of the triumphant smiting pharaoh is understandable given the extension of Egypt's empire in Asia in the 2nd millennium which induced the royal house to promote the image of the leader as a conqueror of the entire world. The 18th Dynasty is particularly interesting to us because it partially overlaps with the Neopalatial period in Crete, when Knossos dynamically expanded in the Aegean and dominated it culturally (and possibly militarily).
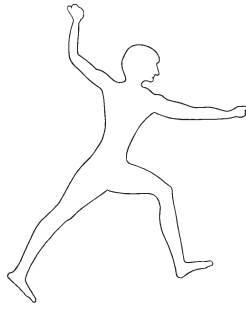
Fig. 1: Ramses II at Abu Simbel (approximate drawing by M. Toufeklis after Marinatos 2010, fig. 13.5c).
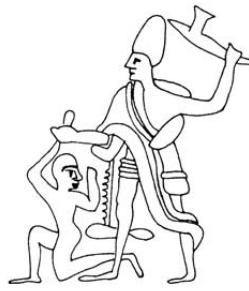
Fig. 2: Syro-Palestinian Seal of the 2nd millennium (after Teissier 1996, no. 248).

But before we look at 18th Dynasty examples, it is worth noting that the smiting ruler template occurs also on Syro-Palestinian seals since the beginning of the 2nd millennium (Fig. 2; Teissier 1996, 247–248, fig. 173); there is even an example on a fresco fragment from the palace of Mari published by William Stevenson Smith (1965, 31–37, fig. 54). As the latter scholar points out, the fragment represents the hand of a king who grabs his captives by their hair; we can imagine that the rest of the fresco resembled the imagery of the seal discussed above in Fig. 2 rendering a smiting ruler in Egyptianizing style. Stevenson Smith wisely spoke of an International Style in the East Mediterranean of the 2nd millennium BC, a style which facilitated communication between royal kingdoms. Marc Van de Mieroop (2004, 121–137) describes the 2nd millennium as an era of "the Club of Great Powers", whereas the present author has collected evidence of religious symbols which suggest interregional communication on a significant scale (Marinatos 2010). In short, the Mari fresco fragment, when coupled with the imagery of Syro-Palestinian seals, points to an iconography with international appeal which express military ideology.

If the entire region had adopted the Egyptian template of the pharaoh's military triumph, it is not surprising that 2nd millennium Crete was no exception to this international style. Still, Crete developed its own visual language of military dominance crafting a protagonist who was either a king or possibly the young god. To this we shall return later.

Let us now focus on an object of particular interest: the Egyptian axe of king Ahmose found in the tomb of Queen Ahotep (Fig. 3; Saleh and Sourouzian 1986, no. 121). Ahmose was the founder of the 18th Dynasty, and this piece is important for the argument that Egypt inspired Minoan imagery of dominance because Ahmose is contemporary with the Cretan New Palace period. The axe is divided into three fields with the pharaoh occupying the middle. The king does not smite his enemy but stabs him; this scheme differs from the smiting pharaoh-type previously discussed: see also Tuthmose III on the Pylon of Karnak (Fig. 4). To return to Ahmose, he does not smite his enemy's head but he does hold the captive Nubian by his hair. The pharaoh's action may be interpreted as stabbing the Nubian with an unspecified weapon (a dagger?) which is concealed behind the overlapping bent arm of the Nubian. The viewer guesses

Fig. 3: Ahmose axe from tomb of Queen Ahotep (Alamy licensed).

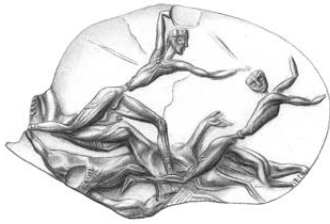Fig. 4: Tuthmosis III from his Temple at Karnak (Alamy licensed).

Fig. 5: Ring impression from Agia Triada (CMS II 6, no. 15; courtesy of the CMS Heidelberg).

Fig. 6: Agate lentoid seal-stone from the grave of the Griffin Warrior, Pylos, SN 24–105 (after Stocker and Davis 2017, 590, fig. 10; drawing by Tina Ross. Courtesy: The Department of Classics, University of Cincinnati).

Fig. 7: Gold seal from Shaft Grave III at Mycenae (CMS I, no. 11; courtesy of the CMS Heidelberg).

that the blow aims at the back of the captive who turns away from the pharaoh as if fleeing. His kneeling posture signifies not only submission but that he has no chance of escaping since the king holds him steadily. The posture of the defeated and the deadly sharp weapon are elements which will be met also in Minoan art. In summary, this pharaonic scene intimates battle rather than the execution of a captive by a mace; this is important when we discuss the Minoan examples, for they are abbreviated battle scenes as well.

Given this evidence, it is not only reasonable but almost inevitable to suppose that the Cretans had seen engravings of the pharaoh's triumph. Perhaps they had seen temple pylons, but it is even more likely that they had seen small objects (perhaps even scarab seals) engraved with the image of a smiting pharaoh according to Richard Wilkinson (forthcoming), who has also identified such smaller objects. Fritz Blakolmer and Irmgard Hein (2018, 195–208) have also pointed to the many influences of Egypt on Crete in the sphere of ritual iconography.

The Minoan Young God or King in Combat

If the Minoans indeed adopted this imagery from Egyptians, then we could have drawn some conclusions about their official ideology because reception of visual codes is not random nor is it spread by only by craftsmen. I argue that the receiving culture must be ready to receive influences and that Crete was prepared to receive war imagery. It will be argued next that the Minoans already had an ideology which associated kingship with military prowess (Marinatos 2010; Rethemiotakis in *Pax Minoica,* forthcoming; *pace* Koehl in this volume). Some examples of the Minoan smiting ruler (unless he is a god) follow next.

The first example is a Neopalatial ring impression from Agia Triada (Fig. 5; *CMS* II 6, no. 15). The dominant figure raises his right hand in which he holds a sword while with the left he clenches his fist and holds the captive tight by his hair. This is very close to the pharaoh's gesture and conveys the message of dominance (*cf.* Figs. 1–4 and 5). Note that the head of the captive enemy is shown frontally which is another convention borrowed from Egypt. As Lyvia Morgan has shown (1995, 135–149), frontal faces allude to otherness, or perhaps death. Another similarity of the ring impression pattern with the Egyptian formulas is that the defeated raises his arms pleading for his life.

A second example is the splendid agate seal, surnamed the Combat Agate seal, which has been recently excavated by Sharon Stocker and Jack Davis in the Griffin Warrior tomb at Pylos. As in the previous example, the victor raises his arm but, in this instance, he has already plunged his sword into the chest of his opponent (Fig. 6; Stocker and Davis 2017). Nevertheless, the scheme is astoundingly similar to the Agia Triada impression (Fig. 5), and it is therefore possible that both representations stem from the same workshop. The victor is presented as a scantily clad young male with well-groomed long locks and with jewellery ornamentation. Note that he is

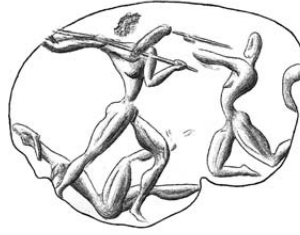Fig. 8: Seal impression from Agia Triada (CMS II 6, no. 16; courtesy of the CMS Heidelberg).

Fig. 9: Seal impression from Zakros (CMS II 7, no. 20; courtesy of the CMS Heidelberg).

wearing a kilt but no armour, no helmet or breastplate. In both cases, he holds the vanquished foe steadily by his hair, or the crest of his helmet (the latter on the Pylos seal).

Who are the victors? In terms of their appearance, although not their posture, they are not too different from the Priest King of Knossos. I agree with Wolf-Dietrich Niemeier (forthcoming in *Pax Minoica*) that these figures represent either the young Minoan god or the king. In any case, the two cannot be distinguished in Minoan art.

Turning now to an example of a combat on a seal found at Mycenae, Grave Circle A (Fig. 7; *CMS* I, no. 11), we meet the same youthful figure in the capacity of a victor in a combat. He is identifiable by the fact that he wears only a codpiece (note that only his belt is discernible) rather than armour. Although he is almost naked, he seems to have had an easy victory plunging his sword into the victim's throat, whereas the opponent's body is well-protected by a large shield. It is possible that with his right hand he has stabbed also the arm of his opponent with a dagger. If so, this act is hidden behind the shield and cannot be verified: which reminds us of the hidden arm of the pharaoh on the Ahmose axe (Fig. 3). As for the opponent, he wears full gear, a helmet and holds a long spear and shield. The style and the near nudity of the protagonist on this seal matches fully the appearance of the youthful king (or god) on the Agia Triada ring impression (Fig. 5). Therefore, although the seal was found at Mycenae, it reflects Minoan ideas and iconography and may well be an import from Crete. In any case, the victor is the youthful figure identified previously as a Minoan god or king.

It must be stressed once again that these scenes of combat are somewhat removed from the original scheme of the smiting pharaoh on the Narmer palette, but they are much closer to the Egyptian contemporary axe of Ahmose (Fig. 3). In other words, the Minoan scenes of triumph developed their own visual style but stayed close to the Egyptian templates of their times.

Looking now at other types of battle scenes from Crete, they are very well-attested in the Neopalatial period. An amygdaloid seal impression from Agia Triada (*CMS* II 6, no. 16) was recognized already by Arthur Evans (1935, 512–513, fig. 456 b) as a scene of combat, and this description is reasserted by Walter Müller and Ingo Pini in their publication in the *CMS* (Fig. 8; *CMS* II 6, n. 16). Because the piece in question dates to the Neopalatial period, it leaves no doubt about its Minoan character: it is not an imitation of Mycenaean art.

There are two differences between this piece and the previously discussed rings from Agia Triada, the Pylos agate seal and the Mycenae seal. First, the captive is not held steadily by his hair or helmet but has fallen on the ground. The vanquished is described by the editors of *CMS* as a seated man ("ein sitzender Mann"; see *CMS* II 6, n. 16); but since he is defeated, the posture can best be described as one of a fallen enemy. The second difference is that both the victor and the vanquished have a triangle over their heads, which must designate a helmet. If so, this is a combat between two mortal warriors and presupposes a battle. Still, there exist similarities with the previous scenes: the victor holds two weapons and shows no mercy to the defeated who raises one arm in supplication.

A seal with a very similar scene was recently found in the excavation of Metaxia Tsipopoulou at Petras, Crete, and was published by David Rupp. The author describes the engraved image as "most likely two men duelling with daggers" (Rupp 2012, 279). The fallen warrior on the left of the Petras seal reminds strongly of the 'sitzender Mann' of the Agia Triada seal impression (Fig. 8).

There exists more evidence of battle scenes on sealings from Zakros, one of which depicts a victor and his defeated adversary kneeling and raising his arms in a pleading gesture (Fig. 9; *CMS* II 7, no. 20). To the left, we discern a lifeless body of a fallen man. The scene was correctly identified by Pini and Müller (*CMS* II 7, no. 20, p. 28) as one of battle correcting Agnes Sakellariou's theory (1985) that men holding lances in Cretan iconography are hunters. Thus, the aforementioned Zakros sealing enriches the Minoan repertoire of scenes of military content.

The Naval Engagement on the Akrotiri Fresco

A full battle scene, or rather naval engagement, is known from Akrotiri, Thera, Room 5 of the West House. By general acceptance, this is a highly Minoanised painting and, as the pottery and frescoes show, Akrotiri was heavily influenced by the palatial centers of Crete, especially Knossos. The naval frieze under discussion is unfortunately fragmentary and its best-preserved section shows a parade of warriors marching next to a bucolic settlement in the countryside (Fig. 10). In 1988, Morgan produced a most eloquent and detailed analysis of the scene and concluded, after citing the available comparanda, that the scene represented a typical coastal raid accompanied by a shipwreck at sea. In other words, she regarded the visual narrative as a typical scene of life on the coast with the dangers and idyls it involves (1988, 157–160).

The warriors, however, give the impression of a military operation in process. Indeed, basing his argument on the boar's tusk helmets worn by the men, Spyros Iakovidis argued that the warriors were Mycenaean conquerors. This was a good point given the fact that boar's tusk helmets were not as well known in Crete at the time when this scholar wrote his article. Iakovidis, then, implicitly assumed that the Minoans were a peaceful folk and did not employ weapons of war (Iakovidis1979; Lewartowski 2020). The situation changed when excavations of a tomb at the harbour town of Poros, Crete, conducted by Nota Dimopoulou, brought to light boar's tusk helmets from the Neopalatial period which means that they date to the exact same period as the Akrotiri fresco in the 15th century BC (Dimopoulou 1999, 27–36, esp. 29 with figs. 11–13, pl. 7: 5). It is worth noting that long swords had been excavated by Spyridon Marinatos already in 1934 in the Arkalochori Cave (Marinatos 1934, 1–3).

Returning to the fresco scene from the north wall of Room 5 of the West House at Akrotiri (Fig. 10), there is no reason a priori to reject the possibility that it represents a naval battle. It is worth looking at its interesting history of interpretation because it reflects the history of thought as regards the role of Knossos in the Aegean.

The frieze was first restored by the painter Konstantine Iliakis in 1972/73, while Marinatos (who was then still alive) took an active role in figuring out the restoration. Marinatos recognized immediately that the scene had a purely Minoan character noting that horns of consecration featured in the town of a frieze located on the opposite wall. But he was also fascinated by the fact that the scene had exotic elements and perhaps paid too much attention to later Classical tradi-
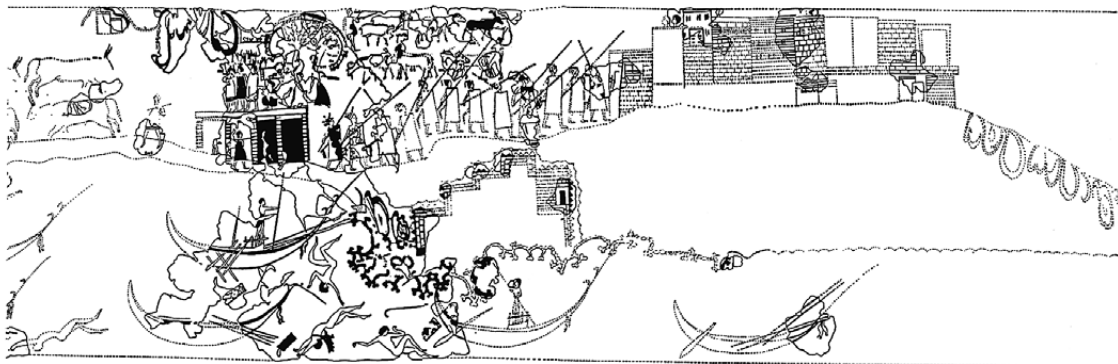

Fig. 10. Miniature frieze of the north wall, West House, Akrotiri (after Televantou 1994, pl. 1; redrawn by Markos Toufeklis).
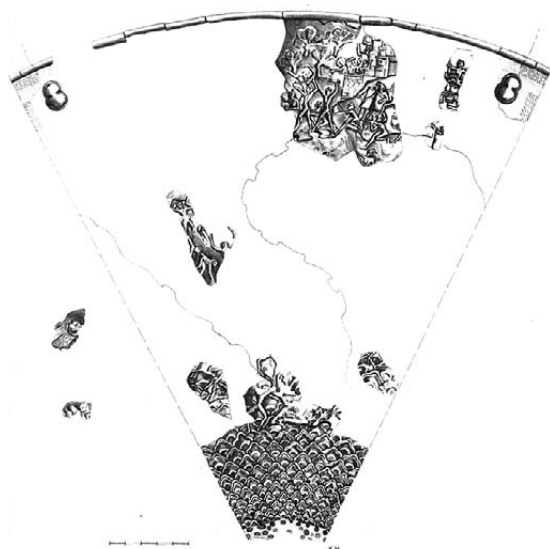
Fig. 11: Silver Siege Rhyton from Mycenae, drawing (after Sakellariou 1985, 296, fig. 1).

tion (recorded by Herodotus) that the Therans had colonized Libya in the Archaic period (Herod. 4, 150–152). Since the two eras are more than a thousand years apart, the connection between Bronze Age and Archaic Thera is a most unlikely event. But Marinatos and his contemporaries sought (and still seek) to link the prehistory of Greece with classical history: hence Marinatos proposed that the drowned men were Libyans (Marinatos 1974, 44–45; *contra:* Warren 1979, 115–129).

If we put the Libyan theory aside, what is the true subject of the frieze? (for a recent reconstruction on the wall see Palyvou 2019, 194–195, figs. 163–166). It was understandable that both the excavator and the painter had difficulties in restoring a war scene, although Iliakis managed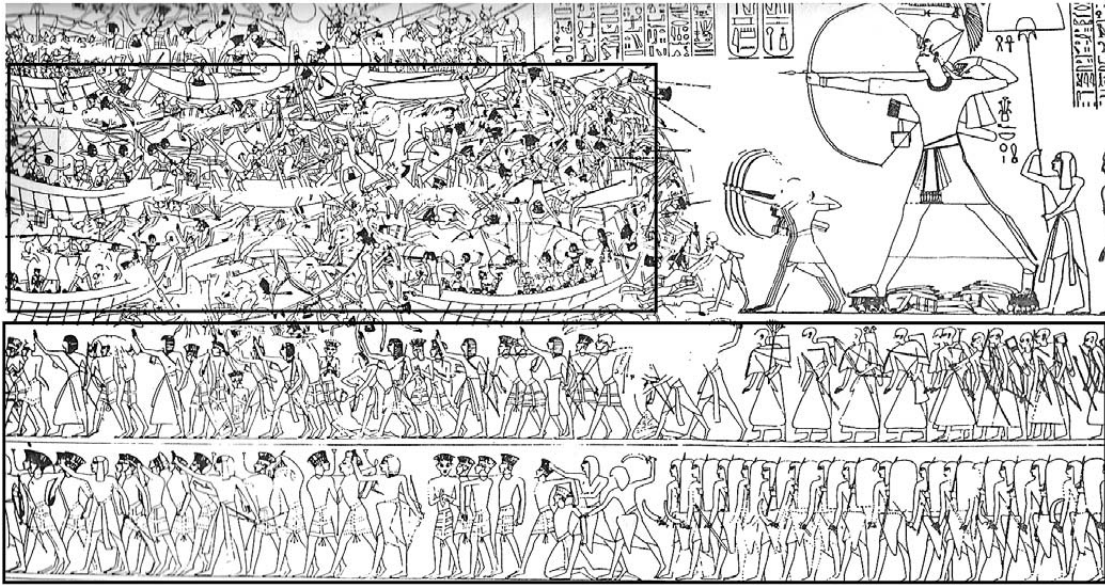 remarkably well given the circumstances and identified nine parading warriors in full military gear (Marinatos 1974, 40–41, pls. 93, 97). However, when a decade later the fragments were restudied by Christina Televantou (1994), she made more discoveries: she increased the nine warriors to twelve after conducting a thorough new search among the fragments. An even more important finding was the target of the warrior's march which was a walled town with battlements similar to the town depicted on the Silver Siege Rhyton (Fig. 11). Additional fragments of ships and the hands of one more person drowning at sea were added to the scene with the result that the interpretation of the shipwreck needed to be changed. It has become clear by now that the miniature frieze of the north wall has a narrative character which involved a naval battle and the defeat of the enemy (the naked drowned men). In the new reconstruction by Televantou, the victors and the defeated emerge clearly: the latter parade on land wearing boar's tusk helmets and carrying ox-hide shields, the defeated have drowned at sea. Presumably, the warriors landed from the ships. Note that the lifeless body postures of the defeated are paralleled on the much earlier Egyptian Narmer Palette and on the inlaid daggers from Vapheio and Geneva (Evans 1930, 126, fig. 81; Thomas 2007, 259, fig. 1; on the iconography and ideology see Marinatos 2000, 907–913). The victors must be Therans/Minoans and in any case the double horns on the frieze of the south wall crowing the town show that Thera was under the sway of Knossos.

A small parenthesis is needed here. It has already been mentioned that the naval military enterprise of the Theran fresco strongly recalls the narrative of the Silver Siege Rhyton (Fig. 11; Evans 1930, 89–106; Sakellariou 1985, 296, fig. 1; Blakolmer 2019, 49–94). As on the rhyton, the drowning men on the Akrotiri fresco are carrying small shields which differ from those of the parading warriors. Apparently, the smaller shields were made of leather, as Marinatos recognized. For this reason, the excavator wrote on the back of a photograph which he took himself: "men are drowned fighters of a sea-battle." In his publication, however, he designates the drowned men as divers (Marinatos 1974, 40).

The Syntax of Dominance and Defeat on the Akrotiri Fresco

In the case of the fresco from Akrotiri, victory and defeat are expressed not only through the content of the scene, namely the damaged ships and the drowned men, but also through the syntax of the entire representation (the arrangement of the scenes). The composition may be divided into an upper and lower zone (rendered as rectangles on Fig. 10). On the upper zone, the rhyth-

Fig. 12: Battle of Ramses III against Sea Peoples from Medinet Habu, drawing by Markos Toufeklis (after Stevenson Smith 1965: fig. 220).

mic pace of the marching victors contrasts with the disorderly arrangement of lifeless bodies of the lower zone. The contrast between victory and defeat is rendered as order vs. disorder.

Perhaps a similar syntax governs the complex scene on the Silver Siege Rhyton, which although found at Mycenae is probably a Minoan import. There too battles take place both at sea and land. At sea, we see warriors arriving in the ships and it is important to note that they are wearing boar's tusk helmets. They arrive at the scene of the besieged town; in the sea, we see naked human bodies, the lifeless posture of which suggests drowning rather than swimming (Fig. 11; Sakellariou 1985, 296, fig. 1; Blakolmer 2019, 61–62, fig. 11).

A question is the ethnic identity of the naked men on the Silver Siege Rhyton. Who are they? Evans (correctly in this author's opinion) regarded the siege as an episode in Minoan colonial history, although others deny this. Blakolmer agrees with Pietro Militello that the combatants are "anonymous and collective, devoid of heroes and protagonists" (Militello 2003, 384; Blakolmer 2019, 61). This is correct but one might say that there is a collective victory for the warriors in gear. And it is also noteworthy that the defeated are different from the helmeted warriors who seem to be dominant. Evans writes that the men outside the besieged town, although fighting on behalf of the besieged "clearly belong to some extraneous race, since they are not even girt with the Minoan belt" (Evans 1930, 94).

The most important issue in this paper, however, is not the ethnicity of the defeated – we need not follow the line of Evans or of Marinatos. What is our focus is that the weapons are Minoan as proved by the Poros excavations and the syntax of the pictures highlights the contrast between the order of the victors and the chaos of the defeated. This syntax is paralleled in Egyptian art, one example being the (admittedly much later) depiction of Ramses III battling the Sea Peoples engraved on his temple at Medinet Habu (Fig. 12; Stevenson Smith 1965, 177, fig. 220). The troops of the gigantic pharaoh are orderly arranged, as may be seen in the lower rectangle highlighted on Fig. 12. Much like the tidily arranged Theran warriors, the Egyptian soldiers move with discipline and form a contrast to the chaotic enemy ships populated by Philistines and Sherden, some of which are drowned (see upper rectangle). This battle dates to the 11th century BC: therefore, there can be no direct link with the Theran painting. Still, we can speak of shared templates of the iconography of victory scenes in the East Mediterranean, an international style where order is the sign of victory and dominance.

385

Conclusions

From the above, we may draw some conclusions concerning the meaning of dominance gestures for the comprehension of Minoan art and society. One result of the present study is that the template of the victorious warrior, who raises his arm to kill the defeated foe, appears on Crete before the mainland, and this has important historical implications because it revives the idea that Crete was a military naval power or thalassocracy (Hägg and Marinatos 1984). The recently excavated agate seal from Pylos demonstrates how images of power were exported along with other art objects and weapons in an unplundered warrior's tomb. The excavators acknowledge the Minoan character of the finds in their publication (Stocker and Davis 2017, 601; Davis 2022) but it remains to be seen what consequences this has from the historical point of view.

The second conclusion suggested by this study is that although the Minoans may have developed their military iconography slowly, this iconography is most evident during the Neopalatial period and surely reflects the state ideology of Knossos. One ought not to forget that the 2nd millennium BC was the era of empires, a "Club of the Great Powers" to use Van de Mieroop's terms. Note too that Malcolm Wiener (2016, 365–378) has spoken of how individual kings on either side of the Aegean may have been catalysts for change and interaction.

Putting all the facts together, it seems that the widely held view that the Minoan culture was confined and peaceful needs drastic revision. Crete has yielded both material evidence of weapons and iconography of naval enterprises and combat. Hence, with Blakolmer (2013, 87–92), I suggest that the Mycenaeans adopted the readily available iconography of prestige and dominance from the great power that was Crete.

Acknowledgments

References

Blakolmer, F. 2013. "Was there a 'Mycenaean art' or: Tradition without innovation? Some examples of relief art," in *Tradition and innovation in Mycenaean palatial polities,* edited by J. Weilhartner and F. Ruppenstein, 87–112. *Mykenische Studien* 34. Vienna: Österreichische Akademie der Wissenschaften.

Blakolmer, F. 2019. "No kings, no inscriptions, no historical events? Some thoughts on the iconography of rulership in Mycenaean Greece," in *From LUGAL.GAL to wanax. Kingship and political organisation in the Late Bronze Age Aegean,* edited by J. M. Kelder and W. J.I. Waal, 49–94. Leiden: Sidestone Press.

Blakolmer, F., and I. Hein 2018. "A 'special procession' in Minoan Crete as a ritual of rulership? A view from Egypt," in *Proceedings of the 10th International Congress on the archaeology of the Aegean and the Near East.* Vol. 1, 195–208. Wiesbaden: Harrassowitz Verlag.

Davis, J. L. 2022. *A Greek state in formation: the origins of civilization in Mycenaean Pylos, Sather Classical Lectures Book 75.* Oakland: University of California Press.

Dimopoulou, N. 1999. "The Neopalatial cemetery of the Knossian harbour-town at Poros: mortuary behaviour and social ranking," in *Eliten in der Bronzezeit.* Vol. 1, 27–36. *Monographien des Römisch-Germanischen Zentralmuseums* 43. Mainz: Römisch-Germanisches Zentralmuseum.

Evans, A. 1930. *The Palace of Minos at Knossos.* Vol. 3, London: Macmillan.

Evans, A. 1932, "Knossos and Mycenae," *Abstract of communication to the International Congress of Prehistoric and Protohistoric Sciences,* Aug. 4, 1932: 1–6.

Evans, A. 1935. *The Palace of Minos at Knossos.* Vol. 4, London: Macmillan.

Hägg, R., and N. Marinatos, eds. 1984. *The Minoan thalassocracy: myth and reality.* Proceedings of the third international symposium at the Swedish Institute in Athens, 32 May-5 June, 1982. *Acta Instituti Atheniensis Regni Sueciae,* Series in 4o. Stockholm: Paul Åströms Förlag.

Hulseapple, D. 2018. *"Structure, ideology, traditions": defining the Akkadian state,* SUNY, Undergraduate Honors Thesis Collection. Open access repository, https://soar.suny.edu/handle/20.500.12648/1333?show=full.

Iakovidis, S. E. 1979. "Thera and Mycenaean Greece," *AJA* 83: 101–110.

Keel, O., and Ch. Uehlinger 1992. *Göttinnen, Götter und Gottessymbole. Neue Erkenntnisse zur Religionsgeschichte Kanaans und Israels aufgrund bislang unerschlossener ikonographischer Quellen, Quaestiones disputatae* 134. Freiburg, Basel, and Vienna: Herder.

Kemp, B. J. 1989. *Ancient Egypt: anatomy of a civilisation.* London: Routledge.

Lange, K., and M. Hirmer 1957. *Ägypten.* 2nd ed. München: Hirmer Verlag.

Lewartowski, K. 2019, "Combat, myths and seals in the Griffin Warrior times," in *Studies in ancient art and civilization* 23, edited by J. Bodzek, 73–94. Krakow: Jagiellonian University.

Marinatos, S. 1934. "Scavi nella grotto di Arkalochori," *Rivista di Filologia e d'Instruzione classica,* N. S. 12, Fasc. 4: 1–3.

Marinatos, S. 1974. *Excavations at Thera.* Vol. VI. Athens: Archaeological Society.

Marinatos, N. 2000. "Nature as ideology: landscapes on the Theran ships," in *Proceedings of the first international symposium 'The wall paintings of Thera', Petros M. Nomikos Conference Centre, Thera, Hellas, 30 August–4 September 1997.* Vol. II, edited by S. Sherratt, 907–913. Athens: Petros M. Nomikos and The Thera Foundation.

Marinatos, N. 2010. *Minoan kingship and the solar goddess.* Urbana/Champaign: UIC Press.

Marinatos, N., forthcoming. "A letter of Spyridon Marinatos to Martin P. Nilsson about Messenia," in *Metioessa. Studies in honor of Eleni Mantzourani,* edited by G. Vavouranakis and I. Voskos, 111–117. Aura Suppl. 10. Athens: Aura and Kardamitsa.

Militello, P. 2003. "Il Rhytòn dei Lottatori e le scene di combattimento: battaglie, duelli, agoni e competizioni nella Creta neopalaziale," *Creta Antica* 4: 359–401.

Morgan L. 1985. "Idea, idiom and iconography," in *L'iconographie minoenne. Actes de la table ronde d'Athènes (21–22 avril 1983),* edited by P. Darcque and J.-C. Poursat, 5–19. *BCH Suppl.* 11. Paris: École française d'Athènes.

Morgan, L. 1995. "Frontal face and the symbolism of death in Aegean glyptic," in *Sceaux minoens et myceniens. IVe symposium international, 10–12 septembre 1992, Clermont-Ferrand,* edited by I. Pini and J.-C. Poursat, 135–149. *CMS Beiheft* 5. Berlin: Gebr. Mann Verlag.

Niemeier, W.-D., forthcoming. "Rethinking the 'Priest King' stucco relief from Knossos, Minoan kingship and gods," in *Minoan religion: new material and interpretations,* edited by N. Marinatos and F. Blakolmer, Philadelphia: IN-STAP Academic Press.

Nigro, L. 1998. "The two steles of Sargon: iconology and visual propaganda at the beginning of royal Akkadian relief," *Iraq* 60: 85–102.

Palyvou C. 2019. *Akrotiri, Thera. The architecture of the West House.* Athens: Melissa.

Rupp, D. W. 2012. "Death in Petras: two men fighting on a LM IA lentoid seal," in *Petras, Siteia – 25 years of excavations and studies,* edited by M. Tsipopoulou, 277–290. *Monographs of the Danish Institute at Athens* 16. Athens: The Danish Institute at Athens.

Sakellariou, A. 1985. "Identité minoenne et identité mycénienne à travers les compositions figuratives," in *L'iconographie minoenne. Actes de la table ronde d'Athènes (21–22 avril 1983),* edited by P. Darcque and J.-C. Poursat, 293–309. *BCH Suppl.* 11. Paris: École française d'Athènes.

Saleh, M., and H. Sourouzian 1986. *Das Ägyptische Museum Kairo.* Mainz: Philipp von Zabern.

Stevenson Smith, W. 1965. *Interconnections in the Ancient Near East. A study of the relationships between the arts of Egypt, the Aegean, and Western Asia.* New Haven: Yale University Press.

Stocker, S. R., and J. L. Davis 2017. "The Combat Agate from the grave of the Griffin Warrior at Pylos," *Hesperia* 86: 583–605.

Stocker, S. R., and J. L. Davis 2020. "An early Mycenaean wanax at Pylos? On genii and sun-disks from the grave of the Griffin Warrior," in *Current approaches and new perspectives in Aegean iconography,* edited by F. Blakolmer, 293–299. *Aegis* 18. Louvain-la-Neuve: Presses universitaires de Louvain.

Teissier, B. 1996. *Egyptian iconography on Syro-Palestinian seals of the Middle Bronze Age, Orbis Biblicus Orientalis* 11. Fribourg and Göttingen: University Press Fribourg and Vandenhoeck & Ruprecht.

Televantou, Ch.A. 1994. *Akrotiri Thiras: Oi toichografies tis Dytikis Oikias. Vivliothiki tis en Athinais Archaiologikis Etaireias* 143. Athens: Archaeological Society.

Thomas, N. R. 2007. "A frontal foot on a 'Mycenaean' inlaid dagger," in *ΣΤΕΦΑΝΟΣ ΑΡΙΣΤΕΙΟΣ. Archäologische Forschungen zwischen Nil und Istros. Festschrift für Stefan Hiller zum 65. Geburtstag,* edited by F. Lang, C. Reinhold, and J. Weilhartner, 251–260. Vienna: Phoibos Verlag.

Thomas, N. R. 2016. "Connecting the pieces: Egypt, Dendra, and the elusive 'Keftiu' Cup," in *RA-PI-NE-U. Studies on the Mycenaean World offered to Robert Laffineur for his 70th Birthday,* edited by J. Driessen, 327–347. *Aegis* 10. Louvain-la-Neuve: Presses universitaires de Louvain.

Van de Mieroop, M. 1977. *The ancient Mesopotamian city.* New York and Oxford: Oxford University Press.

Vlachopoulos, A., 2015. "Detecting 'Mycenaean' elements in the 'Minoan' wall paintings of a 'Cycladic' settlement. The wall paintings at Akrotiri, Thera within their iconographic koine," in *Mycenaean Wall Paintings in Context. New Discoveries and Old Finds Reconsidered,* edited by H. Brecoulaki, J. L. Davis, and S. R. Stocker, 38–46. *Meletimata* 72. Athens: National Hellenic Research Foundation.

Warren, P. 1979. "The Miniature Fresco from the West House at Akrotiri, Thera, and its Aegean setting," *JHS* 99: 115–129.

Wiener, M. H. 2016. "Beyond the Versailles Effect: Mycenaean Greece and Minoan Crete," in *RA-PI-NE-U. Studies on the Mycenaean World offered to Robert Laffineur for his 70th Birthday,* edited by J. Driessen, 365–378. *Aegis* 10. Louvain-la-Neuve: Presses universitaires de Louvain.

Wilkinson, R. R., forthcoming. "Pharaoh and military weapons in Egyptian iconography: gestures of dominance," in *Pax Minoica,* edited by N. Marinatos *et alii.*

Winter, I. J. 2010. "Tree(s) on the mountain: landscape and territory on the Victory Stele of Naram-Sin of Agade," in *On art in the Ancient Near East.* Vol. II, edited by E. Frahm, W. R. Garr, B. Halpern, and T. P. J. van den Hout, 109–131. *Culture and History of the Ancient Near East* 34: 2. Leiden: Brill.

Triumph and Defeat. Emulating the Postures of Near Eastern Rulers and Deities in Aegean Bronze Age Iconography

Veronika Verešová

Abstract   *The identification of rulers in Aegean Bronze Age iconography constitutes one of its most problematic issues and is addressed in numerous studies. This problem arises from the absence of written sources and clearly defined attributes for rulers, as well as from the mode of self-presentation of the ruling elite, which, at first glance, is different from the practice known from Near Eastern cultural regions. However, it is precisely the comparison with these regions which appears to be helpful in detecting earthly or divine Aegean rulers. This contribution focuses on the analysis of triumph and defeat in depictions of a victor and his enemy, through examining postures and gestures expressing higher status or domination over animals and human beings. A triumphant hero, ruler or god and a defeated mortal or divine enemy constitute one of the most important motifs symbolizing the victory of civilization and its ruler over wild nature, evil forces and chaos. The motif of a standing male figure in a dynamic posture, striking with a weapon, or delivering a fatal blow to a kneeling or lying enemy occurs from the very beginning of the great empires of Egypt or Mesopotamia and was widespread in many Near Eastern regions. A detailed comparison of different Aegean and Near Eastern images reveals further evidence for the emulation of this motif, not only in known combat scenes. Their distribution, contexts and interpretation help to explain their meaning in the Aegean, as well as the possible reasons for their adoption and adaptation.*

Introduction

Despite the well-known problem of the 'missing ruler' in Minoan and Mycenaean iconography (Davis 1995), several studies have demonstrated that ruler iconography is actually not completely missing. Many individual elements and motifs designating or emphasizing the authority of a human figure and used in other contemporary cultures to denote divine or earthly rulers have been collected and discussed (several contributions in Rehak 1995; Dubcová 2010; Marinatos 2010, 12–31; Blakolmer 2019). In comparison with the Aegean, we are better informed about the meaning of these motifs in other cultural regions. It is for this reason that Egyptian or Near Eastern counterparts have been used as comparanda for identifying rulers in the Aegean and for reconstructing Aegean Bronze Age society and ideology (*e.g.* Evans 1928, 267–278; Persson 1942, esp. 25–87; Hallager 1986, 22–25; Crowley 1995; Dubcová 2010; Marinatos 2010). Many of these motifs, however, such as the so-called commanding gesture, the enthroned position, or the figures' association with a real or fantastic animal, are rather general, and only a few are specific to and typical of actual rulers. Indeed, rather than denoting individual figures, the motifs indicate so-called VIP characters, a term introduced by Janice Crowley (Crowley 2008, 2013).

Where Aegean iconography is concerned, the main problem lies not only with the identification of individual figures but also with the possibility of differentiating between divine and earthly figures. It appears that the same motifs were used for both spheres, as was often the case in Egypt and the ancient Near East (Otto 2000, 202).[1] Thus, we may assume that gods were de-

---

[1]   Apart from different clothes and headdresses, it was especially the use of diverse throne types, see *e.g.* Metzger 1985; Suter 2020.

Fig. 1: Combat Agate from Pylos (courtesy of the Palace of Nestor Excavations, The Department of Classics, University of Cincinnati).
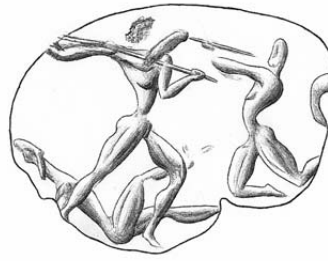
Fig. 2: Sealing from Kato Zakros (after CMS II 7, no. 20).

Fig. 3: Seal from Tragana (after CMS I, no. 263).

picted as rulers and rulers resembled or were identified with a god (discussed *e.g.* in Marinatos 2010, 12–31). Without eloquent Aegean written sources, it seems quite impossible to solve this problem. Although the problem of differentiation between divine and profane spheres remains, there are nevertheless motifs which, in other contemporary cultures, were more often used for the presentation of earthly rulers and which can also be identified in the Aegean. Such motifs include specific clothing (Syrian robes, discussed below) and headdress (pointed hat, see Verešová and Blakolmer 2022), but consist especially of different activities expressed by various postures and gestures indicating a figure's mastery over enemies.

This contribution focuses on Aegean motifs which represent power through the emphasis of triumph and defeat – one of the most important ideas of kingship in Egypt and the ancient Near East. The identification and discussion of their possible prototypes as well as their use and distribution help explain their function and probable meaning in the Aegean, and thus contribute to our knowledge of the Aegean ruling elite and its self-presentation.

Aegean Combat Scenes

Another well-known problem with Aegean Bronze Age iconography is the lack of standardization of individual motifs. There are only some scenes and motifs, which seem to be standardized to a certain extent. Among these are scenes showing the motif of contesting male figures engaged in combat scenes. This is now represented especially by the outstanding Combat Agate, found in the so-called grave of the Griffin Warrior at Pylos (Fig. 1; Stocker and Davis 2017). A standing male figure with spread legs delivers a fatal blow with his sword to a kneeling enemy while he grasps the crest of his helmet. At the same time, the victorious warrior strides over an already defeated combatant lying below him. As has already been demonstrated by the excavators, despite its exceptional artistic mastery, this motif is not unique. It finds several parallels in Crete as well as on the Greek mainland (Stocker and Davis 2017, 587–589), such as the sealing with a combat scene from Agia Triada (*CMS* II 6, no. 15), from Kato Zakros (Fig. 2; CMS II 7, no. 20), the gold cushion seal with a combat scene from Shaft Grave III (*CMS* I, no. 11), the seal from Tragana (Fig. 3), the so-called Battle in the Glen gold signet-ring (*CMS* I, no. 16) or the Silver Battle Krater from Shaft Grave IV (Blakolmer 2007) at Mycenae.

Alongside the more or less homogenous bull-leaping scenes (Younger 1995) and some hunting scenes (Vonhoff 2011), the aforementioned combat scenes constitute one of the most standardized Aegean motifs (Hiller 1999; Vonhoff 2008; Lewartovski 2019; Franković and Matić 2020). They differ mainly in the number of figures, the posture of the defeated enemy, their weapons and the overall setting. The posture and the gestures of the victorious warrior are almost always the same (*cf.* Figs. 1–2). Because of this high degree of standardization, with almost identical elements used, this motif most likely has one common prototype and bears a clear message (assumed already by Hiller 1999, 323–324; Blakolmer 2007, 222–223).

Fig. 4: Akkadian cylinder seal (© The Trustees of the British Museum).

Combat scenes are often seen as depicting an actual or mythical event, perhaps an excerpt from a story or even an early myth (Lewartovski 2019; Stocker and Davis 2017, 601). As in the case of several other Aegean Bronze Age multifigure scenes, it is also very tempting to see predecessors of Homeric myths (*e.g.* the Miniature Frieze from the West House in Akrotiri: Warren 1979, 129; Morris 1989; Younger 2011, 161–183). In the case of the Pylos Griffin Warrior tomb, it has even been suggested that the original owner of the object was the actual buried hero who perhaps identified himself with a mythical counterpart (Stocker and Davis 2016; 2017, 602). The early origin of such myths is supported by rich pictorial scenes of a seemingly narrative character and especially by the later tradition of representation of mythical events in all media (Younger 2016, 2020). However, without clear evidence of the existence of myths by means of written sources from this period, it remains difficult to prove this suggestion (see also Blakolmer 2007, 217).

Indeed, beside this option, one may suggest another explanation. These 'heroic' scenes and depicted figures may simply represent symbolic action expressing a desired outcome, or a way of representing the power, dominance and mastery of the depicted figure, who may possibly be identified as the seal owner, a practice well known in other contemporary cultural regions.

Triumph and Defeat in the Ancient Near East and Egypt

Two main forms of mastery, and thus representations of triumph and defeat, can be recognized in the iconographic material of Egypt and the ancient Near East (Mesopotamia, Syria, Palestine, Anatolia). The oldest motif presents the 'mastery of animals'. Its first form occurs as early as the 5th millennium of Mesopotamia but it is especially prevalent in the 4th millennium (Pittman 2001, 410–427; Costello 2010, 26). From the enigmatic 'shamanic' figures to the first rulers, these figures defeat wild and dangerous animals to protect the flocks, and thus civilisation, against wild, chaotic and hostile forces (Collon 1987, 15; Hansen 2003, 22–24; Schroer and Keel 2005, 280–293; Costello 2010, 27). Especially during the Early Dynastic and Akkadian periods, the motif was transformed into standardized contest scenes (Fig. 4; also called animal friezes, contests with wild beasts, 'Tierkampfszenen'), in which a so-called nude hero and a bull-man or human-headed bull – substituting for the ruler – fight wild animals (Ward 1910, 44–47; Frankfort 1939, 58–62; Boehmer 1965, 3–46; Keel 1992, 29–32; Collon 1995, 24; Hansen 2003, 42–45; Costello 2010, 28–31; Otto 2013, 50–51). The motif, characterized by the central figure in the heraldic position subduing animals or fantastic creatures, was widespread through the whole ancient Near East, as evidenced by Old Babylonian (al-Gailani Werr 1988, 4–6, 30, pls. I, XX; Collon 1987, 45), Anatolian (Özgüç 2006, 25, 28–29) as well as Old Syrian imagery (Otto 2000, 242–243). Furthermore, it was adopted in the Aegean as early as the Protopalatial period (Barclay 2000; Aruz 2008, 66; Crowley 2010; Dubcová 2015). It even oc-
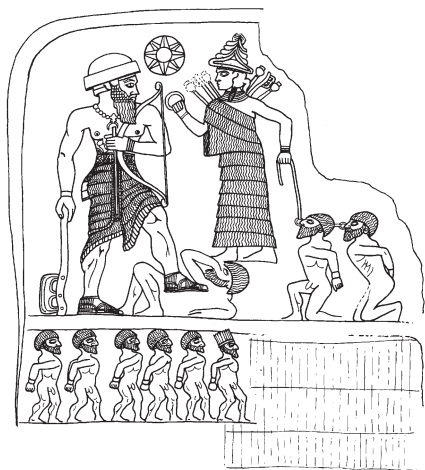
Fig. 6: Old Babylonian cylin-
der seal (after al-Gailani
Werr, pl. VII, no. 7).

Fig. 7: Old Syrian cylinder
seal (after Teissier 1996, 117,
no. 248).

Fig. 5: Drawing of the so-called Anubanini rock relief, Akkadian
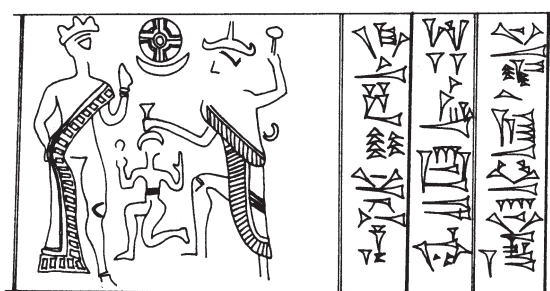or Isin Larsa Period (after Vanden Berghe 1984, fig. 1).

Fig. 8: Old Syrian cylinder seal (after Teissier
1996, 117, no. 249).

Fig. 9: Old Syrian cylinder seal (after Teissier 1996, 117,
no. 247).

curs in Egypt during the Naqada period, though it never gained as much popularity as in other contemporary regions (Schroer and Keel 2005, 230, no. 130; 282–283, no. 184).

The second most important form of mastery documented in the pictorial material of Egypt and the ancient Near East is the action of 'defeating or smiting/slaying enemies'. The demonstration of a ruler's power through the presentation of defeated enemies already appeared in the Uruk period in Mesopotamia (Schroer and Keel 2005, 183, 280–287). By the rise of the Akkadian Empire, it was often used in monumental relief art, with prominent examples being the famous Naramsin stela (Schroer and Keel 2005, 344–345, no. 246), the so-called Anubanini rock relief (Fig. 5; Vanden Berghe 1984, 19–21) and the fragment of a stela in the Louvre from the reign of Shamshi Adad I (Aruz et al. 2008, 25–26). All these scenes show the victorious, and in the first case even divinized (according to his horned crown), ruler in the so-called ascending/victorious posture (see also Ward 1910, 53–58; Sonik 2015, 157, n. 32), striding over enemies and presenting his triumph to the sun god or to the goddess Ishtar. The presentation of this type of triumph or even sacrifice in front of a deity as well as the figure of the victorious ruler himself in this posture are two other motifs which are reflected in later Old Babylonian (Fig. 6; Collon 1986, 165–170, pl. XXXI, nos. 418–425; al-Gailani Werr 1988, 12–15, pl. VII, nos. 7–10) and Syro-Palestinian iconography, where they merge with the Egyptian motif of the pharaoh smiting his enemies (Figs. 7–9; Teissier 1996, 116–117, nos. 196, 247–250; Otto 2000, no. 434).

During the Akkadian period, in which seal iconography was rich and elaborate, a related motif, named the 'battles of the gods', occurs. This motif represents different deities struggling among themselves (Figs. 10–11; Ward 1910, 53–58; Frankfort 1939, 131–132; Boehmer 1965, 49–59; Amiet 1980, 45–46, figs. II.3, II.12, II.18–21; Schroer and Keel 2005, 346–347, nos. 247–248.). This motif differs from the 'presentation of enemies' in the action and in the fact

Fig. 10: Akkadian cylinder seal (BM89628) (© The Trustees of the British Museum).

Fig. 11: Akkadian cylinder seal (BM 89119) (© The Trustees of the British Museum).

that actual combat is represented. The victorious god defeats his enemy, and puts his raised leg over him. Sometimes, this happens in front of another standing or enthroned deity. These scenes take us into the mythological world and are supposed to represent diverse mythological events, partly known from the surviving written sources. It is assumed that these battles symbolise the fight between cosmic powers, the dangerous power of the weather or the sun that destroys the vegetation (Amiet 1980, 45–47; Collon 1982, 68; also Ward 1910, 167–168).

Because of the postures of the fallen enemies, it has been suggested that the Naramsin stela could possibly be inspired by the reliefs of the Old Kingdom 5th or 6th Dynasties in Egypt (Börker-Klähn 1982, I, 136; Schroer and Keel 2005, 344). It is indeed in Egypt that the fixed formula of a victorious ruler and vanquished enemy was most prominent motif in ruler iconography (Swan Hall 1986; Schoske 1982; Schroer and Keel 2005, 236–245; das Candeias Sales 2017). Known in its already standardized form from the 1st Dynasty onwards (Fig. 12), the motif occurs in all time periods in all available media (*e.g.* monumental relief decoration, Fig. 13). The figure of a fighting and smiting king becomes an 'icon of royal supremacy', expressing the idea that the king is obliged to maintain 'maat'- universal order and the inherent structure of creation (Hendricks and Förster 2010, 826–852).

This Egyptian royal iconography also penetrated Syrian glyptic. Local rulers usually presented their power through their depiction in robes with diagonal banding (Figs. 7–9; Teissier 1996, 116–117) on cylinder seals and Middle Bronze Age Syro-Palestinian scarabs (Schroer 1985, 86, fig. 48). This motif is clearly a Mesopotamian and Egyptian iconographic fusion.
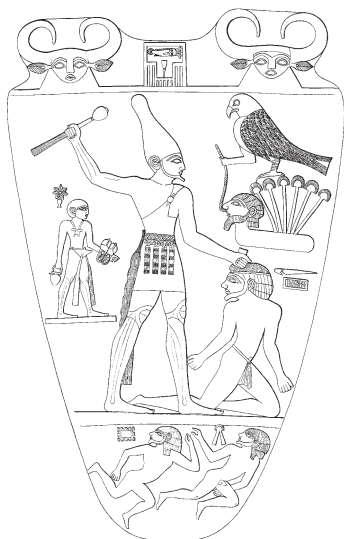
Fig. 12: The Narmer palette, First Dynasty Egypt (after Schroer and Keel 2005, 237, no. 134).

Fig. 13: Thutmosse III, Eighteenth Dynasty, smiting enemies in the Karnak Temple (photographed by the author).

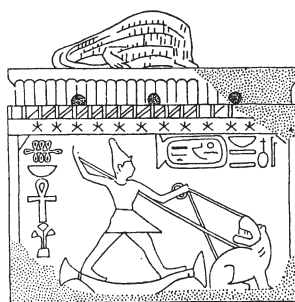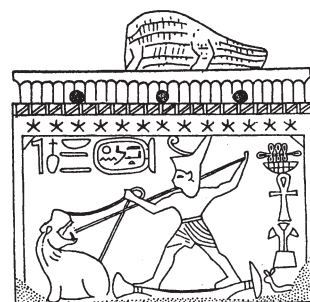Fig. 14: Egyptian scarab seal, Middle Kingdom (after Decker and Herb 1994, II, pl. CC, no. K1.48).

Fig. 15: Amulet of Amenemhat III from Tell Basta, Middle Kingdom (after Decker and Herb 1994, II, pl. CC, no. K1.47).

To some extent, the title 'mastery of animals' also includes the popular 'hunting scenes', which intersect with the contest scenes (mainly in the Uruk period) discussed above. The main difference lies in the usual absence of weapons in contest scenes, which underlines the supernatural character of the combatants depicted. However, the more secular 'hunting scenes' were used in all regions especially for the depiction of rulers, in order to emphasize their divine nature, and to demonstrate their power and victory over wild nature and hostile forces (Selz 2001; Hansen 2003, 21–23; Schroer and Keel 2005, 182–183, 276–283; Otto 2013). The postures and gestures of the figures depicted in these scenes are quite similar to those in the contest scenes. The same holds true in Egypt, where the motif was first used for rulers but was later adopted by private persons (Keel 1996, 124; Decker and Herb 1994, I, 265–291). Different types of hunting scenes (in the desert or in marshes, including hippopotamus, fish and birds, etc.) in which the motif is used, are documented from private tombs, as early as the Old Kingdom, but especially in the New Kingdom (Decker and Herb 1994, I, 265–456). The figures' postures, especially those using a spear or a throwstick in the hippopotamus hunts (Figs. 14–15), and fishing and fowling scenes, closely resemble those of figures fighting or smiting enemies. In Middle Bronze Age Mesopotamia and Syria, the hunting scenes were often replaced by the traditional combat scenes with heroes and bull-men (Otto 2013). They appear quite seldom on Old Syrian seals (e.g. Otto 2000, no. 142).

Fig. 16: Inlaid dagger with a lion hunt scene from the Shaft Grave IV, Mycenae (after Schofield 2007, fig. 21).

Fig. 17: Sealing from Knossos (after CMS II 8, no. 234).

Triumph and Defeat in the Aegean

From this short overview of Near Eastern and Egyptian triumph and defeat motifs, in which their forms, distribution, and mutual iconographic and semantic interconnection were articulated, the existence of similar and related motifs in the Aegean does therefore not appear surprising. Many of the discussed motifs were clearly reflected in the Aegean as early as the Protopalatial period. Evidence comes mainly from seals and sealings and for this reason, their state of preservation often makes their interpretation more difficult. Nevertheless, we clearly recognize the 'mastery of animals', usually in the form of a heraldic composition with a male or female figure subduing animals without weapons or being flanked by them (Barclay 2000; Crowley 2010; Dubcová 2015). Their wide distribution as well as the existence of what are clearly Minoan versions of Near Eastern motifs such as mastering griffins (Dubcová 2019) and sphinxes (Aravantinos 2010, 94) speak for the great importance of this topic in this society and for the self-representation of its elite.

During the Neopalatial period on Crete as well as during the Shaft Grave Era on the mainland, various hunting scenes were very popular (Fig. 16; Vonhoff 2011; Krzyszkowska 2014). Although, there might be some Near Eastern influence (especially in case of the lion hunt, see Vonhoff 2011, 31–38), in none of the contemporary Near Eastern regions were hunting scenes as popular and variable as in the Aegean, a fact that speaks for their local creation or the combination and transformation of various foreign motifs.

Hippopotamus Hunt?

By looking closely at some images, we may possibly find certain clues indicating foreign inspiration and interconnection. One of them is the widely discussed sealing from Knossos depicting an as yet unparalleled contest (Fig. 17; *CMS* II 8, no. 234). A male figure in a typical fighting position holding a spear (?) and standing on a boat fights a creature in the water. The creature's unparalleled appearance led Arthur Evans to interpret it as the mythical Skylla, known from the Odyssey (Evans 1921, 697). However, as was observed by Spyridon Marinatos (1926, 51) and supported by Martin Nilsson (1968, 37–38), the creature clearly resembles a hippopotamus, and consequently, the composition can be compared to the common Egyptian motif of a hippopotamus hunt. The motif already appeared in the Early Dynastic period and was later mainly represented on tomb reliefs and paintings, and on a small scale, on scarabs (Fig. 14) and amulets (Fig. 15) (Decker and Herb 1994, I, 353–382; II, pls. CLXXXVII–CCVI; Schroer and Keel 2005, 242–243, no. 138; Ben-Tor 2007, pl. 20: 7–10; Schroer 2008, 43, 146–149, nos. 362–363). It was originally the Egyptian ruler who fought this dangerous animal and thus defeated malevolent forces and restored world order. The apotropaic power of the motif was later applied to private persons prior to the Middle Kingdom in the funerary sphere or on their private seals (Keel 1996, 123–126, figs. 15–17, 20, 37–38). The posture and gestures are taken from the hunting scenes and were used also in mythological fights, such as for example the known combat between the god Seth and snake-demon Apophis, or Horus slaying his enemy Seth. This is also a scenario identified by Nanno Marinatos (2010, 177–179) who compares the fighting male figure with the Egyptian god Seth and thus also with the Syrian weather god defeating the monstrous snake-demon Apophis. The postures and gestures of these divine figures, represented mainly in the
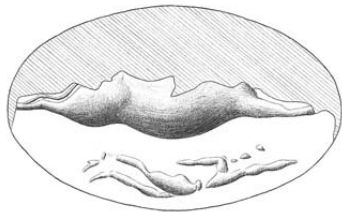
Fig. 18: Sealing from Knossos (after CMS II 8, no. 227).

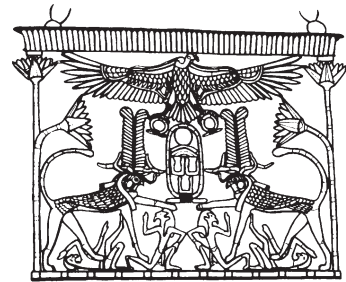Fig. 19: Seal from Mycenae (after CMS I, no. 171).

Fig. 20: Drawing of the pectoral of Mereret, Twelfth Dynasty, Dashur (after Schroer 2008, 143, no. 356).

Book of the Dead, clearly come from ruler iconography. Although related, the individual elements of the Knossos sealing clearly speak for the motif of the hippopotamus hunt, being most likely transformed and/or re-interpreted in the Aegean.

Defeated Enemies

It is above all the presence of defeated enemies, alongside the almost identical postures and gestures of contesting figures, that clearly relate Aegean combat scenes to the motif of the Egyptian pharaoh smiting his enemies. Aside from glyptic combat scenes, Aegean depictions of fallen contestants or warriors appear mainly in relief decoration or in wall paintings. These figures are included in multifigure scenes in which the victorious figure is usually missing. Such formulas appear for example in the Miniature frieze of the West House in Akrotiri (Immerwahr 1990, 187, Ak No. 12, pl. 27), in the Megaron Frieze at Mycenae (Immerwahr 1990, 192, My No. 11, pl. 65) and in the battle scene from Hall 64 in Pylos (Immerwahr 1990, 197, Py. No. 10, pl. 66). A special type of fallen and thus clearly defeated figure is also represented in bull-leaping scenes. Here, the successful leaper demonstrates his triumph not only over the dangerous animal but also over/among the other contestants (Fig. 18; see *e.g. CMS* I, no. 314; VI, no. 342; II 8, no. 227; V Suppl. 1B, no. 48; XIII, no. 35). These scenes displaying actual or symbolic action in bull games represent another form of triumph over nature, the latter being represented by the mighty bull (Younger 1995 b; Panagiotopoulos 2006).

Related to this topic might be a special scene shown on two seal images – on the sealing from Chania (*CMS* V Suppl. 1A, no. 133) and the signet-ring from Athens (*CMS* V, no. 173). In both cases, a male figure is obviously leading two figures attached to a kind of leash. It is not only the latter's submissive position, but also the running figure's victorious posture (for the running posture see Lebessi et al. 2004; Blakolmer and Hein 2018, 199–200), which indicate the character of the scene, that can be read as a triumphant warrior leading defeated and captive enemies. In these two images, the typical fallen position of the enemies is replaced by their binding with a leash, a popular form of mastery in the Aegean (Dubcová 2019).

The symbolic value of a fallen enemy and its possible connection with Egyptian ideology might be indicated on a seal from Mycenae (Fig. 19; *CMS* I, no. 171). It is the comparison not only with known Near Eastern, but also with many Aegean depictions, which suggests that the unnatural posture of the lying figure's arms and legs indicates a fallen enemy. An enemy being subdued by a griffin is a well-known Egyptian motif. In the latter, the griffin embodies the king himself (see *e.g.* the pectoral of Mereret from the 12th Dynasty at Dashur [Fig. 20; Schroer 2008, 142–143, no. 356; Dubcová 2019, 167]). Thus, in this motif we can recognize a Minoan or Mycenaean version, where the expression of dominance is doubled by the presence of mastered (leashed) griffins and by the fallen enemy (Dubcová 2019, 167).

Fig. 21: Sealing from Kato Zakros with the fifth reconstructed male figure (after CMS II 7, no. 2, reconstruction drawn by the author after Koehl 2016, fig. 9.3).

Fig. 22: Impression of cylinder seal from Agia Triada (after CMS *II 6, no. 144).*

Fig. 23: Sealing from Kato Zakros (after CMS *II 7, no. 3).*

Kato Zakros Sealings – Presenting Enemies?

Alongside the aforementioned scenes depicting fallen enemies, some other exceptional images represent subdued or defeated figures being presented by their vanquishers. Examples of such scenes appear on two sealings from Kato Zakros. The first is poorly preserved, but depicts a complex scene involving a group of male figures (Fig. 21; *CMS* II 7, no. 2). One of the male figures, placed to the right, raises his hand to his head, the second figure touches his chest in a gesture of salutation or adoration, and thus indicate the depiction of a cult scene. The central male figure, holding an elongated object with a triangular top, is turned to the left, towards the fourth figure who has one leg bent and raised (see also Hogarth 1902, 77, no. 2, pl. VI; Younger 1995 a, 157, no. 5, pl. I.1c). Recently, the sealing was re-examined and re-interpreted by Robert Koehl (2016, 118–121), who identified a fifth figure kneeling in front of the central male. Koehl connected the scene with a Minoan 'rite of passage'. The kneeling male is clearly submissive to the two figures standing above him.

If we look for parallels in Mesopotamian scenes of mastery, another possible scenario can be inferred. With regard to the figure to the left: the raised leg is always the symbol of a fight and dominance (Sonik 2015, n. 32). In the Aegean, we know it mainly from combat or hunting scenes (Figs. 1–2, 16), in which it can be connected with the movement of the fighting action. The Near Eastern posture is, however, also known in the Aegean context, from the impression of an imported and modified Akkadian or Anatolian seal from Agia Triada which obviously depicts the weather god mastering a bull (Fig. 22; *CMS* II 6, no. 144; Aruz 2008, 178).

In connection with other anthropomorphic figures, these postures, namely the ascending posture of the victorious figure and the kneeling posture of the defeated figure, occur exclusively with contesting deities in Akkadian glyptic, usually in the presence of other deities and worshippers (Figs. 10–11; Ward 1910, 53–58; Boehmer 1965, 49–59, nos. 295, 299, 308, 319–322, pl. XXVIII, no. 332; Collon 1982, 68–73, *e.g.* nos. 130, 132–136, 138). Although significantly modified, the combination of these elements, especially the figures' postures, points to similarities with these Mesopotamian motifs. As was the case in the Syro-Palestinian region, where the presentation of defeated enemies was adopted from Egyptian and Mesopotamian iconography, this type of action and especially the postures of their actors could have also been adopted as a way of representing Aegean figures of authority (earthly or divine rulers).

The other sealing from Kato Zakros, known as the 'proskynesis sealing', depicts the submission of a figure, and has already been attributed to ruler iconography (Fig. 23; *CMS* II 7, no. 3; Hogarth 1902, 78, no. 11, pl. VI; Blakolmer 2019, 51–53; Marinatos 2007; 2010: 182–184; Koehl 2016, 118–127, fig. 9.4). The scene represents a standing male figure holding a staff and two male figures wearing long robes with diagonal banding. In the centre is another male figure bending down to the ground in front of the male figure with the staff. There is no doubt that

the position of the central figure is that of submission, performing obeisance, as was interpreted by Marinatos (2007; 2010, 182–183, fig. 13.14). The act of 'proskynesis' (obeisance/adoration) evokes a secular sphere and it can be applied to an actual ritual performed in the Minoan court in front of the ruler. According to Koehl, this seal might also be understood as the depiction of a 'rite of passage' (Koehl 2016, 118–127, fig. 9.4). However, there might be a third possibility of how to read this particular scene. Another kind of submission of anthropomorphic figures, which is actually documented in available contemporary pictorial material, is the Near Eastern presentation of defeated minor deities by victorious gods to the principal god, or of vanquished enemies by a ruler. Even the presumed nudity of the central figure, a feature usually signifying the submission and representation of defeated enemies, indicates the relationship between these motifs.

Another Indication: the So-called Syrian Robe

The connection with the Near Eastern and especially with the Syro-Palestinian area in the Minoan 'proskynesis sealing' is also indicated by the so-called 'Syrian robe' worn by two of the figures. This special dress has always been considered as adopted from the Syrian region and is usually connected with the so-called 'priest figures' (Evans 1928, 785; 1935, 412–414; Marinatos 1993, 127; Davis 1995, 15–17; Younger 1995a, 162–164; Jones 2015, 265–266). This 'robe with diagonal banding' occurs for the first time in Old Syrian glyptic, in the High Classical period of the early 18th century BC, and is found mainly in western and north-western Syria (Figs. 7–9; Otto 2000, 7–21). Similarly, as was the case in the Aegean, the figures often carry various weapons and symbols of status (a sickle sword, a fenestrated, semi-circular axe, a straight or crooked staff, etc.). On cylinder seals, they are participants in different presentation scenes including the presentation of defeated enemies (Figs. 7–9; Schroer 1985, 84–85, fig. 48; Teissier 1996, no. 249) and are associated with many other figures, with animals and fantastic creatures (see also Schroer 1985; Otto 2000, nos. 122–125.). The identification of these figures is difficult. Only in a few cases where the horned crown is recognisable (a statue from Qatna) can divine or divinised status be assumed (Schroer 1985, 71, fig. 23; 2008, no. 538; Aruz et al. 2008, 48, no. 22). Most of the figures, however, seem to portray royal personages, kings or princes. Their appearance on Palestinian scarabs has been interpreted as representing a 'divinised prince', a symbol of wellbeing, prosperity, royal victorious power and protection (Schroer 1985, 104–106; 2008, 53–54, 284–307).

Identification of the Figures

With the typical Near Eastern scenario in mind, the two scenes from Kato Zakros could therefore be interpreted as showing the presentation of defeated enemies by a ruler or rulers to a deity (males with staff). While the possibility of mythical action cannot be altogether excluded – especially in the case of the first scene, the lack of supernatural elements rather supports the figures' identification as rulers or dignitaries. As was mentioned at the beginning of this paper, in the Aegean, deities were not specified by standardized attributes (for a discussion of this problem see Blakolmer 2010, 2018). This phenomenon seems to be deliberate and does not betray our lack of understanding. For this reason, the images seem to have rather a more general, symbolical meaning.

In the case of the 'proskynesis sealing', the subdued figure shows obeisance or is presented towards the male figure holding a staff. Thus, the latter is understood as a ruler or a god, whereas the figures in Syrian robes are understood as priests or other dignitaries, members of the elite. This identification would coincide with the frequent motif in which the 'male in diagonal robe' is interpreted mainly as a ruler ('prince') with the Syrian weather god or with diverse Egyptian or Egyptianising male figures (a pharaoh or gods) on Old Syrian cylinder seals (see Teissier 1996: the weather god: no. 70, 141, the Egyptian god: no. 60 [imported seal from Heraklion-Poros,

---

2 Similar figures appear also on the Aegean barrel-shaped seal in Athens (*CMS* I Suppl., no. 113, of unknown provenience).

Crete], or the divinized pharaoh: no. 61).[2] It is especially the imported Poros cylinder seal which provides good evidence for the knowledge of these figures in the Aegean (Davaras and Soles 1995, 56, no. 46; Aruz 1995, 2–3, fig. 2; 2008, 137–138, no. 114, fig. 274). The identification of the figures in 'Syrian robes' as priests or perhaps rulers with priestly functions in the Aegean was mainly based on their association with assumed sacrificial tools and sacrificed animals in other depictions (Marinatos 1993, 127–134). However, their secular or even ruling functions are plausible as well (Davis 1995, 15–16). It is especially the well-known seal from Vapheio (*CMS* I, no. 223), in which a figure in a Syrian robe leads a leashed griffin, that indicates the very special power of the figure (Crowley 2013, 144, E29: calls the figure a VIP, a griffin lord). As was the case for the Pylos Griffin Warrior, the owner of the Vapheio tomb probably sought to identify himself with the figure depicted on the seal. This idea is suggested by the discovery of a semi-circular axe of Near Eastern origin in the tomb, and by a depiction of this object on one of the other seals from the tomb (Maran 2015, 255; Dubcová 2019, 172–173). For this reason, it is conceivable that the tomb owner himself was depicted as possessing special functions, such as those of a warrior or perhaps a priest, but it is also possible that we are dealing with rather unspecific figures of power and authority.

The latter interpretation is also supported by Near Eastern evidence in which the 'princes in diagonal robes' are not individual rulers, but rather general figures of power. A similar role was also played by the figures of Egyptian rulers in Syro-Palestinian seal images (Teissier 1996, 57–62). The aim of a non-royal elite to identify with these figures can be traced everywhere in the ancient Near East: in Old Babylonian worship scenes, in Egypt by hunting scenes or in Syria-Palestine by defeating enemies. The idea of a non-specific, idealized 'victorious ruler' characterized by various elements, as we know it from these Near Eastern regions, might be the solution to this identification problem in the Aegean. It is, of course, possible that the poses were originally used to represent named people (historical figures), which are now, unfortunately unknown to us. In many scenes, however, it might not be the figure himself, but rather his act expressed by clearly readable postures and gestures, that was the main purpose of the image.

Conclusions

Aegean iconographic scenes are known for being difficult to understand. However, close comparison with Near Eastern images undertaken in this paper shows that a clear relationship existed between some motifs, and allows for the suggestion of a possible meaning for the Aegean scenes. It seems very likely that the local elites' modes of self-presentation were similar in many regions and that the depiction of triumph and defeat was one of the most prominent topics, expressed by different motifs such as the mastery over wild forces, the slaying of enemies, or the presentation of defeated opponents to powerful figures.

Remarkable similarities exist between Aegean combat scenes and Egyptian smiting scenes. This does not necessarily mean that the motif was directly copied from Egyptian or already modified Syro-Palestinian iconography, but it shows that it was inspired by it. In both regions, be it on Egyptian temple reliefs or in Aegean signet-rings, images depicting this motif formed a distinguished way of self-presentation on the part of the ruling elite. An adaption of foreign motifs can be inferred from the postures and figures on the aforementioned Zakros sealings. They appear to be used for expressing the meaning and/or for embellishing the visual form of the actions represented.

The actual inspiration and emulation of these motifs by the Aegean elite is not only indicated by the related or even identical iconographic elements. As is well known, many motifs were adopted and adapted in the Aegean, the best example being the figure of the Minoan 'genius' which combines intentionally selected Egyptian and Near Eastern elements (Mellink 1987; Weingarten 1991; Dubcová 2015, 232–233). The Aegean practice was to use different motifs from different sources to achieve a desired effect. It was indeed the lack of standardisation of the images which allowed for this freedom.

All the Egyptian or Near Eastern motifs discussed here appear to have been known in the Aegean, given their longevity and widespread distribution. This is also corroborated by the connections existing between the Aegean and the ancient Near East, as is testified especially by the many recovered imports from Crete and from the Greek mainland (discussed mainly in Aruz 2008), for example imported seal images (Davaras and Soles 1995), the Hathor pendant from the tomb of the Griffin Warrior,[3] and the semi-circular axe from the Vapheio tomb (Maran 2015). The demonstration of these ties with Near Eastern regions obviously played an important role. These are also the reasons for which it seems more plausible to explain the images with the help of this comparison rather than with later Greek myths and practices, which were in many ways far removed from the contemporary Bronze Age.

The term Aegean society covers both Minoan as well as the later Mycenaean societies. Although there were certainly differences in both ideologies and self-presentation of the local elites, the presented material does not allow for a specific distinction. Because most of the motifs occurring on the Greek mainland have clear Cretan prototypes, it seems likely that the primary reflection of the Near Eastern motifs appeared there. Nevertheless, their constant use was most likely appealing and reflected also in later Mycenaean period.

As regards the individual images, the closest connection can be seen with the Syro-Palestinian region, which was indeed a meeting point and melting pot for all these ideas and influences coming from Egypt and Mesopotamia. This area and its way of dealing with foreign motifs as well as the self-presentation of its elite seem to be very close to those of the Aegean (see *e.g.* Schroer 2008, 53–54). This also relates to the lack of clear attributes and individualisation of the displayed figures (Otto 2000, 202).

Although their identification remains largely problematic, we can clearly see the preference for motifs coming from Egyptian or Mesopotamian ruler iconography. Many of these motifs including certain postures and gestures seem to be appropriated at the beginning of the Neopalatial era on Crete as well as during the formation of early Mycenaean states, when the local elites were trying to define and present themselves. The use of individual motifs indicates that it was not important to depict actual deities or rulers – but rather divine or royal attire and qualities expressed by specific postures and gestures, which were most likely ascribed to local earthly rulers and dignitaries. The aim of these images was most likely to display the desired values of the victorious rulers, which were understandable in the whole eastern Mediterranean.

---

3 Not yet in printed form, the information comes from the official website of the excavation: http://www.griffinwarrior.org/tholos-tombs/ (accessed 15 June 2022).

References

al-Gailani Werr, L. 1988. *Studies in the chronology and regional style of Old Babylonian cylinder seals. Bibliotheca Mesopotamica* 23. Malibu: Undena Publications.

Amiet, P. 1980. "The mythological repertory in cylinder seals of the Agade period (c. 2335–2155 B.C.)." In *Ancient art in seals. Essays by Pierre Amiet, Nimet Özgüç and John Boardman,* edited by E. Porada, 35–53. Princeton: Princeton University Press.

Aravantinos, V. L. 2010. *The Archaeological Museum of Thebes.* Athens: John S. Latsis Public Benefit Foundation.

Aruz, J. 1995. "Syrian seals and the evidence for cultural interaction between the Levant and Crete." In *Sceaux minoens et mycéniens: IVe symposium international, 10–12 septembre 1992, Clermont-Ferrand, CMS Beiheft* 5, edited by W. Müller, 1–21. Berlin: Verlag Gebr. Mann.

Aruz, J. 2008 *Marks of distinction. Seals and cultural exchange between the Aegean and the Orient. CMS Beiheft* 7. Mainz am Rhein: von Zabern.

Aruz, J., K. Benzel, and J. M. Evans, eds. 2008. *Beyond Babylon. Art, trade and diplomacy in the second millennium B.C.* New York: The Metropolitan Museum of Art.

Barclay, A. E. 2001. "The Potnia Theron. Adaptation of a Near Eastern image." In *Potnia. Deities and religion in the Aegean Bronze Age. Proceedings of the 8th International Aegean Conference. Göteborg, Göteborg University, 12–15 April 2000, Aegaeum* 22, edited by R. Laffineur and R. Hägg, 273–386. Liège: Université de Liège.

Ben-Tor, D. 2007. *Scarabs, chronology, and interconnections. Egypt and Palestine in the Second Intermediate Period. OBO Series Archaeologica* 27. Fribourg: Academic Press.

Blakolmer, F. 2007. "The Silver Battle Krater from Shaft Grave IV at Mycenae: evidence of fighting 'heroes' on Minoan palace walls at Knossos?" In *Epos. Reconsidering Greek epic and Aegean Bronze Age archaeology. Proceedings of the 11th International Aegean Conference, Los Angeles, UCLA – The J. Paul Getty Villa, 20–23 April 2006,* edited by S. P. Morris and R. Laffineur, 213–224. *Aegaeum* 28. Liège and Austin: Université de Liège, University of Texas.

Blakolmer, F. 2010. "A pantheon without attributes? Goddesses and gods in Minoan and Mycenean iconography." In *Divine images and human imaginations in ancient Greece and Rome,* edited by I. Mylonopoulos, 21–61, 389–397. *Religions in the Graeco-Roman World* 170. Leiden and Boston: Brill.

Blakolmer, F. 2018. "Iconography versus reality: goddesses and gods in Minoan Crete." In *Πεπραγμένα ΙΑ′ Διεθνούς Κρητολογικού Συνεδρίου, Ρέθυμνο, 21–27 Οκτωβρίου 2011,* Vol. A1.3, edited by E. Gavrilaki, 173–187.

Blakolmer, F. 2019. "No kings, no inscriptions, no historical events? Some thoughts on the iconography of rulership in Mycenaean Greece." In *From LUGAL.GAL to 'wanax'. Kingship and political organisation in the Late Bronze Age Aegean,* edited by J. M. Kelder and J. I. Waal Willemijn, 49–94. Leiden: Sidestone Press.

Blakolmer, F., and I. Hein. 2018. "A 'special procession' in Minoan Crete as a ritual of rulership? A view from Egypt." In *Proceedings of the 10th Intern. Congress on the Arch. of the Ancient Near East, I CAANE, 25–29 April 2016, Vienna (10th I CAANE),* edited by B. Horejs, Ch. Schwann, V. Müller, M. Luciani, M. Ritter, M. Guidetti, R. B. Salisbury, F. Höflmayer, and T. Bürge, 195–208. Wiesbaden: Harrassowitz Verlag.

Boehmer, R. M. 1965. *Die Entwicklung der Glyptik während der Akkad-Zeit. Untersuchungen zur Assyriologie und Vorderasiatischen Archäologie* 4. Berlin: de Gruyter.

Börker-Klähn, J. *Altvorderasiatische Bildstelen und vergleichbare Felsreliefs.* Vol. I: Text, *Deutsche Archäologisches Institut, Abteilung Baghdad. Baghdader Forschungen* 4. Mainz am Rhein: Verlag Philipp von Zabern.

Collon, D. 1982. *Catalogue of the Western Asiatic seals in the British Museum. Cylinder seals II. Akkadian – post Akkadian – Ur III – periods.* London: Trustees of the British Museum.

Collon, D. 1986. *Catalogue of the Western Asiatic Seals in the British Museum. Cylinder seals III. Isin-Larsa and Old Babylonian periods.* London: The Trustees of the British Museum.

Collon, D. 1987. *First impressions. Cylinder seals in the ancient Near East.* London: British Museum Publications.

Collon, D. 1995. "Nimrod, the mighty hunter, and its descendants: contest scenes on the cylinder seals." In *Seals and sealing in the ancient Near East. Proceedings of the symposium held on September 2, 1993, Jerusalem, Israel,* edited by J. G. Westenholz, 23–38. *Bible Lands Museum Jerusalem Publications* 1. Jerusalem: Bible Lands Museum.

Costello, S. K. 2010. "The Mesopotamian 'nude hero': context and interpretations." In *The master of animals in old world iconography,* edited by D. B. Counts and B. Arnold, 25–35. Budapest: Archaeolingua Alapítvány.

Crowley, J. L. 1995. "Images of power in the Bronze Age Aegean." In *Politeia. Society and state in the Aegean Bronze Age. Proceedings of the 5th International Aegean Conference, University of Heidelberg, Archäologisches Institut, 10–13 April 1994,* Vol II., edited by R. Laffineur and W.-D. Niemeier, 475–491. *Aegaeum* 12. Liège and Austin: Université de Liège, Histoire de l'art et archéologie de la Grèce antique and University of Texas at Austin.

Crowley, J. L. 2008. "In honour of the gods – but which gods? Identifying deities in Aegean Glyptic." In *Dais. The Aegean feast. Proceedings of the 12th International Aegean Conference, University of Melbourne, Centre for Classics and Archaeology, 25–29 March,* edited by L. A. Hitchcock, R. Laffineur, and J. Crowley, 75–87. *Aegaeum* 29. Liège and Austin: Université de Liège and University of Texas.

Crowley, J. L. 2010. "The Aegean Master of Animals: the evidence of the seals, signets and sealings." In *The Master of Animals in old world iconography,* edited by D. B. Counts and B. Arnold, 75–91. Budapest: Archaeolingua Alapítvány.

Crowley, J. L. 2013. *The iconography of Aegean seals. Aegaeum* 34. Leuven and Liège: Peeters.

das Candeias Sales, J. 2017. "The ritual scenes of smiting the enemies in the pylons of Egyptian temples: symbolism and functions." In *Thinking symbols. Interdisciplinary studies,* edited by J. Popielska-Grzybowska and J. Iwaszczuk, 257–262. *Acta Archaeologica Pultuskiensia* VI. Pultusk: Department of Archaeology and Anthropology.

Davaras, C., and J. Soles. 1995. "A new oriental cylinder seal from Mochlos. Appendix: catalogue of the cylinder seals found in the Aegean." *ArchEph* 134: 29–66.

Davis, E. N. 1995. "Art and politics in the Aegean: the missing ruler." In Rehak, ed. 1995, 11–22. *Aegaeum* 11. Liège and Austin: Université de Liège and University of Texas.

Davis, J. L., and S. R. Stocker. 2016. "The Lord of the Gold Rings: the Griffin Warrior of Pylos." *Hesperia* 85: 627–655.

Decker, W., and M. Herb. 1994. *Bildatlas zum Sport im Alten Ägypten.* Vol. I: Text: Corpus der bildlichen Quellen zu Leibesübungen, Spiel, Jagd, Tanz und verwandten Themen. Leiden: Brill.

Dubcová, V. 2010. "Zur Problematik der herrscherlichen Ikonographie im minoisch-mykenischen Griechenland." In *Anodos: studies of the ancient world. In honour of Marie Dufková, 9/2009,* edited by M. Novotná, W. Jobst, M. Dufková, and K. Kuzmová, 17–32. Trnava: Trnavská univerzita v Trnave.

Dubcová, V. 2015. "The Near Eastern "hero" and "bull-man" and their impact on the Aegean Bronze Age iconography." In *There and back again. The crossroads II: proceedings of an international conference held in Prague, September 15–18, 2014,* edited by J. Mynářová, P. Onderka, and P. Pavúk, 221–244. Prague: Charles University in Prague.

Dubcová, V. 2019. "Mastering a griffin. The agency and perception of Near Eastern images by the Aegean Bronze Age elite." In *Proceedings of the international conference Ancient communities and their elites from the Bronze Age to Late Antiquity (Central Europe – Mediterranean – Black Sea): dedicated to the 25th anniversary of the re-established Trnava University in Trnava and the 20th anniversary of Department of Classical Archaeology, Trnava, 6th–8th October 2014, Part I,* edited by M. Novotná et al., 163–178. *Anodos: Studies of the Ancient World* 13. Trnava: University of Trnava.

Evans, A. 1921. *The Palace of Minos at Knossos.* Vol. I. London: Macmillan.

Evans, A. 1928. *The Palace of Minos at Knossos.* Vol. II. London: Macmillan.

Evans, A. 1935. *The Palace of Minos at Knossos.* Vol. IV. London: Macmillan.

Frankfort, H. 1939. *Cylinder seals: a documentary essay on the art and religion of the ancient Near East.* London: Macmillan.

Franković, F. and U. Matić. 2020. "The lion, the weapon and the warlord: historical evaluation of the early Late Bronze Age Aegean iconography." *Egypt and the Levant* 30: 345–375.

Hallager, E. 1985. *The Master Impression: a clay sealing from the Greek-Swedish excavations at Kastelli, Khania. SIMA* 69. Paul Åströms Förlag, Göteborg.

Hansen, D. P. 2003. "Art of the Akkadian Dynasty." In *Art of the first cities. The third millennium B.C. from the Mediterranean to the Indus,* edited by J. Aruz, 189–233. New York: Metropolitan Museum of Art.

Hendricks, S., and F. Förster. 2010. "Early Dynastic art and iconography." In *A companion to ancient Egypt,* edited by A. B. Lloyd, 826–852. Vol. II. Malden: Blackwell.

Hiller, S. 1999. "Scenes of warfare and combat in the arts of Aegean Late Bronze Age: reflections on typology and development." In *Polemos. Le contexte guerrier en Égée á l'âge du Bronze. Actes de la 7e Rencontre égéenne internationale Université de Liège, 14–17 avril 1998,* edited by R. Laffineur, 319–330. *Aegaeum* 19. Liège and Austin: Université de Liège and University of Texas.

Hogarth, D. G. 1902. "The Zakro sealings." *JHS* 22: 76–93.

Immerwahr, S. A. 1990. *Aegean painting in the Bronze Age.* Pennsylvania: Pennsylvania State University Press.

Jones, B. R. 2015. *Ariadne's threads: the construction and significance of clothes in the Aegean Bronze Age.* Leuven and Liège: Peeters.

Keel, O. 1992. *Das Recht der Bilder gesehen zu werden. Drei Fallstudien zur Methode der Interpretation altorientalischer Bilder. OBO* 122. Fribourg: Academic Press.

Keel, O. 1996. "Ein weiterer Skarabäus mit einer Nilpferdjagd, die Ikonographie der sogenannten Beamtenskarabäen und der ägyptische König auf Skarabäen vor dem Neuen Reich." *Egypt and the Levant* 6: 119–136.

Koehl, R. B. 2016. "Beyond the 'Chieftain Cup': more images relating to Minoan Male 'rites of passage'." In *Studies in Aegean art and culture: a New York Aegean Bronze Age colloquium in memory of Ellen N. Davis,* edited by R. B. Koehl, 113–132. Philadelphia: INSTAP Academic Press.

Krzyszkowska, O. 2014. "Cutting to the chase: hunting in Minoan Crete." In *Physis. L'environnement naturel et la relation homme-milieu dans le monde égéen protohistorique. Actes de la 14e Rencontre égéenne internationale, Paris, Institut National d'Histoire de l'Art (INHA), 11–14 décembre 2012,* edited by R. Laffineur, F. Rougemont, and G. Touchais, 341–347. *Aegaeum* 37. Leuven and Liège: Peeters.

Lebessi, A., P. Muhly, and G. Papasavvas. 2004. "The Runner's Ring, a Minoan athlete's dedication at the Syme sanctuary, Crete." *AM* 119: 1–31.

Lewartowski, K. 2019. "Combat, myths and seals in the Griffin Warrior times." *Studies in Ancient Art and Civilization* 23: 73–93.

Maran, J. 2015. "Near Eastern semicircular axes in the Late Bronze Age Aegean as entangled objects." In *Ein Minoer im Exil. Festschrift für Wolf-Dietrich Niemeier,* edited by D. Panagiotopoulos, I. Kaiser, and O. Kouka, 243–270. *Universitätsforschungen zur Prähistorischen Archäologie* 270. Bonn: Verlag Dr. Rudolf Habelt GmbH.

Mellink, M. 1987. "Anatolian libation pourers and the Minoan Genius." In *Monsters and demons in the ancient and medieval worlds. Papers presented in honor of Edith Porada,* edited by A. E. Farkas, 65–72. Mainz am Rhein: Philipp von Zabern.

Marinatos, N. 1993. *Minoan religion. Ritual, image, and symbol.* Columbia: University of South Carolina Press.

Marinatos, N. 2007. "Proskynesis and Minoan theocracy." In *Στέφανος Αριστείος. Archäologische Forschungen zwischen Nil und Istros: Festschrift für Stefan Hiller zum 65. Geburtstag,* edited by F. Lang, C. Reinholdt, and J. Weilhartner, 179–185. Vienna: Phoibos Verlag.

Marinatos, N. 2010. *Minoan kingship and the solar goddess. A Near Eastern koine.* Urbana: University of Illinois Press.

Marinatos, S. N. 1926. "Μινωϊκή καί Ομηρική Σκύλλα." *ArchDelt* 10: 51–62.

Metzger, M. 1985. *Königsthron und Gottesthron. Thronformen und Throndarstellungen in Ägypten und im Vorderen Orient im dritten und zweiten Jahrtausend vor Christus und deren Bedeutung für das Verständnis von Aussagen über den Thron im Alten Testament.* Vol. I: Text, Vol. II: Bildtafeln. *AOAT* 15. Kevelaer: Butzon & Bercker.

Morris, S. P. 1989. "A tale of two cities: the miniature frescoes from Thera and the origins of Greek poetry." *AJA* 93: 511–535.

Nilsson, M. 1968. *The Minoan-Mycenaean religion and its survival in Greek religion.* 2nd rev. ed. Lund: Gleerup.

Otto, A. 2000. *Die Entstehung und Entwicklung der klassisch-syrischen Glyptik. Untersuchungen zur Assyriologie und Vorderasiatischen Archäologie* 8. Berlin: Walter De Gruyter.

Otto, A. 2013. "Königssiegel als Programm – Überlegungen zum Selbstverständnis altorientalischer Herrscher und zur Deutung der Tierkampfszene." *ZA* 103: 45–68.

Özgüç, N. 2006. *Kültepe-Kanis, Nesa. Yerli Peruwa ve Assur-imitti'nin oğlu Assur'lu Tüccar Usur-sa Istar'in arsivlerine ait kil zarfların mühür başkıları.* Türk Tarih Kurumu Yayınları 5, dizi 50. Ankara: Türk Tarih Kurumu.

Panagiotopoulos, D. 2006. "Das minoische Stierspringen. Zur Performanz und Darstellung eines altägäischen Rituals." In *Archäologie und Ritual: Auf der Suche nach der rituellen Handlung in den antiken Kulturen Ägyptens und Griechenlands,* edited by J. Mylonopoulos and H. Roeder, 125–138. Wien: Phoibos Verlag.

Persson, A. W. 1942. *The religion of Greece in prehistoric times. Sather classical lectures* 17. Berkeley: University of California Press.

Pittman, H. 2001. "Mesopotamian intraregional relations reflected through glyptic evidence in the Late Chalcolithic 1–5 Periods." In *Uruk, Mesopotamia and its neighbors. Cross-cultural interactions in the era of state formation,* edited by M. S. Rothman, 403–443. Santa Fe: School of American Research Press.

Rehak, P., ed. 1995. *The role of the ruler in the prehistoric Aegean. Proceedings of a panel discussion presented at the Annual Meeting of the Archaeological Institute of America, New Orleans, Louisiana, 28 December 1992. Aegaeum* 11. Liège, Austen: Université de Liège, University of Texas.

Schofield, L. 2007. *The Mycenaeans.* London: The British Museum Press.

Schoske, S. 1982. "Das Erschlagen der Feinde. Ikonographie und Stilistik der Feindvernichtung im alten Ägypten." Ph.D. diss., University of Heidelberg.

Schroer, S. 1985. "Der Mann im Wulstsaummantel: Ein Motiv der Mittelbronze-Zeit II B." In *Studien zu den Stempelsiegeln aus Palästina/Israel II,* edited by O. Keel and S. Schroer, 51–112. *OBO* 88. Fribourg and Göttingen: Academic Press.

Schroer, S. 2008. *Die Mittelbronzezeit. Die Ikonographie Palästinas / Israels und der Alte Orient. Eine Religionsgeschichte in Bildern. Die Ikonographie Palästinas, Israels und der Alte Orient* II. Fribourg: Academic Press.

Schroer, S., and Keel. O. 2005. *Vom ausgehenden Mesolithikum bis zur Frühbronzezeit. Die Ikonographie Palästinas, Israels und der Alte Orient. Eine Religionsgeschichte in Bildern. Die Ikonographie Palästinas / Israels und der Alte Orient* I. Fribourg: Academic Press.

Selz, G. 2001. "Guter Hirte, Weiser Fürst – Zur Vorstellung von Macht und zur Macht der Vorstellung im altmesopotamischen Herrschaftsparadigma." *Altorientalische Forschungen* 28: 8–13. Berlin: Akademie Verlag.

Sonik, K. 2015. "Divine (re-)presentation: authoritative images and a pictorial stream of tradition in Mesopotamia." In *The materiality of divine agency,* edited by B. Pongratz-Leisten and K. Sonik, 142–193. Berlin, New York: de Gruyter.

Stocker, S. R., and J. L. Davis. 2017. "The Combat Agate from the grave of the Griffin Warrior at Pylos." *Hesperia* 86: 583–605.

Suter, C. E. 2020. "The play with throne designs in third millennium BCE Mesopotamia." In *The ancient throne. The Mediterranean, Near East, and beyond, from the 3rd millennium BCE to the 14th century CE. Proceedings of the workshop held at the 10th ICAANE in Vienna, April 2016,* edited by L. Naeh and D. Brostowsky Gilboa, 21–36. Vienna: Austrian Academy of Sciences.

Swan Hall, E. 1986. *The pharaoh smites his enemies: a comparative study. Münchner Ägyptologische Studien* 44. Munich: Deutscher Kunstverlag.

Teissier, B. 1996. *Egyptian iconography on Syro-Palestinian cylinder seals of the Middle Bronze Age. OBO Series Archaeologica* 11. Fribourg: Academic Press.

Vanden Berghe, L. 1984. *Reliefs rupestres de l'Iran ancien.* Bruxelles, Musées Royaux d'Art et d'Historie.

Vere\u0161ová, V., and F. Blakolmer. 2022. "Orientalische Götterkronen und das Problem ›fremder Götter‹ in der Ikonografie des minoischen Kreta." *ÖJh* 91, 273–296.

Vonhoff, Ch. 2008. *Darstellungen von Kampf und Krieg in der minoischen und mykenischen Kultur. Internationale Archäologie* 109. Rahden: Verlag Marie Leidorf GmbH.

Vonhoff, Ch. 2011. "Jagddarstellungen in der spätmykenischen Kunst der Palast- und Nachpalastzeit." *AM* 126: 29–61.

Ward, W. H. 1910. *The seal cylinders of Western Asia.* Washington: Carnegie Institution of Washington.

Warren, P. M. 1979. "The miniature fresco from the West House at Akrotiri, Thera, and its Aegean setting." *JHS* 99: 115–129.

Weingarten, J. 1983. *The Zakro Master and his place in prehistory. SIMA-PB* 26. Göteborg: Åström.

Weingarten, J. 1991. *The transformation of Egyptian Taweret into the Minoan genius. A study in cultural transmission in the Middle Bronze Age. SIMA* 88. Partille: Åström.

Younger, J. G. 1995 a. "The iconography of rulership in the Aegean: a conspectus." In Rehak, ed. 1995, 151–211. *Aegaeum* 11. Liège and Austin: Université de Liège and University of Texas at Austin.

Younger, J. G. 1995 b. "Bronze Age representations of Aegean bull-games, III." In *Politeia. Society and state in the Aegean Bronze Age. Proceedings of the 5th International Aegean Conference, University of Heidelberg, Archäologisches Institut, 10–13 April 1994,* Vol. II, edited by R. Laffineur and W.-D. Niemeier, 507–545. *Aegaeum* 12. Liège and Austin: Université de Liège and University of Texas at Austin.

Younger, J. G. 2011. "A view from the sea. The seascape in Aegean prehistory." In *Monographs of the Danish Institute at Athens* 14, edited by G. Vavouranakis, 161–183. Athens: The Danish Institute at Athens.

Younger, J. G. 2016. "Identifying myth in Minoan art." In *Metaphysis. Ritual, myth and symbolism in the Aegean Bronze Age. Proceedings of the 15th International Aegean Conference, Vienna, Institute for Oriental and European Archaeology, Aegean and Anatolia Department, Austrian Academy of Sciences and Institute of Classical Archaeology, University of Vienna, 22–25 April 2014,* edited by E. Alram-Stern, F. Blakolmer, S. Deger-Jalkotzy, R. Laffineur, and J. Weilhartner, 433–438. *Aegaeum* 39. Leuven and Liège: Peeters.

Younger, J. G. 2020. Narrative in Aegean art: a methodology of identification and interpretation. In *Current approaches and new perspectives in Aegean iconography,* edited by F. Blakolmer, 71–86. *Aegis* 18, Louvain-la-Neuve: Presses universitaires de Louvain.

The Mycenaean 'Lunge and Thrust'

Robert B. Koehl

Abstract *This paper was conceived in response to the widely held view that the so-called Combat Agate seal, from the Griffin Warrior tomb at Pylos, is a masterpiece of Neopalatial Minoan art. However, it is argued here that the seal depicts the Mycenaean formula for showing the moment of the kill in a face-to-face combat. As will be demonstrated, the victor in these scenes stands in a posture identified here as the 'lunge and thrust'. This consists of two movements involving a shift in body weight: a backward movement to gain momentum, followed by a forward lunge which is accompanied by a sword thrust. To date, no Minoan seals show figures in the 'lunge and thrust' pose. Rather, all the relevant parallels come from mainland Helladic contexts. While there is no question that the style of depicting the male figures on the Pylos seal and on the other Mycenaean seals discussed here emulate Minoan figural art, their mainland funerary contexts imply that they were received and appreciated by Mycenaeans who might even have identified with the victor who stands in the 'lunge and thrust' posture.*

The discovery in 2015 of a banded agate seal-stone, now known as the Combat Agate, in the tomb of the Griffin Warrior at Pylos, justifiably has received worldwide recognition for the beauty of its carving, thanks largely to its prompt publication by the excavators, replete with outstanding photographs, which thus enables a critical appraisal of the object (Fig. 1; Stocker and Davis 2017). While the seal has unanimously been lauded as a masterpiece of Minoan glyptic art (Stocker and Davis 2017, 599–601), I would challenge that assumption and rather situate the seal in the cultural milieu of the Late Helladic/Mycenaean Greek mainland. To that end, this paper argues that the victorious figure carved on the seal-stone's left side, stands in a posture called here the 'lunge and thrust', which will be shown to be a crucial element of the Mycenaean formula for depicting a kill during LH I and LH II A, be it man versus man, or man versus lion.

The evidence that has been mustered to argue for the seal's Minoan pedigree has relied on several Minoan sealings which are alleged to depict a similar combat scene. Yet, on close inspection, none of the sealings from Crete which have been cited as comparanda provide convincing parallels to the imagery and narrative of the Combat Agate, despite the relative contemporaneity of the Pylos seal, dated to LH II A, with the sealings which come from LM I B contexts (on the chronology, see Krzyszkowska 2005, 171, 178; Warren and Hankey 1989, 97–98).

One of these is a sealing from Agia Triada (*CMS* II 6, no. 15), with versions from Knossos (*CMS* II 8, no. 279), whose imagery has been interpreted as a combat scene, with one warrior running ahead of the other (Fig. 2; Krzyszkowska 2005, 189; Stocker and Davis 2017, 599, n. 51, fig. 8; on combat scenes in Aegean art, see Hiller 1999; Krzyszkowska 2005, 139; Rupp 2012, 282–283). The rear male, who has long hair and wears a necklace, appears to raise a weapon and is ready to strike the forward male who, on account of his short hair, may be recognized as the younger (on age and male hairstyles, see Koehl 1986; 2000, 135–137). The theme of combat seems to be reinforced by the frontal face of the forward figure, a pose which Lyvia Morgan (1995, 137, 139) interprets as signifying his imminent death, presumably at the hands of the rear figure, though she avoids referring to them as warriors.

Before turning to the imagery on the sealing, the differences in the composition between the Combat Agate and this sealing must be acknowledged. Whereas the Pylos seal is composed of two facing, hence bilateral figures, with a third, fallen figure placed along the bottom, the

Fig. 1: Pylos Combat Agate amygdaloid bead seal
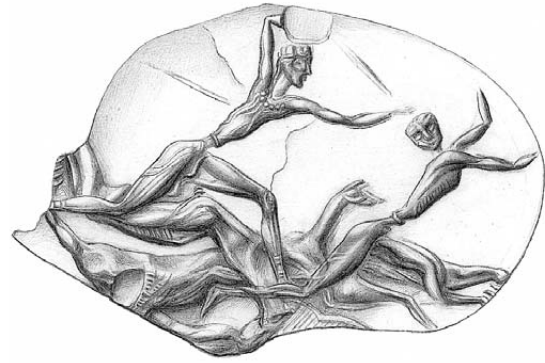(courtesy of the University of Cincinnati).

Fig. 2: Agia Triada, Man hunt sealing (CMS II 6,
no. 15; drawing courtesy of the CMS Heidelberg).

sealing(s) depicts two figures running in the same forward direction. And rather than a fallen male figure, the lower part of the seal appears to show a dog running with the males, amidst more indecipherable elements, perhaps landscape.

The presence of the dog introduces an iconographic element which significantly alters previous interpretations of these sealings and implies that the scene is related to a hunt (on dogs in Aegean hunting scenes, see Papageorgiou 2008, 21–23). Thus, while charging ahead, the forward figure may be understood as turning his head back to communicate with the rear figure, which is often a necessity in hunting. However, it must also be acknowledged that, despite the poor state of the sealings' preservation, the weaponry that both figures wield is ambiguous. Although the forward figure raises his arms, no trace remains of what they originally held. And while the rear figure seems to brandish a weapon, he appears to hold both its back and front end, thus making it unlikely that it was a sword or spear, neither of which are held by the blade.

Recently, these sealings have been re-examined by Giorgos Rethemiotakis in preparation for their re-publication who attests that the element previously interpreted as a dog has been misunderstood as such (Rethemiotakis, pers. comm., 11/15/2021). While we await a future publication, an alternative explanation is offered here, that does not depend either on the presence or absence of a dog (or dogs). In this author's publication of the Chieftain Cup, it was suggested that the cup's relief decoration depicts an episode from the cycle of male 'rites of passage,' specifically, the culminating event in the initiation of a Minoan youth who has been granted special status, known in the historical period, as a 'parastatheis', or the one who stands beside (Koehl 1986, 105–108). Thus, on one side of the cup we see an adult male, identified as such by his height and distinctive long hair, presenting a youth with a sword, which the youth holds in one hand and its scabbard in the other, as well as three ox hides, on the opposite side of the cup, to be converted into figure-of-eight and/or tower shields. According to the historical sources, which appear to describe the rites in some detail, the cup itself would also have been presented as a gift from the 'philetor' or lover, to his 'parastatheis' (Koehl 1986, 109).

While this is not the occasion to evaluate the validity of using historical sources to illuminate Minoan imagery and cultural practices, which most scholars have ascribed to the Dorians (for a preliminary discussion, see Koehl 1986, 105–106, 109–110), in the belief that there were elements of cultural continuity from the Minoan into the historical era, albeit significantly modified, this sealing, like the Chieftain Cup, appears to illustrate an episode from this same cycle of Minoan male initiation rites. The historical source which describes Cretan male initiation rites that may derive from the Bronze Age is a passage from Strabo (X 483–484), quoting the 4th century BC historian, Ephoros, who explains the customs associated with the love affairs between Cretan young men and youths. According to Ephoros, a young man would select a youth from

an 'agela', literally, a 'herd', or cohort, and after making elaborate preparations with the boy's friends, would stage a mock abduction of the youth, followed by a two-month period hunting and feasting, which culminated with the presentation in the 'andreion', or men's hall, of the gifts noted above. Perhaps the sealing in Figure 2, which purports to show a human hunting another human, actually depicts this mock abduction. Like the more mature figure on the Chieftain Cup, the abductor on the sealing has long hair and wears a beaded necklace, whereas the youthful abductee has short hair, like the recipient on the Chieftain Cup,

Fig. 3: Palaikastro Master Ring, cast of sealing (courtesy of J. Weingarten, M. Polig, S. Hermon).

thus providing iconographic links between the cup and sealing. This interpretation might also explain the youth's frontal face. Rather than see the frontality as a presentiment of his actual death, or murder, perhaps it alludes to his metaphorical death. According to Mircea Eliade (1958, xii–xiii, 13–37), rituals which celebrate the transition from one age grade to the next often contain elements that allude to the initiate's death, since the departure from one stage of life is understood as a kind of death, whereas entry into the next stage is regarded as a kind of rebirth.

Another Minoan sealing which has recently been cited as a close stylistic parallel to the victor on the Pylos agate is the towering male figure on the Palaikastro Master Ring (Fig. 3; Weingarten et al. 2020). Judith Weingarten has even proposed that the two glyptic masterpieces might derive from the same Minoan palatial workshop (Weingarten *et al.* 2020, 135). While Weingarten has convincingly shown that the two figures depict powerful male figures with similar physiques, and both lean into their 'prey' at a similar angle (Weingarten et al. 2020, 134–135), the hunting theme and mono-directional composition of the Palaikastro sealing has more in common with the chase depicted on the sealings from Agia Triada and Knossos discussed above, than with the bilaterally composed, inward facing, combat scene on the Pylos agate.

What is not challenged here is the dependency of the Pylos agate on Minoan stylistic conventions for depicting the 'ideal' male figure, whose conception, with narrow waist, broad shoulders, and muscular arms, torso and legs, may have begun in MM III B, as evinced by the sealings from the Knossos Temple Repository, notably the boxer (*CMS* II 8, no. 280). By LH II A, this ideal type for the male figure was clearly entrenched on the mainland, as witnessed, *e.g.* by the male figures on the Vapheio Cups. Indeed, even if Ellen Davis (1974) was correct in her belief that the 'Quiet' cup was made by a Minoan craftsperson, the male figures on the 'Violent' cup, which was undoubtedly a mainland product, adhere to this type. What is challenged here, however, is the notion that the composition and theme of the Combat Agate is Minoan. And while the birthplace of the artist who executed the seal is unlikely ever to be known, its ultimate recipient was undoubtedly the Mycenaean Griffin Warrior of Pylos, with whom it was buried.

The one group of Minoan sealings from LM I B contexts which do, in fact, depict two figures in a face-to-face confrontation are two from Kato Zakros (Fig. 4: *CMS* II 7, no. 19; Fig. 5: *CMS* II 7, no. 20) and one from Agia Triada (Fig. 6: *CMS* II 6, no. 17; see also Rupp 2012, 282). Once again, the figures have been identified as warriors engaged, in this instance, in a spear throwing duel (*e.g.* Crowley 2013, 85, 87; here, she identifies *CMS* II 7, no. 19, as a hunter; Hiller 1999, 321, 323; Rupp 2012, 282). Yet, on close inspection, the object which they brandish is clearly not a spear, as is apparent from its blunt tip, best preserved in the left-hand figure on *CMS* II 7, no. 20 (Fig. 5). Indeed, where spears are depicted, their thickened, pointed tips are clearly distinguishable from the shaft, as seen *e.g.* on a sealing from Knossos (*CMS* II 8, no. 276) and a LM II jug from Knossos (Popham 1984, 86, pl. 153.7; on the archaeological evidence for spears, see Molloy 2012, 126–127). Furthermore, the object on the seals is held by the figures
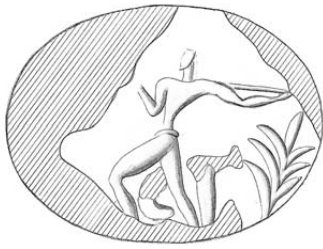
Fig. 4: Kato Zakros, Bare-headed stick throwing sealing (CMS II 7, no. 19; courtesy of the CMS Heidelberg).
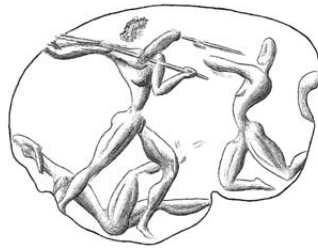

Fig. 5: Kato Zakros, Bare-headed stick throwing competition sealing (CMS II 7, no. 20; courtesy of the CMS Heidelberg).
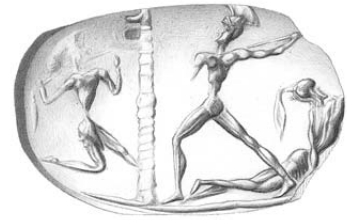

Fig. 6: Agia Triada, Helmeted stick throwing sealing (CMS II 6, no. 17; courtesy of the CMS Heidelberg).

Fig. 7: Agia Triada, 'Duel' sealing (CMS II 6, no. 16; courtesy of the CMS Heidelberg).

using both hands, with the front arm bent at an acute angle, whereas a spear in use is invariably held in the raised, cocked back arm, while the front arm is extended for balance and aim, as the jug from Knossos clearly illustrates. Indeed, even when carried "on parade", Minoan spears were carried in one hand, as on *CMS* II 8, no. 276.

Elsewhere this author has recently suggested that the group of sealings from Agia Triada and Kato Zakros, discussed above, depict the hitherto unrecognized sport of stick-fighting, a competitive sport which has its roots in Old Kingdom Egypt, whence it probably arrived on Crete (Koehl 2022). And as on the Boxer Rhyton, which depicts two zones of competing boxers wearing helmets, and one zone with bare-headed boxers (Koehl 2006, 164–165), the opponents on the sealing from Agia Triada wear helmets (Fig. 6), whereas the opponents on the sealings from Kato Zakros are bare-headed (Figs. 4–5). The sticks are held with both hands, with the front arm used to jab at the competitor. Furthermore, as on the zone with bare-headed boxers, the fallen figure on *CMS* II 7, no. 20 (Fig. 5) kicks a standing figure, suggesting that a version of the sport allowed for kicking. Lastly, as on the Boxer Rhyton, the presence of a columnar structure on the sealing from Zakros with helmeted stick-fighters suggests that the helmeted version of both boxing and stick-fighting took place in a built environment, such as the interior courtyard of a palace, whereas the presence of foliage on *CMS* II 7, no. 19 (Fig. 4) suggests that their bare-headed versions took place outdoors.

The two glyptic images that seem to depict an actual duel are also two of the least skillfully carved and, consequently, among the most inscrutable Minoan seals with human figural imagery. One of them, a sealing from Agia Triada (*CMS* II 6, no. 16) was classified by Stefan Hiller (1999, 321) as a single combat between warriors without shields (see also Rupp 2012, 280). However, several elements are irreconcilable with this interpretation (Fig. 7). While both figures wear headgear, it is difficult to identify as a helmet, as it appears to outline the head, which is clearly visible, and thus provides no apparent means of protection. The figure on the right, who appears to be the victor, based on his striding pose, holds his sword with its tip pointing upwards, his arm acutely bent, while with his raised right arm, he holds the sword's scabbard, pointing downward, which touches the shoulder or back of the fallen figure (contra Rupp, 2012, 280, who identified the scabbard as another weapon). The fallen figure, who appears to be unarmed, reaches towards the striding figure with one bent arm, while the other arm hangs down. Though his upper body is vertical, he seems to bend at the waist. His two legs taper enigmatically to a point, curving along with the bottom of the scene. The identification of the bifurcated, diagonal object that emerges from the right-hand figure's bent front right leg and behind the 'legs' of the fallen figure

is also enigmatic. Thus, it is perhaps best to leave this seal out of the discussion, at least until its meaning is untangled.

Somewhat less ambiguous is a LM I A lentoid stone seal from Petras which, like *CMS* II 6, no. 16, discussed above, depicts two facing figures (Fig. 8; Rupp 2012). Like the sealing from Agia Triada, the right-hand figure appears to be the dominant one, from his upright posture and wide-legged stance. The carver's lack of skill seems apparent from the stiff position of the forward, extended leg, which on every other glyptic image considered here, both Minoan and Mycenaean, is bent at the knee. Yet it is also the clearly defined, curving legs of the left-hand, "falling" figure, which seem to be slipping from underneath him, that

Fig. 8: Petras 'Duel', lentoid serpentinite seal (courtesy of M. Tsipopoulou and D. Rupp).

may help clarify the identification of the tapering element on the Agia Triada sealing as legs (Fig. 7). Furthermore, like the Agia Triada sealing, the dominant, right-hand figure, seems to reach out to touch the shoulder or the back of the left-hand figure, although it is unclear if he is empty-handed or, as David Rupp cautiously suggests, is holding a dagger (Rupp 2012, 279–280, 285). Rupp, again cautiously, suggests that the left-hand figure may also be holding a dagger (Rupp 2012, 280, 285), and thus identifies the scene as a duel, though as became clear from the discussion following the seal's initial public presentation (Tsipopoulou 2012, 287–289), the imagery remains inscrutable and thus, like the sealing from Agia Triada, does not substantially contribute to the discussion regarding the artistic context from which the Pylos Combat Agate emerged.

Though none of the Minoan seals and sealings discussed above seem to offer satisfactory parallels for the agate seal from Pylos, there do exist several glyptic artifacts from Mycenaean, or Helladic, contexts which provide compelling artistic and narrative comparanda for the seal. These objects come from two phases, LH I and LH II A, the latter being the date for the Pylos agate. All the LH I glyptic group come from Grave Circle A at Mycenae and is comprised of a carnelian amygdaloid seal from Shaft Grave III (Fig. 9: *CMS* I, no. 12), two gold cushion-shaped seal beads also from Shaft Grave III (Fig. 10: *CMS* I, no. 9; Fig. 11: *CMS* I, no. 11), and an oval-shaped gold signet-ring from Shaft Grave IV (Fig. 12: *CMS* I, no. 16). The LH II A group comprises, in addition to the Combat Agate from Pylos (Fig. 13), an amethyst amygdaloid bead seal
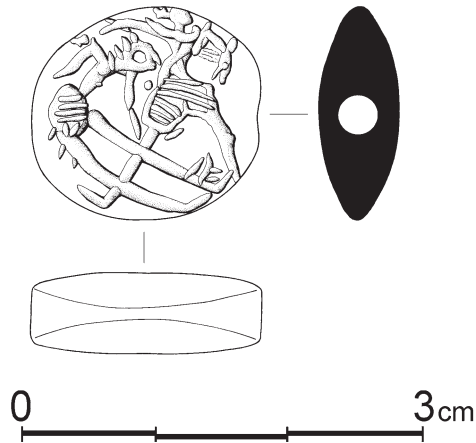

Fig. 10. Mycenae, Lion duel, gold cushion seal (CMS I, no 9; courtesy of the CMS *Heidelberg).*

Fig. 11: Mycenae, Duel, gold cushion seal (CMS I, no. 11; courtesy of the CMS *Heidelberg).*

Fig. 9: Mycenae, Duel, carnelian amygdaloid bead seal (CMS I, no. 12; courtesy of the CMS *Heidelberg).*

Fig. 12: Mycenae, Conflict in the 'glen', gold signet-ring (CMS I, no. 16; courtesy of the CMS Heidelberg).

Fig. 13: Pylos Combat Agate (courtesy of the University of Cincinnati).

Fig. 14: Pylos, Lion duel, amethyst amygdaloid bead seal (CMS I, no. 290; courtesy of the CMS Heidelberg).

from Grave Δ also from Pylos (Fig. 14: *CMS* I, no. 290), and an agate amygdaloid cylinder bead seal from a tholos tomb at Kakovatos (Fig. 15: *CMS* XI, no. 208).

What defines these seals as a coherent group in iconographic terms is the presence of a male swordsman, who is shown in a specific pose, called here, the 'lunge and thrust'. This is a complex pose performed simultaneously by the arm, torso, and legs. While standing in a wide stride, with the front leg bent and the back leg extended, the swordsman lunges forward, with his sword raised in most cases above his head, which he thrusts it into his opponent (also see Rupp 2012, 283). On the amethyst bead seal from Pylos (Fig. 14), the swordman is shown leaning back, as if to gain momentum for the forward thrust. Hence, the heel of his bent front leg is raised, whereas on the other seals, the forward motion causes the heel of the back leg to rise. On *CMS* I, no. 9 (Fig. 10), the lion seems to be lifting the swordsman's bent front leg off the ground with his paw.

The actual sword thrust, or "kill-stroke" as Sharon Stocker and Jack Davis (2017, 598) aptly call it, severs the jugular vein as depicted on the amygdaloid seal (Fig. 9), the gold cushion-shaped seal (Fig. 11) and the Pylos agate (Fig. 13; see also Peatfield 1999, 71). On the gold cushion-shaped lion duel seal (Fig. 10), the sword seems to pass through locks of the swordsman's hair before piercing through the lion's muzzle, whereas on the amethyst seal from Pylos, (Fig. 14) and the agate cylinder from Kakovatos, (Fig. 15), the swordsman stabs the feline in its opened maw.

Oddly, although the helmeted swordsman on the oval-shaped gold signet-ring from Shaft Grave IV (Fig. 12) stands in the 'lunge and thrust' pose, his sword, or more correctly, his dagger, does not penetrate his opponent, but rather terminates at his own neck. His other arm hangs down, apparently behind the shoulder of his opponent. Indeed, if he were depicted pushing down on his opponent's shoulder, it would mean that the artist had rendered his hand as emerging from his upper arm, at the location of the elbow. Rather, the artist shows the opponent's fully rounded pectoral muscle. This opponent, who is bare-headed and wears a distinctive short hairstyle with a top knot (on the top knot, see Koehl 1986, 101–102; 2000, 135–137), indeed wields a sword which he appears to thrust up to the mouth of the facing helmeted figure. A second helmeted figure, positioned to the far left, thrusts his spear towards this other, facing helmeted figure, which stops just short of his helmeted head. Thus, the imagery on this ring depicts an ambiguous narrative: since there are no apparent victors, the outcome remains uncertain.

In their initial discussion of the Pylos Combat Agate, Stocker and Davis (2017, 598) correctly observed that its closest parallel, in terms of composition, theme and iconographic details, is the dueling scene on the gold cushion-shaped bead seal from Shaft Grave III (Fig. 11). However, the carnelian amygdaloid bead seal from Shaft Grave III (Fig. 9), also provides important and relevant parallels. To be sure, there are aspects of the carnelian seal's engraving which are enigmatic, and perhaps ought to be attributed to the carver's inexperience with a relatively new art form, as discussed below. However, the artistic intelligence of the glyptic carver must be acknowl-

edged in the choice of the amygdaloid, over the lentoid. Both the amygdaloid and lentoid seal shapes were familiar to Mycenaean seal cutters as evinced by the presence of imported Minoan specimens from Grave Circle B (*CMS* I, nos. 5–7, possibly no. 8). But it seems that the lentoid was mostly rejected as ill-suited for a duel, hence the awkwardly positioned legs of the sword and spear wielding hunters on the lentoid seals from Chania (*CMS* V Suppl. 1A, no. 135) and Pylos (*CMS* I, no. 294).

Inexperience might explain the drill hole used to indicate a hand at the end of the victor's outstretched arm on the Shaft Grave carnelian amygdaloid seal (Fig. 9). Interestingly, his outstretched arm lies on top of his opponent's helmet, recalling the Egyptian smiting gesture. This gesture was used continuously in Egyptian imagery, from Pre-Dynastic times through the New Kingdom, to visually express pharaonic dominance

Fig. 15: Kakovatos, Lion duel, agate amygdaloid cylinder bead seal (CMS XI, no. 208; courtesy of the CMS Heidelberg).

over his enemies and may well have been an ultimate source of inspiration for the Helladic 'lunge and thrust' pose (on the Egyptian smiting gesture, see Bestock 2018; Davis 1992, 192–200; Hall 1986; Luiselli 2011). More difficult to explain is the curved element at the handle end of his sword which resembles a knuckle guard, although there is no evidence to suggest that Aegean swords were equipped with knuckle guards (Rupp 2012, 283, thinks the swordsman grasps the sword with both hands). As with Rupp (2012, 283), it seems that the opponent raises one arm to block the sword; the other arm dangles behind. What is also notable is the sword's trajectory: it appears to have broken through the edge of the opponent's figure-of-eight shield which looks shattered, especially along its inner edge and lower half.

As already suggested, the seal seems like an ambitious attempt at a complex narrative by a relatively inexperienced seal carver. Certainly, the dependence on the drill, even for details like the hands and kneecaps, lends credence to this notion. Inexperience might also account for seal's crowded appearance. A more experienced carver would have eliminated the filling motif to the right, thereby giving more space to the swordsman. However, even with the elimination of the filling motif, the tapered sides of the vertically oriented amygdaloid would still severely restrict the space for a proper 'lunge and thrust' pose, unlike the cushion-shaped bead seals from the same grave, *CMS* I, no. 9 (Fig. 10) and *CMS* I, no. 11 (Fig. 11), or the horizontally oriented ovoid signet, *CMS* I, no. 16 (Fig. 12).

In LH II A, the next generation of seal carvers appear to have recognized the suitability of the horizontally oriented amygdaloid shape for depictions of the killing formula, whose protagonist, the swordsman, is shown in the 'lunge and thrust' stance. Though the Pylos Combat Agate surely represents its most glorious expression, with both the swordsman and his opponent comfortably extending their back legs (Fig. 13), the stance's depiction on the amethyst bead seal from Pylos, *CMS* I, no. 290 (Fig. 14) and on the amygdaloid agate cylinder bead seal from Kakovatos, *CMS* XI, no. 208 (Fig. 15), merit further comment. As Olga Krzyszkowska (2005, 252) has noted, the positioning of the imagery on the cylindrical bead with swollen center, at a right angle to the bead's vertical axis (*i.e.* its horizontal piercing) is unique in Aegean glyptic. Clearly, it provided a comfortable frame for the 'lunge and thrust' swordsman, his leonine prey, and the 'demon' or 'genius' who stands grinning behind the swordsman.

The amethyst amygdaloid bead seal from Pylos is notable not only for the rarity of its material, but also for the positioning of the swordsman. This is the only seal, out of seven, where the swordsman making the 'lunge and thrust' pose was carved on the right, and thus appears on the left side of the impression. Although the actual skill of the carver may be questioned, especially when compared with its contemporary from Pylos, the Combat Agate, the 'energy' of the figure's back-leaning pose, causing the heel of the front leg to rise, and the successful placement of the

Fig. 16: Gouvalari, Duel, amethyst cushion seal (CMS V, no. 643; courtesy of the CMS Heidelberg).

lioness and swordsman within the amygdaloid frame, might actually attest to the carver's experience. In this light, it may also be worth drawing attention to an amethyst cushion-shaped seal from Gouvalari, *CMS* V, no. 643 (Fig. 16), which almost certainly comes from the same workshop, if not the same hand, as the amygdaloid amethyst seal from Pylos. The seal from Gouvalari depicts two facing figures who, like the swordsman on the amethyst seal from Pylos, lean backwards and thrust forward, a pose not seen on any other Aegean seals. And like the Pylos amygdaloid, the 'victorious' swordsman on the Gouvalari seal was carved on the right and thus appears on the left side of the impression. Perhaps most telling though are the long tassels which dangle from the sword's scabbard on the Pylos amygdaloid and from the handle ends of both daggers (or better, single-edge swords with curled tang handles), on the Gouvalari cushion-shaped seal. These tassels are otherwise unknown in Aegean glyptic imagery. The narrative content of the Gouvalari seal may also be unique. The figure on the right appears to have successfully blocked the swordsman's thrust to his jugular so that, instead, the swordsman seems to stab his opponent's upper arm. Thus, as on the gold signet-ring, *CMS* I, no. 16, not every duel in Mycenaean glyptic arts ends in an unmitigated success.

The preceding discussion offers a concrete example of Jeffrey Hurwit's assessment regarding the 15th century that "Mycenaean art as a whole is, perhaps, an art of formulae, conservatively utilizing a repertoire of images that are not as characteristic of Minoan art" (Hurwit 1979, 416). Thus, the Minoan sealings which have previously been brought into analyses of the Pylos Combat Agate have been shown here to be different thematically from the Pylos seal, in their depictions of the sport of stick-fighting, an agrimi hunt, and a human hunt or mock kidnapping. On the other hand, the Pylos agate seal can now be seen as one of a group of Helladic glyptic scenes, albeit its most outstanding representative, which formulaically depict duels or combats in which one character wields a sword and stands in a pose called here, the 'lunge and thrust'. And unlike the Minoan sealings, which were all made from ovoid metal signet-rings, the Mycenaean carvers seem to have discovered that the combat compositions featuring a swordsman in the 'lunge and thrust' pose are best suited to the cushion-shaped or the amygdaloid seal; only signet-ring *CMS* I, no. 16 (Fig. 12) is ovoid, a shape which, admittedly, is similar to the amygdaloid in its spatial allowances. Although the birthplace and gender of the artist who carved the Pylos Combat Agate will never be known, nor where they received their training, considering the mainland funerary contexts, and the thematic and compositional unity of the seal with that of the others in the 'lunge and thrust' seal group, it would seem that at least for two generations, from LH I to LH IIA, they may well have comprised one of the grandest and most quintessential of Mycenaean artistic expressions.

References

Bestock, L. D. 2018. *Violence and power in ancient Egypt. Image and ideology before the New Kingdom. Routledge Studies in Egyptology.* London and New York: Routledge.

Crowley, J. L. 2013. *The iconography of Aegean seals. Aegaeum* 34. Leuven and Liège: Peeters.

Davis, E. N. 1974. "The Vapheio Cups: one Minoan and one Mycenaean?" *The Art Bulletin* 56: 472–487.

Davis, W. 1992. *Masking the blow: the scene of representation in late prehistoric Egyptian art.* Berkeley, Los Angeles, and Oxford: University of California Press.

Eliade, M. 1958. *Rites and symbols of initiation* (trans. W. R. Trask). New York: Harper and Row.

Hall, E. S. 1986. *The Pharaoh smites his enemies: a comparative study. Münchner ägyptologische Studien* 44. München: Deutscher Kunstverlag.

Hiller, S. 1999. "Scenes of warfare and combat in the arts of Aegean Late Bronze Age. Reflections on typology and development." In *Polemos. Le contexte guerrier en Égée à l'âge du bronze. Actes de la 7e Recontre égéenne international Université de Liège, 14–17 avril 1998,* edited by R. Laffineur, 319–329. *Aegaeum* 19. Liège and Austin: Université de Liège and University of Texas at Austin.

Hurwitt, J. 1979. "The Dendra Octopus Cup and the problem of style in the fifteenth century Aegean." *AJA* 83: 413–426.

Koehl, R. B. 1986. The Chieftain Cup and a Minoan 'rite of passage.' *JHS* 106: 99–110.

Koehl, R. B. 2000. "The ritual context." In *The Palaikastro Kouros: a Minoan chryselephantine and its Aegean Bronze Age context,* edited by J. A. MacGillivray, J. M. Driessen, and L. H. Sackett, 131–143. *British School at Athens Studies* 6. London: The British School at Athens.

Koehl, R. B. 2006. *Aegean Bronze Age rhyta. Prehistory Monographs* 43. Philadelphia: INSTAP Academic Press.

Koehl, R. B. 2022. "Minoan stick-fighting." In *Metioessa: Studies in honor of Eleni Mantzourani,* edited by G. Vavouranakis and I. Voskos, 263–269. AURA Suppl. 10. Athens: Department of History and Archaeology of the National and Kapodistrian University of Athens.

Krzyszkowska, O. 2005. *Aegean seals. An introduction. BICS Supplement* 85. London: University of London.

Luiselli, M. M. 2011. "The Ancient Egyptian scene of 'Pharaoh smiting his enemies': an attempt to visualize cultural memory?" In *Cultural memory and identity in ancient societies,* edited by M. Bommas, 10–25. London and New York: Continuum International Publishing Group.

Molloy, B. P. C. 2012. "Martial Minoans? War as social process, practice and event in Bronze Age Crete." *BSA* 107: 87–142.

Morgan, L. 1995. "Frontal face and the symbolism of death in Aegean glyptic." In *Sceaux Minoens et Mycéniens. IVe symposium international 10–12 septembre 1992, Clermont-Ferrand,* edited by W. Müller, 135–149. *CMS Beiheft* 5. Berlin: Mann Verlag.

Papageorgiou, I. 2008. "The Mycenaean golden kylix of the Benaki Museum. A *dubitandum*?" *Mouseio Benaki* 8: 9–37.

Peatfield, A. 1999. "The paradox of violence: weaponry and martial art in Minoan Crete." In *Polemos. Le contexte guerrier en Égée à l'âge du bronze. Actes de la 7e Recontre égéenne international Université de Liège, 14–17 avril 1998,* edited by R. Laffineur, 67–73. *Aegaeum* 19. Liège and Austin: Université de Liège and University of Texas at Austin.

Popham, M. R. 1984. *The Minoan Unexplored Mansion at Knossos. British School at Athens. Supplementary Vol.* 17. Oxford: Thames and Hudson.

Rupp, D. W. 2012. "Death in Petras: two men fighting on a LM IA lentoid seal." In *Petras, Siteia. 25 years of excavations and studies. Acts of a two-day conference held at the Danish Institute at Athens, 9–10 October 2010,* edited by M. Tsipopoulou, 277–286. *Monographs of the Danish Institute at Athens* 16. Athens: The Danish Institute at Athens.

Stocker, S. R., and J. L. Davis. 2017. "The Combat Agate from the grave of the Griffin Warrior at Pylos." *Hesperia* 86: 583–605.

Tsipopoulou, M., ed., 2012. *Petras, Siteia. 25 years of excavations and studies. Acts of a two-day conference held at the Danish Institute at Athens, 9–10 October 2010. Monographs of the Danish Institute at Athens* 16. Athens: The Danish Institute at Athens.

Warren, P., and V. Hankey. 1989. *Aegean Bronze Age chronology.* Bristol: Bristol Classical Press.

Weingarten, J., M. Polig, and S. Hermon. 2020. "The Palaikastro Master's Ring and the Griffin Warrior's Combat Agate: drawing conclusions." In *Neoteros. Studies in Bronze Age Aegean Art and Archaeology in honor of Professor John G. Younger,* edited by B. Davis and R. Laffineur, 131–139. *Aegaeum* 44. Leuven and Liège: Peeters.

VIII. Death and the Communicative Body

Disarticulated Bones, Articulated Narratives: Exploring Mortuary Gestures and Their Meaning at the Petras Cemetery, Siteia, Crete

Sotiria Kiorpe

Abstract   *The human body is a powerful medium of communication that is not only subject to, but also shapes, social and religious narratives. Until recently, the understanding of these narratives was largely approached through the detailed examination of the body as portrayed in iconographic representations. Advances in theoretical and methodological approaches, however, emphasised the role of corporeal experiences in the negotiation and re-invention of personal and communal identities and stressed the fact that the body itself should be seen in a similar way, as interacting with material culture, since it can be altered by social and cultural practice. In this respect, the present paper examines the symbolic plasticity of the body in Early Bronze Age (EBA) and Middle Bronze Age (MBA) funerary ritual through osteological evidence. Specifically, it examines different modes of placing and interacting with defleshed or the still decomposing human remains and the particular gestures and stances evident in the few primary burials of the Petras cemetery. Similarities in the form of disposal are studied in an attempt to understand the social and religious-metaphysical claims that constructed these embodied identities. Identities, although fractal, seem to be shared, as is suggested by the repeated modes of interaction with the bodies and the latter's recurring gestures. The very fact that some of these gestures have iconographic counterparts implies the presence of a prevalent Minoan ideology which, in the ritual dialectic, is used for the negotiation, re-creation, and establishment of social structures.*

Introduction

Non-verbal communication, in particular bodily gestures, is of paramount importance to everyday interactions and communication. Gestures are not trivial or supplementary actions to speech; they are equal units of the process of utterance since they are embedded with meaning and are expressive of thoughts and feelings (Kendon 1997). Despite being widely studied, gestures are difficult to define (Mauss 1973, 70); they are often referred to as movements or bodily postures invested with meaning that is targeted and transmitted to an observer. Many scholars elaborate further on this definition either by describing the forms the transmission of the message can take (Morgan 1997; Morris 2001) or, more recently, by discussing the emotions that gestures evoke and aspects of their materiality (Dakouri-Hild 2021; Matthews 2005). In all cases, the cultural specificity of gestures is emphasized by the fact that the same gesture can be polysemous depending on the context in which it is performed and its recipient. In providing an agenda for gestural studies, Adam Kendon (1996) lists several key features each activity should have in order to be regarded as a gesture, but the latter refer only to 'living gestures' which are inaccessible to archaeologists that study past bodies and societies.

To surpass this obstacle, the archaeological discipline focused on the study of human bodies and their gestural repertoire through their representations in iconography. Recent advances in theory (Hamilakis et al. 2002; Sofaer 2006), however, emphasized the materiality of the body and introduced new readings not only of the represented, but also of the behaving, body. Noticeably, among the multiple trajectories that body-centred research has taken, physical remains, and subsequently burials, became a prominent research topic since bodies were seen

both as malleable social constructs and as independent agents that shaped and were shaped by social action (Nanoglou 2012, 157–170; Nillson-Stutz 2008, 19–28). At Petras in Siteia, the long-term use of the cemetery (Early Minoan I–Middle Minoan II; see Tsipopoulou 2017, 58–101) offers us the opportunity to study the patterns of mortuary gestures diachronically and to consider how gestures were employed and what was their meaning for the Petras community.

Documenting *"les gestes funéraires"*

The first step in reconstructing mortuary gestures is the use of an explicit terminology in order to clearly communicate observations and enable future comparisons of the results.[1] The vocabulary used for the description of skeletal deposits follows internationally accepted terms (Boulestin and Duday, 2006; Knüsel and Robb, 2016) while that of body position, namely the position of anatomical elements and how they relate to one another within the grave, was informed by the classification scheme suggested by Christopher Knüsel (2014) and Roderick Sprague (2005, 57–190). Finally, the examination of the post-depositional processes that acted upon and shaped the assemblage, as well as the reconstruction of the initial form of the depositions, was performed according to the principles of archaeothanatology (Duday 2009).

This study situates gestures as intentional embodied practices that took place either during the funerary ritual, referring to the stages of separation and integration of the dead and their material manifestations, or during other practices of no funerary character, such as commemorative events (Boulestin and Duday 2006; Brandt 2015, 6–7). Regarding the description of the primary burials, gesture is seen as well-bounded body posture and arm-hand positioning. By this logic, the present study adopts a double reading of gestures: the first relates to gestures given to the dead as being evident in the mode of deposition, burial position, and stance, and the second regards the gestures of the living upon the dead. Burial practice is therefore perceived as a formalized ritual act which comprised a sequence of fixed gestures.

Results

Staging the dead: a visual interaction

Three primary pit burials discovered at the south part of the cemetery, where House Tomb 2 (HT2) was later built (Tsipopoulou, in press), share evidence of staging, in particular arm positions thus far unrepresented in burials. All burials[2] were made in a filled space while both the soil and the walls of the pits acted as barriers that kept bones in place after decomposition (Table 1). The burial in structure 25, space 9 (Fig. 1), is an EM II pit burial of an adult individual who was placed in an extended position; the legs were flexed at the knee joint, the right arm was tightly flexed at the elbow, and the hand was touching the same shoulder. The position of the left arm could not be securely identified due to later disturbance caused in excavation but it seems to have been parallel to the side of the body. Despite being of a later date, the MM I A burial in structure 28, below Room 1 of HT2 (Fig. 2), shares the same position but has both hands on the chest[3] in a symmetrical posture. A third burial (Fig. 3), found also in space 9, probably had its right arm flexed at the elbow, the forearm placed on the top of the chest, and the left arm parallel to the body. However, the skeleton was later disturbed due to the deposition of an offering, hence the upper body, including the arms, was re-arranged. For this reason, this burial is not included in the discussion.

---

1 "Les gestes funéraires" is translated as 'mortuary practices' in H. Duday's (a French anthropologist and founder of the field of archaeothanatology) original publication (1990). The French version is preferred here as it includes the term 'gestes' (gestures) which is invariably used for practices, denoting the intentionality of actions which the performers of funerary rituals undertook.

2 A detailed description of the burials is given in Figure 1 due to space restrictions. The osteological study of the primary burials has not yet been performed.

3 The hands are placed on chest at a higher level and closer to the shoulder area. However, Rutkowski describes this gesture as hands on chest (pl. XII, V, HM 3410, see reference in the text), thus this description is adopted here.

Context	Type of deposit	Manipulation	Burial position
Str. 24, Area 9	Single primary* burial in a pit, adult individual Pit dug into rock layer Decomposition in a filled space, wrapping? Burial orientation: N-S	Disturbed for the deposition of offering; manipulation of the lower thoracic area, the sacrum & the forearms. The sacrum was found 30 cm north of pelves, R radius relocated, placed perpendicular to the legs. Manipulation after decomposition	Head: on L side, facing the E Trunk: on back, extended Clavicles: verticalization**, wrapped in shroud? Arms: close to thoracic region, R arm flexed at elbow, forearm on chest, L arm extended along the body (?), *wall effect* at R side due to stones, at L no stones, far from pit limits, indication of wrapping? Later displacement of L radius following collapse of L pelvis within the volume of the corpse Pelves: flattening of L pelvis, R in anatomical position due to stones on R side Legs: flexed at knees, the tibia and fibula bones folded underneath the thighs
Str. 25, Area 9	Single primary burial in a pit, adult individual Pit dug into rock layer Decomposition in a filled space Burial orientation: E-W	Undisturbed	Head: on L side, facing the S Trunk: on back, extended Clavicles: verticalization, pit morphology (narrow, upper body on rocks, higher than lower body) Arms: R arm flexed at elbow, hand to the same shoulder, L arm extended along the body (?), missing L forearm due to taphonomic & excavational disturbance: placed on top of stones, higher elevation led to the excavation & removal of these bones along with leg bones prior to the exposure of burial Pelves: flattening of R pelvis, L in anatomical position due to pit wall (*wall effect*) Legs: legs flexed at knee, R on top of L, resting on the S pit wall, feet extended
Str. 28, below R1, HT2	Single primary burial in a pit, adult individual Pit dug into rock layer Decomposition in a filled space, wrapping? Burial orientation: E-W	Undisturbed; to the N there are the remains (reduction & re-arrangement in a pile) of a female individual, one child and an infant interred previously in the structure	Head: on L side, tilted down, facing NE Trunk: on back, extended Clavicles: verticalization, R side (pit morphology?), L side (pit/shroud?) Arms: close to thoracic region, flexed at elbow, hands on shoulders/chest. R radius relocated due to decomposition and sloping effect since R side on top of stones, R hand bones found on scapula (internal secondary void) & dispersed above the shoulder to the S of head Pelves: flattening of R & L pelvis Legs: flexed at knee, L on top of R, the latter resting on the SE wall of the pit, feet R on top of L (wrapping?)

*Primary: labile articulations still in connection, original location of deposition.
**Verticalization: medial extremity downwards due to pressures applied on the shoulder area.
Key: E: east, W: west, N: north, S: south, R: right, L: left

Table 1: Summary Box: brief description of burials.

Interestingly, the postures given to the burials share many iconographic counterparts; the hands-on-chest gesture is mainly attested on male figurines found in peak sanctuaries, often depicted with daggers (Nakou 1995; Rutkowski 1991, 44). The individual in structure 28 not only shared the gesture but was also buried with a bronze dagger placed on the left ribcage. The clear position of hands-on-chest, not grasping the dagger, reinforces comparisons with figurines such as the ones found at Petsophas (*e.g.* Rutkowski 1991, pl. XII, V, HM 3410; pl. XIII, I, HM 3407). Corroborating evidence of the association of this gesture with the funerary cult is provided by an MM I A male figurine displaying the same gesture excavated at the annex of the Agios Kyrillos tholos tomb in the Mesara (Alexiou 1967, pl. 195α). Moving to the burial in structure 25, the hand-on-shoulder gesture, often performed by female figures, is a common pattern on seals (Crowley 2013, 188; *CMS* II 3, no. 15). This self-touching gesture, which is slightly modified at times, with the hand touching the opposing shoulder (Dimopoulou-Rethe-
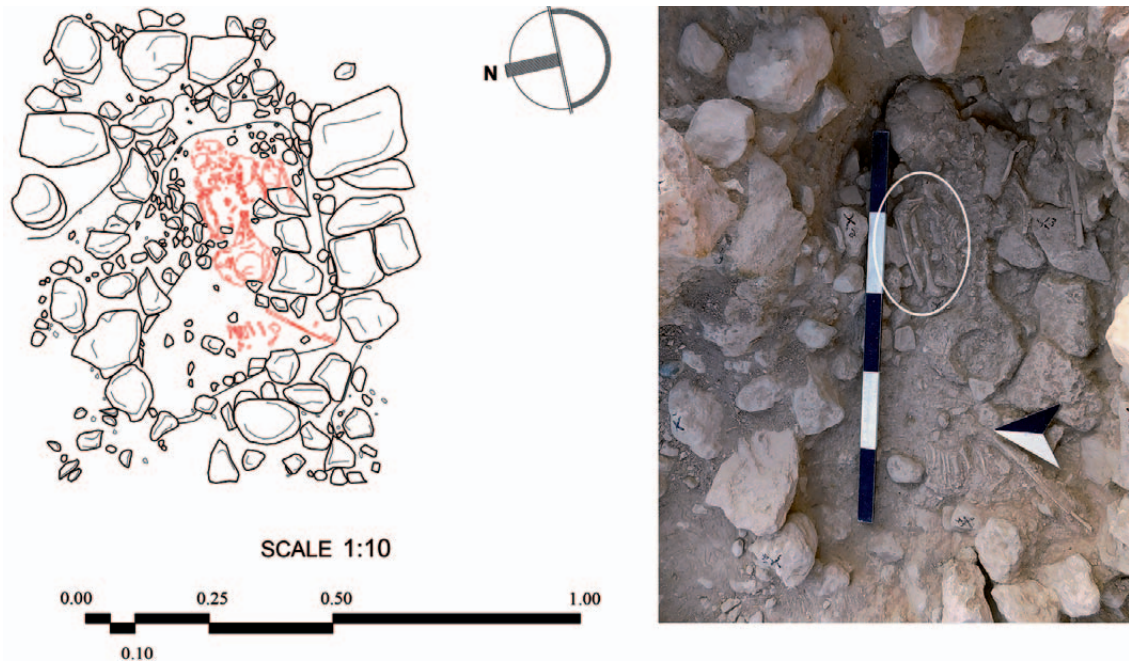
Fig. 1: Burial, Str. 25. Notice the position of the right arm and hand. Petras excavation Archive (drawing G. Vlachodimos).
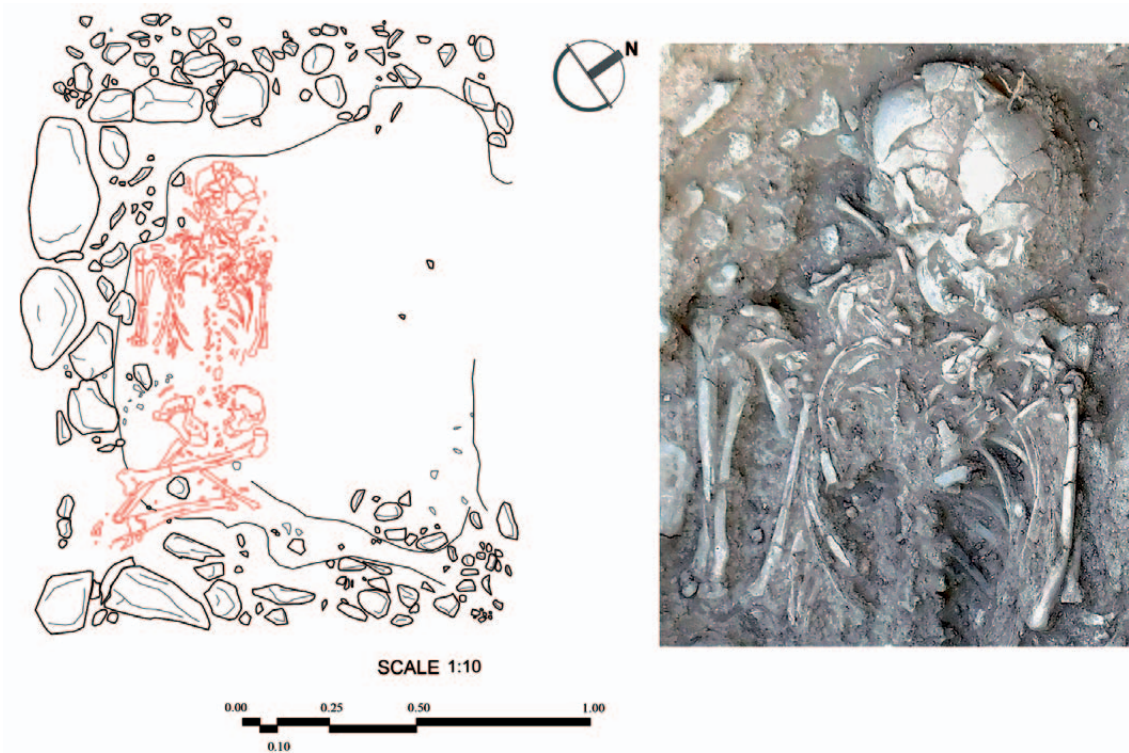

Fig. 2: Burial, Str. 28. Notice the posture of the hands. Petras excavation Archive (drawing G. Vlachodimos).
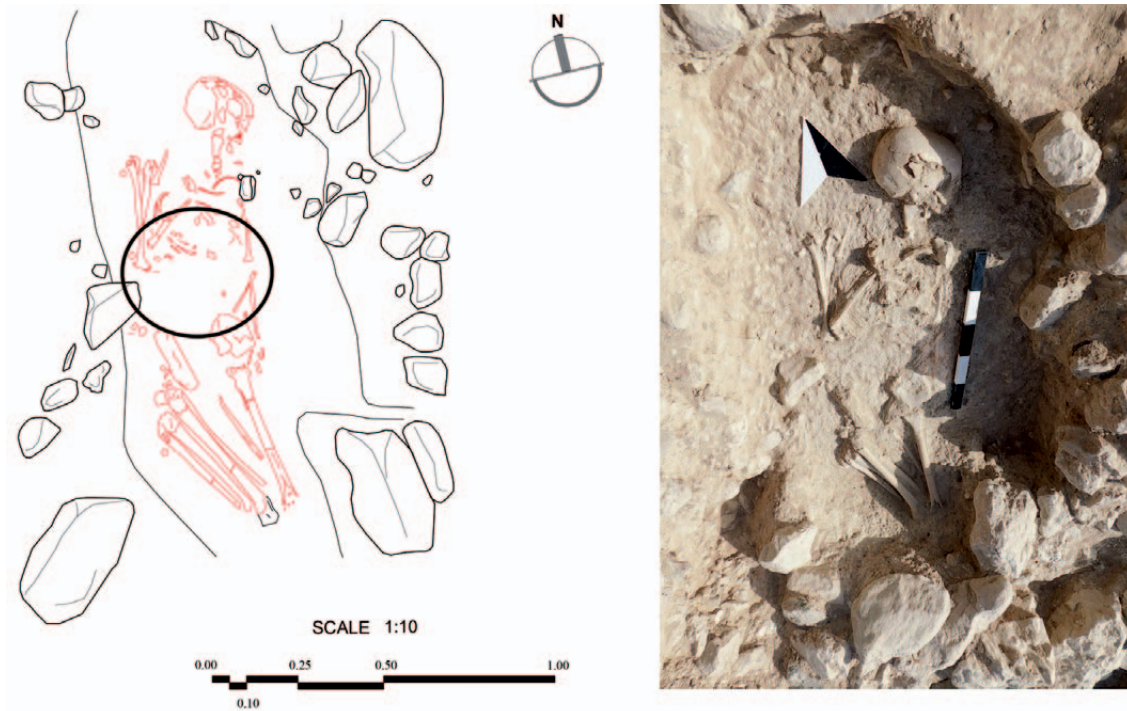
Fig. 3: Burial, space 9. Highlighted area corresponds to area of disturbance. Petras excavation Archive (drawing G. Vlachodimos).

miotaki 2005, 98),[4] is interpreted as a gesture of affection and is associated with the expression of one own's grief, at least regarding the art of later periods (see Günkel-Maschek, this volume).

The gestures of the living: the tactile aspect of interaction

The haptic aspect of gestures is examined through the practices of the living. The archaeological data suggests the existence of diverse attitudes towards the disposal and treatment of the dead body (Triantaphyllou 2016). In detail, the living participants of the Petras funerary ritual(s) appear to have manipulated dead bodies at several stages either after the bodies had decomposed or while they were still decomposing. This is a common pattern for the tombs of the cemetery and can be attested either as semi-articulated body parts or as manipulated primary burials that still preserved some of the labile joints in anatomical connection (Kiorpe 2018, fig. 2). Manipulation was applied both to primary burials and to disarticulated remains and it could take the form of reduction, re-arrangement, cleaning, firing, piling up and moving bones within or outside the area of original deposition. Yet, idiosyncratic choices are easy to discern since there is a great variability in the use of rooms and the form of depositions both between synchronous tombs and also within the rooms of the same tomb (Triantaphyllou et al. 2017). Despite variability in choices towards the disposal of the dead, the treatment of the body was indistinguishable for all age groups and both sexes as well as for remains deposited inside burial containers, emphasizing collectivity in death in this manner. During the stages of the funerary ritual, some of the participants came in direct contact with the bodies by manipulating them, while a larger part of the community participated by other forms of bodily actions such as feasting, utterances, songs and so forth (Hamilakis 2002, 121–136; Tsipopoulou 2017, 69–72, 111–130).

---

4 To date there is no source discussing any distinction in meaning between those two gestures. The author sees the hand-on-shoulder and the hand-on-opposing shoulder as a self-touching gesture that possibly conveys the same meaning.

Concluding Remarks: Gestures as Part of a Shared Narrative?

The performance of gestures is an active element of rituals since the body is immensely engaged in ritual practice (Morris and Peatfield 2004). The Petras funerary ritual is comprised of a rich and complex set of mortuary practices during which the living and the dead are in constant discourse by means of an overt bodily communication such as the manipulation of whole or fragmented dead bodies, the consumption of food and drink within the cemetery, and other corporeal experiences (Simandiraki-Grimshaw, this volume). The importance of death and the dead body in social practice can also be traced at the staging of the dead. The burial positions, in particular the gestures of the arms, provide us with insights into the content of the funerary practices, since these postures, despite being static, should have communicated a message easily readable by the intended audience. Perhaps this message was part of an eschatological or cosmological narrative considering the framing of the gestures, namely the fact that the staging took place in a funerary context. Was the staging meant to re-animate the dead by enabling them to participate in the ritual, or did it convey a message about the dead or the living, their identity, social claims and beliefs? Given the restrictions of the material and the inherent difficulty in reconstructing narratives, it is hard to offer a solid answer to the questions above. Notwithstanding difficulties of exploring the meaning of these gestures, the investment put into these burials and their proximity to the richest and most emblematic tomb of the cemetery (HT2), combined with the fact that they were not manipulated like the rest burials of the cemetery, signifies their importance both for the group that later built HT2 and to the broader Petras community. In any case, the gestures performed by the social bodies of the living and the dead probably acted as metaphors structuring memories, non-living entities (ancestors) and notions on death, the afterlife, and the community.

References

Alexiou, S. 1967. "Μικραί ανασκαφαί και περισυλλογή αρχαίων εις Κρήτην." *Prakt* 1967: 210–215.

Boulestin, B., and H. Duday. 2006. "Ethnology and archaeology of death: from the illusion of references to the use of a terminology." *Archaeologia Polona* 44: 149–169.

Brandt, J. R. 2015. "Introduction: ritual, change, and funerary practices" In *Death and changing rituals: function and meaning in ancient funerary practices,* edited by J. R. Brandt, M. Prusac, and H. Roland, ix–xix. Oxford: Oxbow.

Crowley, J. L. 2013. *The iconography of Aegean seals. Aegaeum* 34. Leuven: Peeters.

Dakouri-Hild, A. 2021. "The most discouraged Mycenaeans: performing emotion and death in Late Bronze Age Tanagra, Greece." *JFA* 46: 348–381.

Dimopoulou-Rethemiotaki, N. 2005. *The Archaeological Museum of Heraklion.* Latsis Foundation: Athens.

Duday, H. 2009. *The archaeology of the dead: lectures in archaeothanatology.* Oxford: Oxbow books.

Hamilakis, Y. 2002. "The past as oral history: towards an archaeology of the senses." In *Thinking through the body: archaeologies of corporeality,* edited by Y. Hamilakis, M. Pluciennik, and S. Tarlow, 121–136. New York: Kluwer Academic/Plenum.

Kendon, A. 1996. "An agenda for gesture studies." *Semiotic Review of Books* 7: 1–22.

Kendon, A. 1997. "Gesture." *Annual Review of Anthropology* 26: 109–128.

Kiorpe, S. 2018. "Tracing the funerary ritual at Kephala Petras through the evidence of the human skeletal remains, *Kentro* 21: 1–6.

Knüsel, C. J. 2014. "Crouching in fear: terms of engagement for funerary remains." *Journal of Social Archaeology* 14: 26–58.

Knüsel, C. J., and J. Robb. 2016. "Funerary taphonomy: An overview of goals and methods". *JAS* 10: 655–673.

Matthews, S. 2005. "The materiality of gesture: intimacy, emotion and technique in the archaeological study of body communication." In *The archaeology of gesture: reconstructing prehistoric technical and symbolic behaviour, 11th Annual Meeting of the European Association of Archaeologists, 5–11 September 2005, Cork, Ireland.* https://semioticon.com/virtuals/archaeology/materiality.pdf.

Mauss, M. 1973. "Techniques of the body." *Economy and Society* 2: 70–88.

Morgan, L. 2000. "Form and meaning in figurative painting." In *The wall paintings of Thera: proceedings of the First International Symposium.* Vol. 2, edited by S. Sherratt, 925–946. Athens: Thera Foundation.

Morris, C. E. 2001. "The language of gesture in Minoan religion." In *Potnia: deities and religion in the Aegean Bronze Age,* edited by R. Laffineur and R. Hägg, 245–251. *Aegaeum* 22. Liège: Université de Liège.

Morris, C. E., and A. A. D. Peatfield. 2004. "Experiencing ritual: shamanic elements in Minoan religion." In *Celebrations: sanctuaries and the vestiges of cult practice,* edited by M. Wedde, 35–59. Bergen: Norwegian Institute at Athens.

Nakou, G. 1995. "The cutting edge: a new look at Early Aegean metallurgy." *JMA* 8: 1–32.

Nanoglou, S. 2012. "From embodied regulations to hybrid ontologies." In *Routledge Handbook of Body Studies,* edited by B. S. Turner, 157–170. Abingdon: Routledge.

Nillson-Stutz, L. 2008. "More than metaphor: approaching the human cadaver in archaeology." In *The materiality of death: bodies, burials, beliefs,* edited by F. Fahlander and T. Oestigaard, 19–28. Oxford: Archaeopress.

Rutkowski, B. 1991. *Petsophas: a Cretan peak sanctuary.* Warsaw: Art and Archaeology.

Sofaer, J. R. 2006. *The body as material culture: a theoretical osteoarchaeology.* Cambridge: Cambridge University Press.

Sprague, R. 2005. *Burial terminology: a guide for researchers.* Lanham MD: AltaMira Press.

Triantaphyllou, S. 2016. "Staging the manipulation of the dead in Pre- and Protopalatial Crete, Greece (3rd–early 2nd mill. BC): from body wholes to fragmented body parts." *JAS* 10: 769–779.

Triantaphyllou, S., S. Kiorpe, and M. Tsipopoulou. 2017. "House Tomb 5: a preliminary analysis of the human skeletal remains." In *Petras, Siteia: The Pre- and Protopalatial cemetery in context,* edited by M. Tsipopoulou, 291–299. *Monographs of the Danish Institute at Athens* 21. Aarhus: The Danish Institute at Athens and Aarhus University Press.

Tsipopoulou, M. 2017. "Documenting sociopolitical changes in Pre-and Protopalatial Petras: the house tomb cemetery." In In *Petras, Siteia: the Pre- and Protopalatial cemetery in context,* edited by M. Tsipopoulou, 57–101. *Monographs of the Danish Institute at Athens* 21. Aarhus: The Danish Institute at Athens and Aarhus University Press.

Funeral or 'Biography'? Re-considering the Potential Identities of Figures on the LM III A2 Agia Triada Sarcophagus

Jacob E. Heywood

Abstract   *The idea that the iconography of the limestone sarcophagus from Agia Triada depicts the funerary rites of its occupant has long retained favour. One figure has traditionally been interpreted as representing the deceased – the male recipient in the 'presentation' scene. Considering the broader archaeological and iconographic context of the sarcophagus at Agia Triada, contemporaneous trends in larnax decoration taking inspiration from elite art and architecture, and the attributes and bodily expression of key figures within the pictorial scenes, the sarcophagus's production for a high-status woman – perhaps one of the ritual officiants illustrated on the long sides – seems more probable. Rather than serving as a visual source for interpreting Cretan funerary rites, the sarcophagus might be better understood as a biographical statement about the status and social role of its occupant within Agia Triada's elite community.*

Introduction

While interpretations of the painted scenes adorning the famed limestone sarcophagus from Agia Triada have varied since the excavation of Tomb 4 in 1903 (Paribeni 1904), their characterisation as depictions of funerary rites has been overwhelmingly favoured. Following the influential studies of Charlotte Long (1974, 72–73, 80–82) and Martin Nilsson (1950, 426–443), the limbless male recipient in the 'presentation scene' (Fig. 1, Individual A) has conventionally been regarded as either a representation of the deceased or a 'heroized' ancestor worshipped via a cult of the dead. This paper instead argues that a more sustainable reading of the sarcophagus's decoration suggests its production for a high-status woman. Women (perhaps the same individuals depicted repeatedly) clearly occupy the prominent position in all but one narrative scene (Figs. 1–2). Together with elaborate attire and spatial prominence, gesture and bodily expression serve to communicate their leading roles as ceremonial officiants. While it cannot be assumed that the sarcophagus necessarily depicts its occupant(s), their representation is a firm possibility in view of the object's wider iconographic context. Indeed, the thematic relationship with frescoed buildings in the nearby settlement suggests that its iconography was intended to draw connections with these spaces and relate important messages about its occupant's social identity. This interpretation is consistent with the broader context of Postpalatial mortuary iconography, where styles and themes associated with elite art were re-adapted as decorative subjects for larnakes.

The Sarcophagus in Context

The disrupted state of Tomb 4 and recent scholarly analyses of the sarcophagus's relationship to the broader program of architecture and iconography at LM III Agia Triada dually complicate views that the sarcophagus portrayed the funerary rites of a male dignitary. Noting the conspicuousness of high-status female burials on Crete during LM III, Jan Driessen (2021) has proposed that the sarcophagus might have belonged to a powerful woman. Gold jewelry and other material from the nearby Tomba degli Ori may have been looted from Tomb 4 (La Rosa 2000), but the lack of finds clearly associated with the sarcophagus beyond the two incomplete skulls it contained undermines efforts to identify its occupants. A third individual in a terracotta larnax buried under the tomb's floor has tenuously been identified as male based on the discovery of two
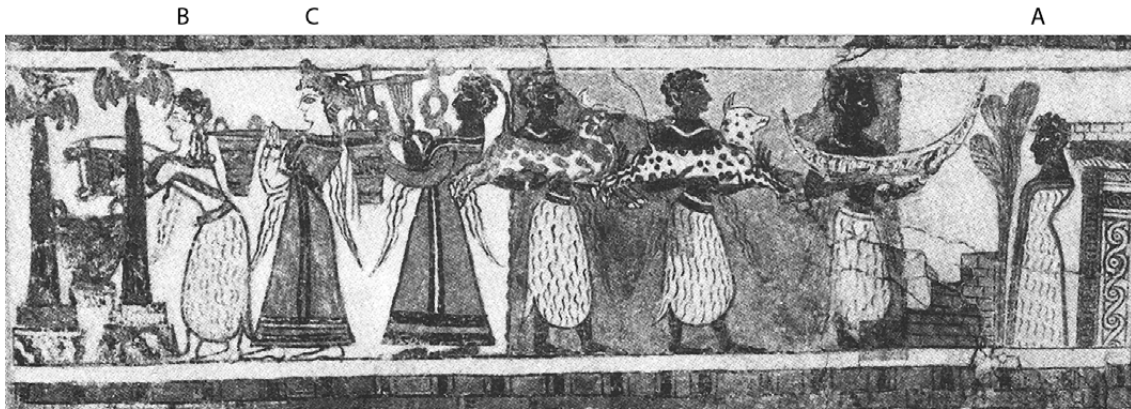
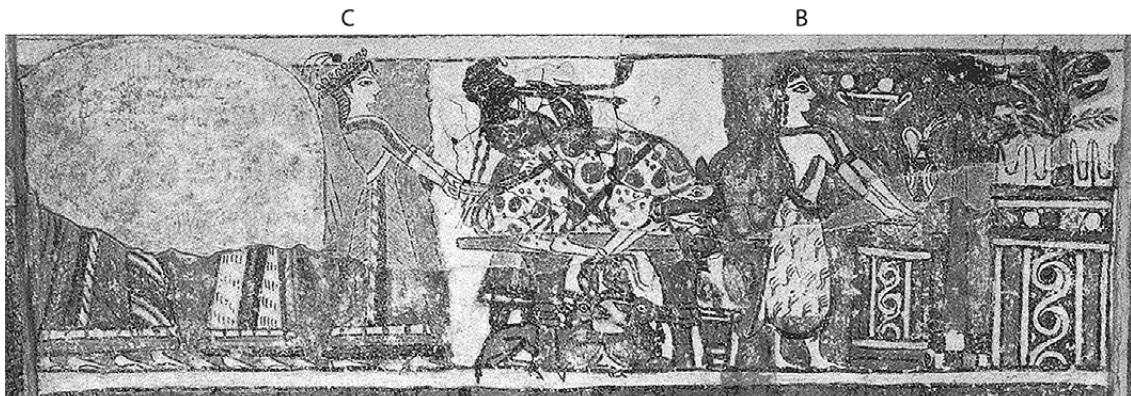*Fig. 1: Agia Triada sarcophagus, Side A, detail (after Militello 1998, pl. 14A).*

Fig. 2: Agia Triada sarcophagus, Side B, detail (after Militello 1998, pl. 14B).

bronze razors (Long 1974, 13); their relationship to the earlier interments in the sarcophagus remains unclear. The corniced ashlar-topped structure behind the presentation scene's recipient on Side A of the sarcophagus probably marks the extremity of a larger building (Alušík 2005; Militello 2020, 101) and not Tomb 4 as thought by Long (1974, 72). A modest rectangular structure with interior dimensions of 1.95m by 2.39m, Tomb 4's walls – comprised of regular blocks and re-used ashlar – were preserved to a height of 1.20 m, without tangible evidence of an elaborate plastered superstructure like that shown on the sarcophagus (Burke 2005, 410).

Santo Privitera (2016, 152–153) compellingly argues that the ceremonial imagery on the sarcophagus alludes to Agia Triada's built environment, perhaps the Piazzale dei Sacelli and its environs. Pyramidal stone double-axe stands like those on the sarcophagus were found in the vicinity of the Piazzale (Cucuzza 2001, 172), as were numerous votive model bulls (D'Agata 1999, 38–102). The LM III C/Subminoan context of the latter objects post-dates the sarcophagus, but nevertheless offers an intriguing analogy for the offerings in the presentation scene. Privitera's contention consequently strengthens alternative interpretations of the 'recipient' – whose stiff pose contrasts with the other figures' movement – as a wooden or clay 'xoanon' (French 1981, 174; Alušík 2005, 41). Moreover, a close stylistic and thematic relationship exists between the sarcophagus' decoration and contemporary frescoes from Agia Triada's buildings, particularly the Small and Great Procession Frescoes and the Woman and Altar Fresco from Casa VAP (Militello 1998, 283–320, pls. I, L, M). This directly affiliates the sarcophagus's occupant with Agia Triada's elite architectural spaces and ceremonial functions associated with them.[1] Its iconography

---

1 Privitera 2016, 153. In making this observation, Privitera questions whether the deceased might be identified as "the priestess" appearing next to the double-axes (Individual B in Figs. 1–2) but does not elaborate further.

could thus relate specific symbolically charged events connected with the social role or biography of the deceased in their capacity as a member of the site's ruling administration.

Postpalatial Larnax Iconography and the Memorialisation of Social Identities

Decorative features of LM III clay larnakes not only caution against an *a priori* interpretation of the sarcophagus's iconography as an illustration of funerary rites, but also underline the potential capacity of burial containers – including the sarcophagus – to present narratives relating to the lives of their occupants. Despite tendencies to interpret Cretan larnax decoration through a primarily funerary/eschatological lens (for a survey of key scholarship, see Warren 2007) overt scenes of mortuary rites and emotive mourning like those on mainland larnakes are lacking. Currently, the only definitive exception is a 'prothesis' scene on a larnax from Pigi (Baxevani 1995, 27–33, figs. 10–11). More evident are efforts to assert authoritative social identities by appropriating elite symbolism (Merousis 2000, 78–89). Themes

Fig. 3: LM III B larnax from Kalochorafitis Tomb D (after Karetsou and Girella 2015, pl. VIII).

traditionally associated with non-funerary 'palatial' iconography – particularly subjects derived from the repertoire of wall painting, including high-status activities such as hunting, martial display, seafaring, and chariot-riding – were widely re-adapted. Given the iconographic prioritisation of such activities on many LM III burial containers (including the sarcophagus) it is logical to consider that figures depicted engaging in them might constitute idealised representations of the deceased.

Fresco-style compositions were occasionally replicated directly, marking a point of similarity with the sarcophagus via similar thematic emphases on elite architecture, space, and ceremonial performance. For example, an LM III B larnax from nearby Kalochorafitis (Fig. 3) shows a procession of male and female figures across two registers. The stylistic and thematic affinities to Agia Triada's wall paintings underlines the artist's familiarity with that iconographic program (Antonakaki 2015, 131–136), and thus their attentive effort to reproduce it on a burial container. The clear influence of wall art in the representation of female figures on a larnax from the North Cemetery (Morgan 1987, 175–184, 192, figs. 3–5, 7) implies similar intentionality at Knossos. Transferring symbolically potent imagery connected with centers of political and ceremonial power to the domain of funerary rites via burial containers conceivably facilitated the communication of strong ideological statements about the social identity and status of the deceased, and by extension about their living relatives and kin (Heywood and Davis 2019, 703–707).

Action and Bodily Expression on the Sarcophagus

Two women – individuals B and C in Figs. 1–2 – might cautiously be identified as appearing on the sarcophagus more than once. Their dress, positioning, and actions serve to differentiate their identities and roles from those of surrounding figures, communicating their status as the leading ceremonial agents. That Sides A and B each represent the same two individuals is potentially confounded by colour and pattern variations in their garments. The interpretation, however, need not be considered problematic if the various activities depicted on the sarcophagus are under-

Fig. 5: Sealing from Malia (CMS II 6, no. 173).

Fig. 4: Agia Triada sarcophagus, griffin-drawn char-
iot, detail (after Militello 1998, pl. 15B).

stood as a temporal sequence of events, perhaps even occurring across different times of day and
night in line with Walter Pötscher's interpretation of the coloured background panels behind the
figurative scenes (Pötscher 1997). Moreover, the separation of ritual activities across opposite
long sides means that it cannot be taken for granted that they represent a unified sequence of ac-
tivity in which each figure must necessarily represent a unique personality. On the contrary, the
division of these sides into *different* sequences seems reinforced by the running spirals that verti-
cally frame (and thus compartmentalize) the figurative scenes on each surface, and the lack of an
obvious narrative link with the decorative content on the ends (one of which is compositionally
discontinuous due to its division into two horizontal registers). While these observations cannot
unequivocally prove the repeated appearance on the sarcophagus of certain personalities, at the
very least they make the visual and performative similarities between the two pairs of 'leading'
women represented on each long side more difficult to overlook.

Individual B – the only woman on any one side of the sarcophagus to wear a hide skirt, a
ritual garment attested in Cretan iconography from MM II (Boloti 2014, 251) – appears at the
forefront of both processional activities in which she participates and is shown as the 'active' ri-
tual performer in both the libation scene on Side A and at the altar on Side B. Standing behind
Individual B in the libation scene and officiating the bull sacrifice on Side B, Individual C wears
the same type of long robe with a vertical band worn by other processional participants on the
sarcophagus (often associated with 'priestly' figures in Mycenaean-era iconography) but is distin-
guished by an elaborate headdress often associated with sphinxes and other high-status women
(Boloti 2014, 247–262). One out of each pair of chariot-riding women adorning the sarcopha-
gus's ends – in a griffin-drawn (Fig. 4) and agrimi-drawn chariot respectively – might also repre-
sent Individual C despite the identification by Long (1974, 29–34, 55–57) of all four
individuals as goddesses. The near-identical attire of the figures riding a chariot drawn by fantasti-
cal creatures and those depicted on the long sides of the sarcophagus need not confound the in-

428

terpretation; it is conceivable that an acolyte would intentionally adopt their deity's dress and 'insignia dignitatis' (Boloti 2014, 261–262).

While contextually reminiscent of a LM II–III A sealing from Malia (Fig. 5) that shows a man standing with arms extended over a trussed bull on a sacrificial table, the gesture displayed by both women on Side B – hands held palms-down in front of the waist – has no exact Aegean parallel. Explained as an indicator of chthonic rites (Long 1974, 67) or an act of consecration (Marinatos 1986, 25), the position of the hands hovering directly above the cult furnishings might also emphasise the gesturer's proactive control over the rites in progress. That this posture – with distinctively forward-facing shoulders – was able to communicate the figures' ritual agency is reinforced by its general resemblance to the profiles of other 'priestly' women in palatial frescoes, including those from the Mycenae Cult Centre (Tournavitou 2017, fig. 12c), the Small Procession from Casa VAP (Militello 1998, pl. 10), and especially La Parisienne at Knossos, whom Brendan Burke (2005, 413) contends may have held a similar role to the woman at the altar on Side B. While the gesture on the sarcophagus is idiosyncratic, two near-identical glyptic scenes (one an LM III A1 lentoid sealing from Knossos (*CMS* II 8, no. 250), the other (*CMS* IX, no. 153) an unprovenanced seal attributed to LBA III A1) provide further Aegean evidence for the capacity of a palms-down gesture to emphasise control over the activities or entities with which the gesturer engages. Both scenes show a male 'Master of Animals' with arms outstretched and hands directly above the heads of lions that flank them. The Aegean 'Master of Animals' formula frequently communicates creatures' subjugation via manual restraint or tethering (Marinatos 1993, 167–169), yet these representations convey it through the implication of manual control without physical contact. While the bodily expression of both female officiants on the sarcophagus (and the male on the Malia sealing) was undoubtedly intended to illustrate specific ritual performances in action, the emphatic placement of hands directly above key ritual objects (sacrificial victim and altar) may equally work to emphasise their claims of authority in this context.

Conclusion

While it cannot be assumed that the Agia Triada sarcophagus portrays its occupant(s), either of the two leading female figures – set apart by their positional prominence, differential attire, and performed actions – seem viable candidates. Despite views as to the material and narrative exceptionality of the sarcophagus (Burke 2005, 416), its conspicuous reference to architectural spaces and ceremonial activities affiliated with elite identity is a feature replicated on clay larnakes, underlining a dually ideological and biographical aspect to LM III burial container decoration. On the sarcophagus, the two main female officiants on each side are not simply positioned at the forefront of the ceremonial activities that they perform, but through their proactive movements are perhaps singled out from other ceremonial participants as possessing the authority and prerogative to lead them.

References

Alušík, T. 2005. "Architecture in the Aghia Triada sarcophagus: problems and possible solutions." *Eirene* 41: 26–44.

Antonakaki, I. 2015. "The larnakes of the 2010 tomb". In *Kalochorafitis: two chamber tombs from the LM III A2–B cemetery: a contribution to Postpalatial funerary practice in the Mesara,* edited by A. Karetsou and L. Girella, 127–136. *Studi di Archeologia Cretese* 12. Padova: Bottega D'Erasmo.

Baxevani, K. 1995. "A Minoan larnax from Pigi-Rethymnou with religious and funerary iconography." In *KLADOS: Essays in honor of J. N. Coldstream,* edited by C. Morris, 15–33. *BICS* Supplement 63. London: Institute of Classical Studies.

Boloti, T. 2014. "e-ri-ta's dress: contribution to the study of the Mycenaean priestesses' attire." In *Prehistoric, ancient Near Eastern and Aegean textiles and dress. An interdisciplinary anthology,* edited by M. Harlow, C. Michel, and M.-L. Nosch, 245–270. Oxford: Oxbow.

Burke, B. 2005. "Materialization of Mycenaean ideology and the Ayia Triada sarcophagus." *AJA* 109: 403–422.

Cucuzza, N. 2001. "Religion and architecture: early LM III A2 buildings in the southern area of Haghia Triada." In *POTNIA. Deities and religion in the Aegean Bronze Age,* edited by R. Laffineur and R. Hägg, 169–174. *Aegaeum* 22. Liège: Université de Liège.

D'Agata, A. L. 1999. *Haghia Triada. Vol. 2, Statuine Minoiche e Post-Minoiche dai Vecchi Scavi di Haghia Triada (Creta).* Padova: Bottega d'Erasmo.

Driessen J. 2021. "The Lady of Sissi and the agency of women on Crete during the Final Palatial period." Paper read at "Modern women of the past? Unearthing gender and antiquity," 5-6 March, Sydney.

French, E. 1981. "Mycenaean figures and figurines." In *Sanctuaries and cults in the Aegean Bronze Age,* edited by R. Hägg and N. Marinatos, 173–177. Stockholm: Paul Åströms Förlag.

Heywood, J. E., and B. Davis. 2019. "Painted larnakes of the Late Minoan III period: funerary iconography and the stimulation of memory." In *Μνήμη / Mneme. Past and memory in the Aegean Bronze Age,* edited by E. Borgna, I. Caloi, F. Carinci, and R. Laffineur, 703-707. *Aegaeum* 43. Leuven: Peeters.

Karetsou, A., and L. Girella, eds. 2015. *Kalochorafitis: two chamber tombs from the LM III A2–B cemetery: a contribution to Postpalatial funerary practice in the Mesara. Studi di Archeologia Cretese* 12. Padova: Bottega D'Erasmo.

La Rosa, V. 2000. "To whom did the Queen Tiyi scarab found at Hagia Triada belong?" In *Κρήτη-Αίγυπτος: Πολιτιστικοί δεσμοί τριών χιλιετιών,* edited by A. Karetsou, 86–93. Athens: Hellenic Ministry of Culture; Archaeological Museum of Heraklion.

Long, C. 1974. *The Ayia Triadha Sarcophagus: a study of Late Minoan and Mycenaean funerary practices and beliefs. SIMA* 41. Göteborg: Paul Åströms Förlag.

Marinatos, N. 1986. *Minoan sacrificial ritual: cult practice and symbolism.* Stockholm: Paul Åströms Förlag.

Marinatos, N. 1993. *Minoan religion: ritual, image, and symbol.* Columbia: University of South Carolina Press.

Merousis, N. 2000. *Οι εικονογραφικοί κύκλοι των υστερομινωικών III λαρνάκων: οι διαστάσεις της εικονογραφίας στα πλαίσια των ταφικών πρακτικών.* Thessaloniki: Aristotle University of Thessaloniki.

Militello, P. 1998, *Haghia Triada. Vol. 1, Gli affreschi.* Padova: Bottega d'Erasmo.

Militello, P. 2020. "Minoan religious architecture: representation and reality." In *Current approaches and new perspectives in Aegean iconography,* edited by F. Blakolmer, 87–115. *Aegis* 18. Louvain-la-Neuve: Presses Universitaires de Louvain.

Morgan, L. 1987. "A Minoan larnax from Knossos." *BSA* 82: 171–200.

Nilsson, M. P. 1950. *Minoan-Mycenaean religion and its survival in Greek religion.* Lund: C. W.K. Gleerup.

Paribeni, R. 1904. "Richerche nel sepolcreto di Hagia Triada presso Phestos." *MonAnt* 14: 677–756.

Pötscher, W. 1997. "Tag und Nacht auf dem Sarkophag von Hagia Triada." *Klio* 79: 19–22.

Privitera, S. 2016. "The tomb, the house, and the double axes: Late Minoan III A2 Hagia Triada as a ritual and mythic place." In *Metaphysis. Ritual, Myth and Symbolism in the Aegean Bronze Age,* edited by E. Alram-Stern, F. Blakolmer, S. Deger-Jalkotzy, R. Laffineur, and J. Weilhartner, 149–156. *Aegaeum* 39. Leuven: Peeters.

Tournavitou, I. 2017. *The wall paintings of the West House at Mycenae.* Oxford: Oxbow.

Warren, P. M. 2007. "Ηλύσιον Μινωϊκόν." In *ΣΤΕΦΑΝΟΣ ΑΡΙΣΤΕΙΟΣ:* Archäologische Forschungen zwischen Nil und Istros. *Festschrift für Stefan Hiller zum 65. Geburstag,* edited by F. Lang, C. Reinholdt, and J. Weilhartner, 261–270. Vienna: Phoibos Verlag.

Adoration and Visionary Practices, or Expressions of Lamentation and Grief in Bronze Age Crete?

Ute Günkel-Maschek

Abstract   *Grieving, emotionally distressed, or lamenting figures rarely appear in the scholarly discussion on early Late Minoan religious scenes. This is mainly due to the generally accepted view that Minoan religion was essentially focused on adoration and the invocation of divine epiphanies. However, a recent re-evaluation of gestures in two- and three-dimensional representations by the author has led to the identification of a considerable number of expressions of grief and emotional distress and of gestures of lamentation. A thorough examination of the contexts in which these gestures and expressions appear in the LM I period, of how they developed from their early beginnings in the Middle Minoan period, and of how they were carried forward into the LM II and LM III periods, reveals their consistent importance in religious representations. The fact that some of the gestures shown by figurines dedicated at peak sanctuaries first appeared in funerary contexts supports the assumption that they were expressive forms that originally fulfilled their function in relation to the deceased before they became part of ritual activities in the Middle Minoan period. Their continued use on figurines deposited in tombs during the LM II / III period and beyond confirms the persistent understanding of the gestures as expressions of sadness, grief, and mournful contemplation. In order to explain this surprisingly widespread appearance of mourning and lamenting figures in Minoan religious imagery, the old idea of a deity (or hero) who resided in the underworld and was therefore considered dead and/or absent from the world of the living is revived along with the argument that mourning for him was a central aspect of Minoan ritual practice.*

Introduction

Written and visual accounts of mourning and lamenting figures are a recurring feature in the cultures of the ancient eastern Mediterranean. We have various accounts of people throwing their hands in the air, pulling their hair, scratching their cheeks, beating their chest, and exposing their breasts, but also of quieter forms of mourning represented by figures touching the head, cheek, or side of the neck. In Ancient Egypt, where the textual evidence sheds light on the use and meaning of such actions, the associated imagery remained largely unchanged over time. Mourning figurines were placed in tombs from the end of the Old Kingdom to the Greco-Roman period, funerary paintings decorated the walls of tombs, and both Isis and Nephtis were depicted in an iconic way mourning the death of Osiris, thereby stimulating "the rebirth of nature, corresponding to Osiris' resurrection" (*e.g.* Colazilli 2018, esp. 221; Dominicus 1994, 6, 9, 19–21, 58–75, 180; Millward 2013; Kucharek 2011, 28–32). In Greece and Crete, depictions of mourning figures touching their heads and/or pulling their hair and scratching their cheeks in excessive and passionate mourning are known mainly from funerary paintings on LH and LM III *larnakes* (*e.g.* Vermeule 1991; Watrous 1991, esp. 291–292, 302; Cavanagh and Mee 1995; Kramer-Hajos 2015). The same gestures, along with others such as the touching of the face or neck, continued to be used in later periods (*e.g.* Merthen 2005; Margariti 2019). In funerary contexts, such representations were the appropriate means of expressing grief over the death of a person, thereby paying respect and ensuring a pleasant afterlife. But there were also reasons for mourning and lamenting other than the death of an individual, such as the absence of a loved

Fig. 1: LM I bronze figurine in Berlin (drawing U. Günkel-Maschek, after Berlin Antikensammlung: https://smb.museum-digital.de/object/11892; Verlinden 1984, pl. 16, cat. no. 33).

Fig. 2: LM I gold ring from Vapheio (drawing U. Günkel-Maschek, after CMS I, no. 219).

one at sea or in battle, the fall of a city, or festivals during which the death of a deity was collectively mourned before the joyful celebration of its resurrection (Alexiou 2002. *Cf.* Nilsson 1971, 277, 525, 527).

In representations from Egypt and later Greece, for which we are usually familiar with the context and occasion, figures covering their faces with one or both hands, figures standing or kneeling with their heads bowed, figures touching their heads or necks, or figures 'hugging' themselves with one or both arms are readily identified as figures expressing sadness and grief and/or as figures lamenting, often with an element of reverence for the subject of their emotional display. In contrast, Minoan figures adopting the same behaviour are rarely understood as expressing such emotions, but are usually placed within interpretive models built around adoration and divine epiphany. But this has not always been the case.

As early as the 1880s and 1890s, classical archaeologists Adolf Furtwängler, Maximilian Mayer, and Maxime Collignon described some of the clay and bronze figurines known at the time from the Aegean Bronze Age as depictions of mourners, including the well-known bronze figurine in the Antikensammlung in Berlin (Fig. 1; Furtwängler 1889, 93–94, fig. 7; 1900, 455–456; Mayer 1892, 197–198; Collignon 1903, 309). During the following decades, the same figurine became a priestess or votary in the influential works of Arthur Evans and Friedrich Matz (Evans 1921, 508; Matz 1959, 428). Martin Nilsson also objected to an interpretation of this and other bronze and clay figurines as mourners with the argument that none of them had been found in funerary contexts (Nilsson [1927] 1971, 298–299). Instead, he concluded that, because of their discovery mostly at the sites of 'villas' and in sanctuaries, these figures simply could not be mourning (in the narrow sense of mourning someone's death) but had to be votaries shown in an attitude of adoration or dancing (Nilsson [1927] 1971, 298–299; followed by Brandt 1965, 21, n. 3). In 1969, Costis Davaras stated in a footnote on the bronze figurine in Berlin that "the old theory that it is a mourning woman has long been abandoned" (Davaras 1969, 638, n. 8 [author's translation]).

However, even in more recent times, it has occasionally been suggested that figures usually described as worshippers are actually figures in an attitude of mourning. In 2012, Efi Sapouna-Sakellaraki identified the placing of both hands on the forehead on bronze figurines from the Minoan peak sanctuary at Agios Georgios sto Vouno on Kythera as a gesture of mourning, based on its close similarity with mourning gestures on later *larnakes,* and she proposed that mourning may well have played a role in non-funerary religious ritual at peak sanctuaries. As a comparable religious occasion, she cited a festival from nearby Laconia, the Hyakinthia, in which the mourning of the death of the name-giving hero on the first day was followed by the joyful celebration of his rebirth on the second day (Sapouna-Sakellaraki 2012, 71; *cf.* Persson 1942, 136–137). In

her final assessment of the gestures, she nevertheless identified the same hand position as an invocation gesture (Sapouna-Sakellaraki 2012, 149). Moreover, in her earlier 1995 work on bronze figurines, Sapouna-Sakellaraki had also already suggested an interpretation of the Berlin figurine's lowered head and arm posture as an attitude of lamentation, but in the end tended towards an interpretation as the benedictory attitude of a deity "looking down" (Sapouna-Sakellarakis 1995, 103–104, 109–110, 143). This example illustrates how hand postures that are recognised as relating to mourning/grief/lamentation, based on the knowledge of similar expressions that were widely used in antiquity, are nevertheless not accepted as such, because they do not fit into the religious models that have been created for Minoan Crete.

The identification of mourning figures was not limited to figurines. In 1942, the Swedish archaeologist Axel Persson, studying depictions on golden signet-rings, developed an idea already briefly expressed by Arthur Evans: the existence in Bronze Age Crete of a deity who shared aspects with the Egyptian Osiris and the Mesopotamian Tammuz. Their death and resurrection not only symbolised parts of the vegetation cycle, but were also "celebrated", he wrote, "with ecstatic expressions of sorrow and joy" (Persson 1942, 121). While Evans had based his reconstruction of such a narrative on two seal images from Mycenae and Vapheio (Fig. 2; Evans 1930, 140–144; *CMS* I, nos. 126 and 219, respectively), Persson found figures lamenting the death of the vegetation god in the depictions of figures leaning over what he identified as burial jars. Both Evans' and Persson's views failed to convince, however, not least because of some serious flaws in their readings of the seal images. While Evans saw mourning women where there were none (as already noted by Persson 1942, 37), Persson's identification of most of the oval objects as burial jars symbolising the death of vegetation and the burial of the vegetation god (Persson 1942, 32, 34–35, 88, 99) has been rightly refuted in favour of an identification as rock boulders (*e.g.* Niemeier 1989, 174–154). Due to this and other problematic readings, Persson's theory that the Minoans mourned the death of a god lost much of its credibility.[1] In the following decades, the appealing image of Bronze Age male and female figures engaging in ecstatic behaviour to invoke divine epiphanies largely superseded their identification as mourners, and their self-touching gestures and often hunched or slumped postures were subsumed within the wider field of adoration and ecstatic and/or visionary practices.

Towards a New Understanding of Minoan Gesturing Figures

One could provocatively argue that the early interpretation of figurines as mourners came at a time when it was necessary to focus on the details of the figures, such as their gestures and postures, whereas the interpretation as worshippers came with the gradual (re)construction of religious concepts based on emerging contextual features, into which the gestures of figures and figurines were then refitted. As we have seen, this has led to the abandonment of interpretations that had been based on their peculiarities and, in the case of mourning gestures, on knowledge of widely accepted representations of mourners from neighbouring or later cultures, in favour of seemingly more appropriate interpretations. However, alongside sex, clothing, and hairstyle, the gesture[2] and posture of a figure are essential, if not the defining, elements of a figure's presence in a context – be it a two-dimensional pictorial context or a three-dimensional physical context. The

---

1 See *e.g.* Nilsson [1927] 1971, 278–278. However, while criticising Persson for drawing parallels with Near Eastern religions that show "sorrow over the vanishing of vegetation and joy over its reappearing" (Nilsson 1971, 288), Nilsson himself argued in favour of "a tree cult with on the one hand joy and dancing, on the other mourning" (Nilsson 1971, 277), and also considered the idea of a dying fertility goddess, whose "death was celebrated annually", as an "un-Greek" and therefore "original product of Minoan religious genius" (Nilsson 1971, 527–528).

2 While there is a distinction between gesture and expression when applied in real life, the depiction of both gesture and expression falls under the category of gesture, as the depiction of both conforms to contemporary conventions of how to express them visually. Gesture is the pictorial means chosen by the craftsperson to depict any kind of arm movement or posture that conveys a message to the viewer. This message may be a communicative gesture, an emotional expression, or a functional action.

gesture and posture establish the figure's relationship with, and attitude towards its surrounding, e.g. whether it is intentionally and dialogically engaging with it, or whether it is expressing its inner or emotional state to it. Communicative gestures, which are particularly linked to culture-specific conventions of interpersonal communication, are often more abstract and therefore difficult to interpret without the supporting knowledge. While this may also be true when emotions are explicitly and intentionally expressed in social interactions, the observation that people's natural responses to emotion-evoking stimuli are (almost) universal is reflected, among other things, in the tendency of the emotional expressions depicted (according to culture-specific conventions) to show striking similarities across cultural periods and regions. This includes the classic expressions of emotion as well as the more subtle body cues or micro-expressions that have been shown to reveal suppressed or hidden emotions, especially in response to negative stimuli (*e.g.* Chen et al. 2023 with further references).

Among these, of particular interest for the present discussion are self-touches (also known as self-adaptors or self-manipulators), *i.e.* one part of the body touching and/or doing something to another part of the body, sometimes also to clothing or jewellery worn on the body (Lhommet and Marsella 2014, 277, 279). Studies in human behaviour have found these self-touches to be associated with negative emotional states and stress, anxiety, or discomfort, and to be involved in psychological regulation such as self-calming and self-stabilisation, *i.e.* they serve to comfort and release states of emotional discomfort. The display of such spontaneous gestures – both when applied in real life and in pictorial representation – indicates a person's need to use such pacifying actions. Consequently, self-touches such as touching the head, neck, or suprasternal notch (the large dip at the point where the neck meets the chest), feature regularly in guides to body language, as they reveal a person's emotional distress, insecurity, or anxiety in a situation (*e.g.* Morris 2002; Navarro 2008; Chen et al. 2023, 1349–1350).

More insight into the basic emotional attitude of a gesturer can be gained from the postures of the head and body with which the gesture is combined. For example, studies of the perception of emotion from posture have found sadness to be the emotion with the highest agreement rate, both within and across cultures (*e.g.* Coulson 2004, 118, 133–134; Kleinsmith *et al.* 2006, 7, 16–17). Sadness was also one of the emotions that was not confused with any other emotion (Coulson 2004, 136), especially when viewed in profile, and "the only emotion characterised by a forwards head bend" (Coulson 2004, 132), with other common features including a forward chest, collapsed posture, and arms at the sides of the trunk (Lhommet and Marsella 2014, 273, 278). The early identification of the bronze figurine from Berlin (Fig. 1) as a mourner therefore comes as no surprise.

Depictions of emotional expression show certain diachronic and transcultural continuities and similarities, precisely because they are often based on universal basic needs and related forms of behaviour. Self-touches such as touching the head, neck, or face, scratching the neck or cheek, pulling the hair, beating the chest, or tearing the garment represent a large part of the repertoire of mourning gestures found in depictions from Egypt and Greece, *i.e.* from cultures that 'embrace' the Minoan culture both chronologically and geographically. The same association of gestures with emotions persisted in depictions from later periods (*e.g.* Pasquinelli 2007; Morris 2019). This means that some pictorial formulae for depicting emotions – reproducing gestures and bodily cues that are perceived as such by the respective culture – have been in use for millennia. They can therefore be said to have a certain transcultural and diachronic validity, from which Minoan depictions should not be considered exempt. In addition to research on the representation and perception of emotions and feelings of distress in the field of bodily communication and non-verbal behaviour, studies of the depictions of emotions in Egyptian, Classical, and later art history can therefore provide useful comparisons and points of reference for the interpretation of Minoan gestures.

While the meaning of a gesture is specified by the context in which it is made – and may remain ambiguous in the eyes of the viewer without it – the presence of a gesture in a pictorial or
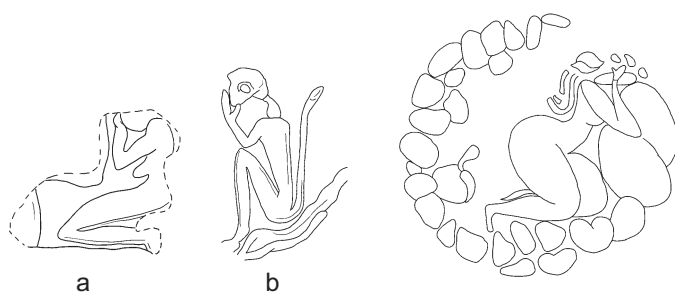
Fig. 3: Seal impressions from Knossos and Agia Triada depicting a woman and monkey covering the face with the palms of the hands or paws, respectively (drawing U. Günkel-Maschek, after a) CMS II 8, no. 281; b) CMS II 6, no. 282).

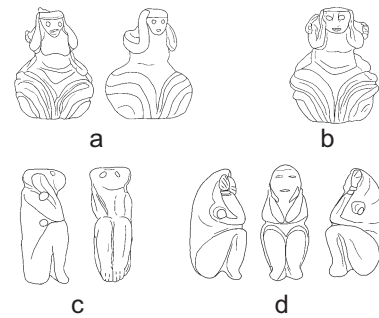Fig. 4: LM I seal-stone from Knossos (drawing U. Günkel-Maschek, after Warren 1988, 17, fig. 9).

Fig. 5: Pendants depicting women (a–b) and monkeys (c–d) touching the sides of the head with the palms of their hands or forepaws, respectively. From a) Gournia, b) Poros, c) Isopata, d) Knossos (drawing U. Günkel-Maschek, after a) Hawes et al. 1908, 48, pl. XI, 14; Dimopoulou-Rethemiotaki 2005, 324; b) Vasilakis 2005, 101, fig.; c) Evans 1905, 542, fig. 131; d) Coldstream 1973, 162–163, fig. 258, pl. 95).

physical context results from the 'use' of the gesture in a context, for which it was considered appropriate *because* of its meaning. For example, the gestures chosen for figurines or figurative pendants that were deposited in burials or placed in peak or cave sanctuaries were chosen for the particular context because of the suitability of their meaning in relation to the focus of the deposition. In two-dimensional representations, gestures were reproduced in pictorial contexts for the suitability of the gesture to define the contribution of the protagonist to the overall content of the representation. Patterns of Bronze Age 'use' of a gesture, and therefore its suitability for certain contexts (and not for others), are reflected in the presence of the gesture in some contexts, and not in others. This 'use' can therefore be reconstructed by recording and analysing its repeated occurrence in physical and/or pictorial contexts over time.

In my research on Minoan gestures, therefore, I have been adopting an approach in which interpretation is based on the analysis of a gesture and its combination with head and body posture, on the dimensions of meaning ascribed to such combinations in studies of human behaviour and comparable representations, and on the analysis of the physical and/or pictorial context in which representations of the gesture in question recur.[3] By looking not at a single gesture, but at many gestures occurring in contexts over a long period of time, patterns emerge which reveal the Bronze Age 'use' of gesture representations, reflecting the Bronze Age understanding of gestures and the basic sense of their meaning. In this way, it is possible to give back to the gesture itself its meaning as a defining feature of a figure's presence in a context – and to gain further insights into meaningful aspects of the context itself.

Before moving on to the discussion of the representations, however, I shall briefly mention two important conventions that have emerged from the study of two-dimensional representations of non-symmetrical gestures, as they are important for understanding the more subtle nuances of Minoan gesture combinations. One is the consistent representation of non-symmetrical gestures with the primary hand in front of the body, while the other hand has a complementary charac-

---

4 Katerina Giannaki independently made the same observation, see her contribution in this volume.

ter.[4] This convention is a logical consequence of the representation of the torso in three-quarter to frontal view, *i.e.* a figure communicating in dialogue or expressing its inner state to someone or something in front of it uses the arm closer to the target to convey the message. Secondly, the depiction of a single hand in two-dimensional images represents a symmetrical gesture, *i.e.* a gesture in which both arms are held in the same way. This type of depiction is found alongside the explicit depiction of both arms in a symmetrical posture, usually slightly offset from each other. Non-symmetrical gestures always show both arms. Therefore, if only one arm is visible, this indicates a symmetrical gesture.

To give an example, the covering of the face with the palms of both hands was implied by the depiction of a kneeling female figure on a ring impression from Knossos (Fig. 3a). The same gesture is made by a monkey on a ring impression from Agia Triada (Fig. 3b). In both cases, only one hand, or paw, was depicted. The other one must be imagined in the same way on the side facing away from the viewer. The same rule applies to the figure bent over a rock on a seal-stone from Knossos: only one hand is shown as it is brought to the side of the head, indicating a symmetrical gesture of the two hands touching the sides of the head (Fig. 4). Crucially, the same symmetrical gesture is found on LM I pendants from Gournia, Poros, Knossos, and Isopata, where it is performed by female figures and by monkeys (Fig. 5) – two, if not three of them originally deposited in tombs. The same gesture was identified on two of the clay figurines from the peak sanctuary on Petsophas by Bogdan Rutkowski, who noted (in his 1991 article on 'prayer [adoration] gestures') that "this type becomes popular in the LM II/LH III and Archaic period, especially as the representation of mourning women" (Rutkowski 1991a, 17).

Expressions of Sadness and Emotional Distress in LM I Images – the Evidence

The figure on the seal-stone from Knossos (Fig. 4) is kneeling beside a boulder, her head bent forward and leaning onto it, her hands touching the sides of her head. She is *not* clasping and kissing the stone (*contra* Warren 1988, 17), but places her forehead on it. This head movement can be identified as a tie sign (*cf.* Morris 2002, 141), revealing her close, if not intimate relationship with what the boulder symbolises to her and provides the reason for her posture and emotional state, while the rest of the world is shut out from her contact with the boulder. The hands on the sides of the head, a gesture known across art history to express deep pain, despair, fear, or anger (Pasquinelli 2007, 168), reinforce her 'cut-off' attitude (Morris 2002, 141; 2019, 208–210). The same attitude is shown by the female figures and monkeys in the pendants placed alongside burials, and, if correctly identified, already earlier by clay figurines offered at Petsophas.

A male figure leaning over a boulder with his head deeply bowed is depicted on the gold ring from Kalyvia (Fig. 6). Due to the poor state of preservation, only the complementary part of
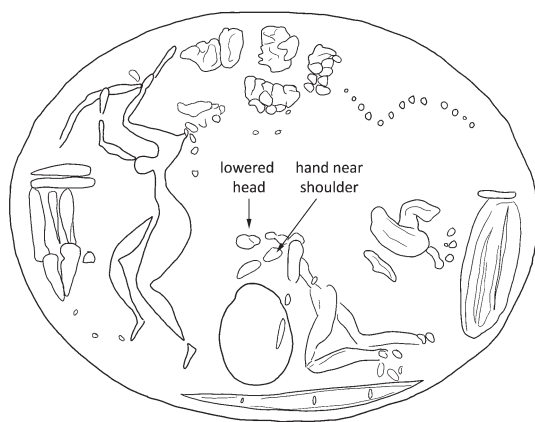

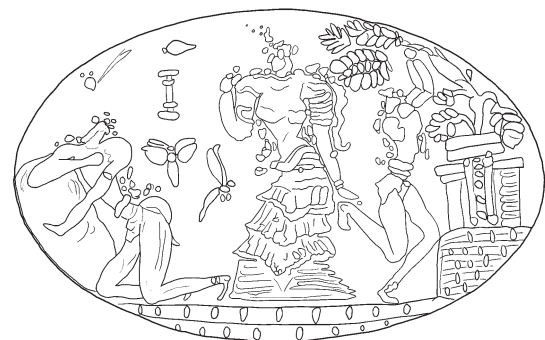Fig. 6: LM I gold ring from Kalyvia (drawing U. Günkel-Maschek, after CMS *II 3, no. 114*).

Fig. 7: LM I gold ring from Archanes (drawing U. Günkel-Maschek, after Sakellarakis and Sapouna-Sakellaraki 1997, 655, fig. 722).

Fig. 8: LM I gold ring from Chania (drawing U. Günkel-Maschek, after CMS VI, no. 278).
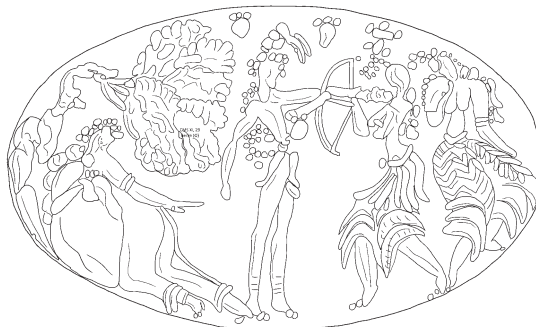

Fig. 9: Gold ring of unknown provenance, Berlin (drawing U. Günkel-Maschek, after CMS XI, no. 29).

his gesture combination is clearly visible, clasping the stone in the same way as the male figure kneeling beside a boulder on the gold ring from Archanes (Fig. 7). The latter places the primary hand on the chest near the opposite shoulder. The figure on the Kalyvia ring possibly had the primary arm in the same pose, but only two sections are preserved of it – perhaps the forearm and hand on the chest near the opposite shoulder, as indicated in Fig. 6. While the man on the gold ring from Kalyvia has slumped over the boulder with his head deeply lowered in a posture that would be recognized across cultures as an indication of sadness (see above), the man on the Archanes ring has the head turned away from the boulder and lowered to the other side. The excavators, Giannis and Efi Sakellarakis, considered the turn of the head as supportive of an interpretation as lamentation, concluding that his movement "appears to be theatrical, in the sense that it is an enactment of a ritual, in which the postures and movements are exaggerated and affected" (Sakellarakis and Sapouna-Sakellaraki 1997, 658).

Fig. 10: Impression from LM I signet-ring, Chania (drawing U. Günkel-Maschek, after CMS V Suppl. 1A, no. 176).

Another depiction which indicates that the boulder causes the figures kneeling beside it to make gestures, body and head postures that express sadness is the depiction of a female figure leaning over a boulder with her head deeply bowed on a gold ring in the Ashmolean Museum (Fig. 8). It was previously described as presenting "an attitude of mourning" by Persson (1942, 32–33). Also leaning against a rock is a female figure on a gold ring of unknown provenance in Berlin (Fig. 9). The woman turns her upper body backwards, her head lowered, her arm extended towards the centre of the scene, where a male figure stands with his back to her, facing a female archer. The extension of the arm towards a target object or person is also found in standing figures as a primary gesture. For example, on a ring impression from Chania, a female figure extends her arm towards a built structure crowned by a tree (Fig. 10). As on the Archanes ring, her head is turned away from the target of her primary gesture and lowered towards the shoulder in sadness and self-intimacy (Morris 2002, 146). The other, complementary hand touches the suprasternal notch. This is a pacifying "micro-gesture" found to be typically made by women when feeling insecure, emotionally distressed, or worried in response to a negative experience (Navarro 2008, 35. 38–39, fig. 7; cf. Chen et al. 2023, 1352, table 1). Taken together, the depiction conveys the image of a woman who is at the same time longing for the tree-crowned structure and what it represents, and turning away from it in sadness, emotional distress, worry, and/or anxiety, as if she cannot bear to look at it.

A woman touching the suprasternal notch with the primary hand also stands next to the kneeling figure on the previously mentioned gold ring in the Ashmolean Museum (Fig. 8). In doing so, the expression of anxiety, worry, and emotional distress implied by the self-pacifying
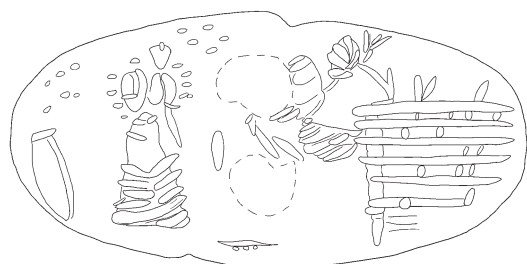
Fig. 11: LM I gold ring from Knossos (drawing U. Günkel-Maschek, after CMS II 3, no. 15).

Fig. 12: LM I 'Sacred Mansion' ring from Poros (drawing U. Günkel-Maschek, after Rethemiotakis and Dimopoulou 2003, col. pl. 1).
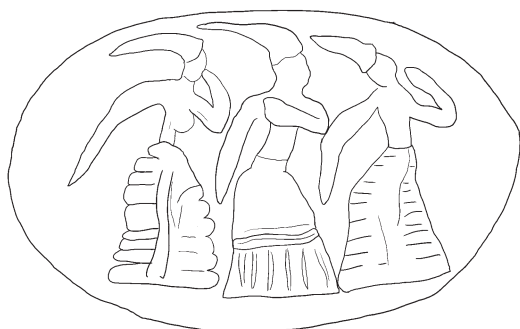

Fig. 13: LM I mould for ring bezel, from Cyprus (drawing U. Günkel-Maschek, after British Museum: https://www.britishmuseum.org/collection/image/ 811238001).

primary hand gesture is paired with the attitude of mourning of the kneeling woman. We also find as a primary gesture the touching of the suprasternal notch on the female figure flanking the couple on the gold ring in Berlin, to whom the kneeling woman described above turns longingly from the other side (Fig. 9). As can be seen from the long hair falling over the other, lowered arm, the side of the torso facing the centre of the picture is conceived as the front of the twisted figure, the arm raised to the suprasternal notch therefore as the primary one. With her head again lowered to her shoulder in a self-intimacing pose (cf. Morris 2002, 146), her expression complements the appearance of the kneeling figure with an arm outstretched in longing at the other end, while both of them face and thus relate their actions to the central motif of the male figure being targeted by a female archer.

A variation of the touching of the suprasternal notch, in which the hand is more on the collarbone of the same body side, is shown by the female figure on a gold ring from Knossos (Fig. 11), who stands looking at a structure crowned by a tree. This pacifying "micro-gesture", which indicates once again the woman's state of emotional discomfort, complements the lowering of the primary arm in front of the body, which emphasises the woman's motionless posture as she gazes at the tree-crowned structure with which a second, poorly preserved figure is engaged. All in all, these depictions of women touching the area where the neck meets the chest suggest that whatever they are looking at makes them feel emotionally distressed, worried, insecure, or anxious, and causes them to adopt this self-pacifying behaviour as a natural reaction to suppress these feelings.

A position of the arm, which, in combination with the other hand on the forehead, has been identified by Classical archaeologists as that of a wailer, is the self-hug, a self-intimacy that provides comfort by miming the act of being touched by someone else (Morris 2002, 144–145; Navarro 2008, 48–49). The left hand placed on the opposite shoulder in a self-hug complements the right hand of the bronze figurine in Berlin, which is brought to the lowered forehead (Fig. 1). The combination has a close parallel in the female figure on a gold ring from Poros (Fig. 12). Standing in a paved courtyard that is reached from below by a flight of steps, her attitude is focused on a building with palatial architectural features including 'horns of consecration', suggesting that this type of building, and the ideas it represented, could also evoke a need for self-comfort.
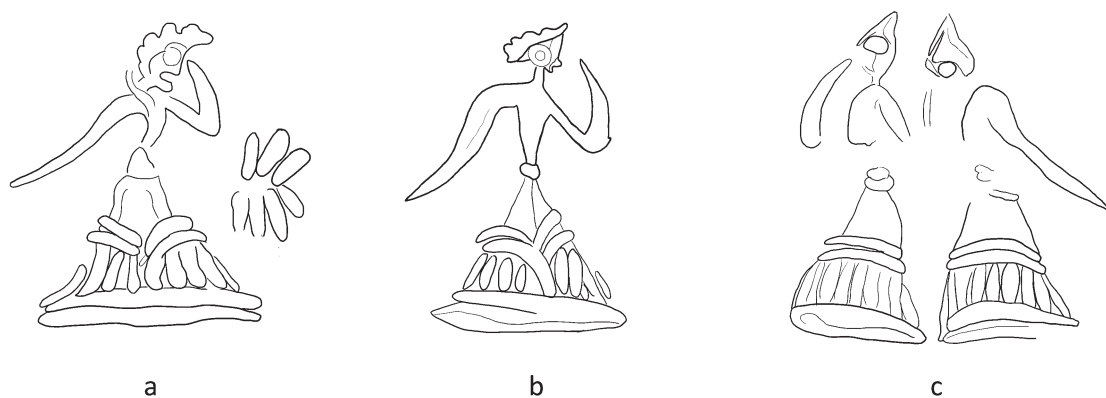
Fig. 14: Women raising the hand towards the lowered head or the mouth on LM I seal-stones: a) CMS III, no. 351; b) CMS X, no. 262; c) CMS XI, no. 282 (drawing U. Günkel-Maschek, after a) CMS III, no. 351; b) CMS X, no. 262: c) CMS XI, no. 282).
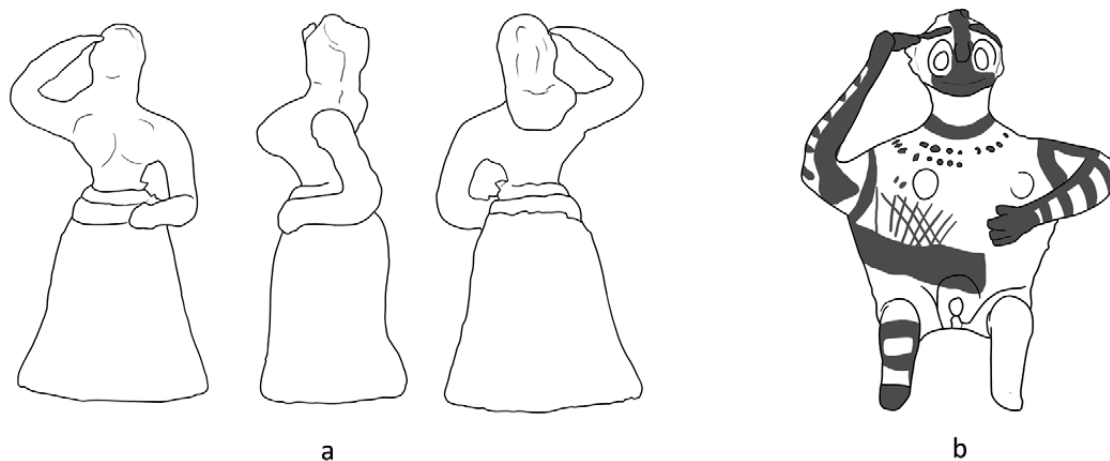

Fig. 15: Touching the temple with the fingertips: a) LM I bronze figurine from Psychro cave, b) LM III A2/B clay rhyton from Gournia (drawing U. Günkel-Maschek, after a) Verlinden 1984, pl. 18, cat. no. 37; b) Rethemiotakis 1998, pl. 32, cat. no. 10).

As a primary gesture, the self-hug occurs on the central of three female figures lined up on an LM I mould from Cyprus, all dressed in typical Minoan clothing (Fig. 13). She is standing with her head and upper body bowed forward, with one arm, the arm at the front of the body, placed across her chest, the hand resting on the opposite shoulder. The other arm is hanging down the other side of the body. The other two figures show gestures that are well known from LM I signet-rings and seal-stones, where they are performed by female figures in groups of two or three. The figure on the left raises the hand to the head which is inclined forward. This gesture is sometimes seen in combination with an open mouth, indicating oral utterance, which may be lamenting, wailing, recitation, singing, or other (Figs. 14 a–b); on this topic see also Blakolmer in this volume). The touching of the head with the extended fingers occurs also on a bronze figurine from Psychro Cave (Fig. 15 a). At the very basic level, this hand movement indicates that 'a person is struggling with something or is undergoing slight to severe discomfort' (Navarro 2009, 40, fig. 8). Crucially, its performance with one or both hands is well known from depictions of mourning figures from LM/LH III into historical Greece (Watrous 1991, 292; Cavanagh and Mee 1995; Merthen 2005). Combined with the lowered head, which can be read as an expression of sadness, an interpretation of the hand movement and body posture as an expression of emotional despair does not seem unreasonable for the Minoan seal images either, and the oral
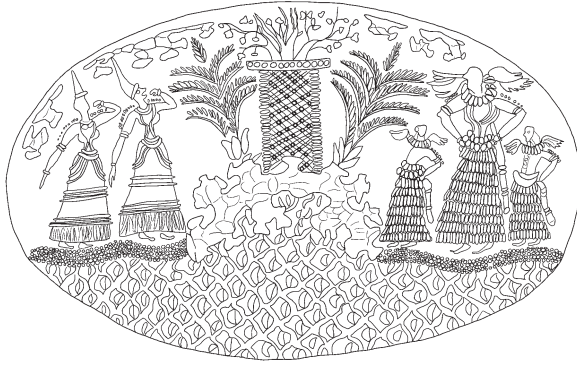
Fig. 16: LM I gold ring from the tomb of the Griffin Warrior at Pylos (drawing U. Günkel-Maschek, after Davis and Stocker 2016, 641, fig. 10a).

utterances are likely to be classified as laments or wails. The other arm is stretched out at the back, away from the body, as if the figure is trying to shake off the emotional upset.

The same complementary arm posture characterises the third type, represented by the figure heading the line-up on the mould in Fig. 13, who stands in an upright position with her head tilted backward and her primary hand raised towards her mouth. This posture is also encountered on numerous seal-stones (*e.g.* Fig. 14c: figure on left) as well as on signet-rings such as the LM I gold ring from the tomb of the Griffin Warrior at Pylos (Fig. 16). At least one of the women in the group of two, the figure in front, is again depicted with her mouth wide open. In view of the joint occurrence of this posture with the one just discussed on LM I seal-stones (Fig. 14c), which means that they were part of one and the same performance, it is reasonable to assume that the figures on the gold ring from Pylos also raised their primary hands and opened their mouths in lamentation. Once again, the group of two is associated with a tree-crowned structure that becomes the focus of the performative action, now on a rocky ground in a waterside setting.

Returning to the LM I mould from Cyprus thus the group probably also represents three women lamenting. The reason for their lamentation is not shown, but would have been known to the Bronze Age viewer from the composition and the group's action. It is presumably directly related to the other representations of women engaged in the same, almost iconic type of group performance, including the gold ring from Pylos where the focus of the lament is a tree-crowned structure. The scene on the mould thus unites three different displays of lament, of which two are regularly encountered in similar groups on signet-rings and seal-stones elsewhere and may have represented more passionate performances, whereas the third, the self-hug shown by the figure in the centre, is more indicative of quiet grief.[5]

The Roots of the Self-hug and Other Expressions of Sadness

The self-hug in LM I seal images and bronze figurines is a gesture with roots in the Middle Minoan Period. Here it occurs on clay and bronze figurines from peak sanctuaries such as Petsophas, Maza, Vrysinas, Traostalos and Kophinas and from Piskokephalo (Fig. 17). The small-sized figures from Vrysinas (Fig. 17f) have been attributed to a multi-figure model and thus represent a group of similarly expressive figures already in the Middle Minoan period (Sphakianakis 2016, 187. 205, fig. 16; 207). A small-sized female figure with one hand on the opposite shoulder, the other hand on the wrist of the self-hugging arm from Petsophas (Fig. 17a), which was described by John Myres (1902/1903, 378–379) as belonging to a figural group, may indeed come from a similar model. The discovery of such model(s) confirms that the collective expression of grief in groups was already an element of the ritual that took place in the peak sanctuaries during the Middle Minoan period. The Piskokephalo figurines also have the second hand grasping the wrist of the hand placed on the opposite shoulder, or alternatively placed around the lower torso to the opposite hip (Fig. 17c). These hand poses reinforce the expression of emotion indicated by the self-hug, with the grasping of the own wrist in particular "heightening the drama of the feelings expressed" (Pasquinelli 2007, 58 [author's translation]), perhaps characterising, as in works of art from later periods, the gesturer as somebody "who is present at a tragic event but does not

---

5 On quiet restrained vs. excessive and passionate mourning, see Margaritis 2019.
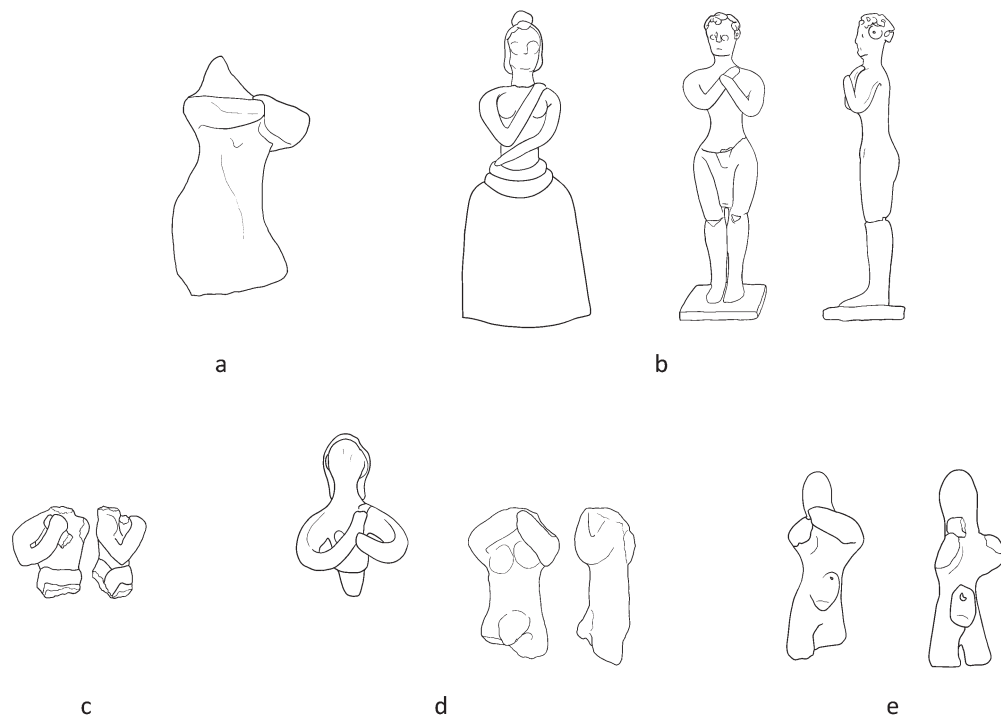
Fig. 17: MM clay figurines 'hugging' themselves with one arm, from: a) Petsophas, b) Piskokephalo, c) Kophinas, d) Traostalos, e) Vrysinas (drawing U. Günkel-Maschek, after a) Myres 1902/1903, 378–379, pl. XI, no. 30; b) Platon 1951, pl. H, figs. 1–2; Sapouna-Sakellarakis 1995, pl. 40.9; c) Spiliotopoulou 2018 (II), pl. 29, cat. no. 291; d) Davaras 1976, 93, fig. 51; Sapouna-Sakellaraki 1971, pl. 13β–γ; e) Sphakianakis 2016, figs. 11. 12).

take an active part. It is a gesture of deep compassion in the face of a painful reality" (Pasquinelli 2007, 162 [author's translation]).

When placed at sanctuary sites, the behaviour displayed by the figurines must be seen in relation to a focal aspect of the cult during which they were dedicated. Their attitude was thus deemed an appropriate behaviour in reaction to this focal aspect of the cult. The men and women represented by the figurines were affected by what they saw, commemorated, or contemplated, in a way that filled them with negative feelings and made them adopt a self-comforting behaviour. In doing so, the figurines, and, consequently, the people who dedicated them, displayed their emotion towards an apparently unsettling element of the peak sanctuary cult.

The gestures of the Middle Minoan figurines have parallels in Egyptian funerary scenes that are too close to be dismissed as coincidence. These gestures are used by the tomb owner's relatives, officials, and dependants to respectfully express their grief at his death, even during their everyday activity. Although listed as gestures of respect (Verehrungsgesten) by Dominicus (1994, 6, 9, 19–21, 58–75; see also Kekes 2021), the scholar well understood these gestures as expressions of the inner state (innere Haltung) of the figures (Dominicus 1994, 180). It is unlikely that the adoption of not just one, but indeed a set of gestures for the configuration of the clay figurines placed on display in Middle Minoan peak sanctuaries happened without any consideration of the dimension of meaning conveyed by these gestures in Egyptian funerary contexts. Instead, the variants of the self-hug combinations on the Minoan figurines, all of which have parallels in Egyptian depictions,[6] are probably also about showing respect by expressing one's own sadness or grief. The obvious difference in the use context – a sanctuary rather than a tomb – should

---

6 In addition to the hand on the wrist of the self-hugging arm, the placing of one arm across the lower body to the opposite hip appears in combination with a palm on the head; see Dominicus 1994, 66, fig. 15c.
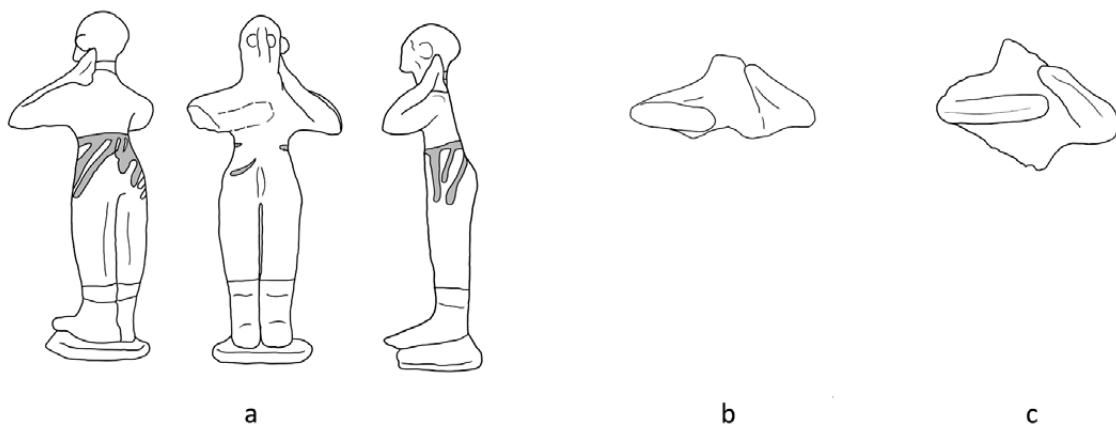
Fig. 18: MM and LM III A clay figurines with one hand touching the side of the neck: a–b) from Petsophas; c) from the LM III A Tomba del Sarcofago Dipinto *from Agia Triada (drawing U. Günkel-Maschek and B. Houllis, after a) Sapouna-Sakellaraki 1971, pl. 5β. γ; Rutkowski 1991 b, pl. V, figs. 1, 3; b) Rutkowski 1991 b, pl. XXII, fig. 6; c) La Rosa 2000, 88, fig. 2).*
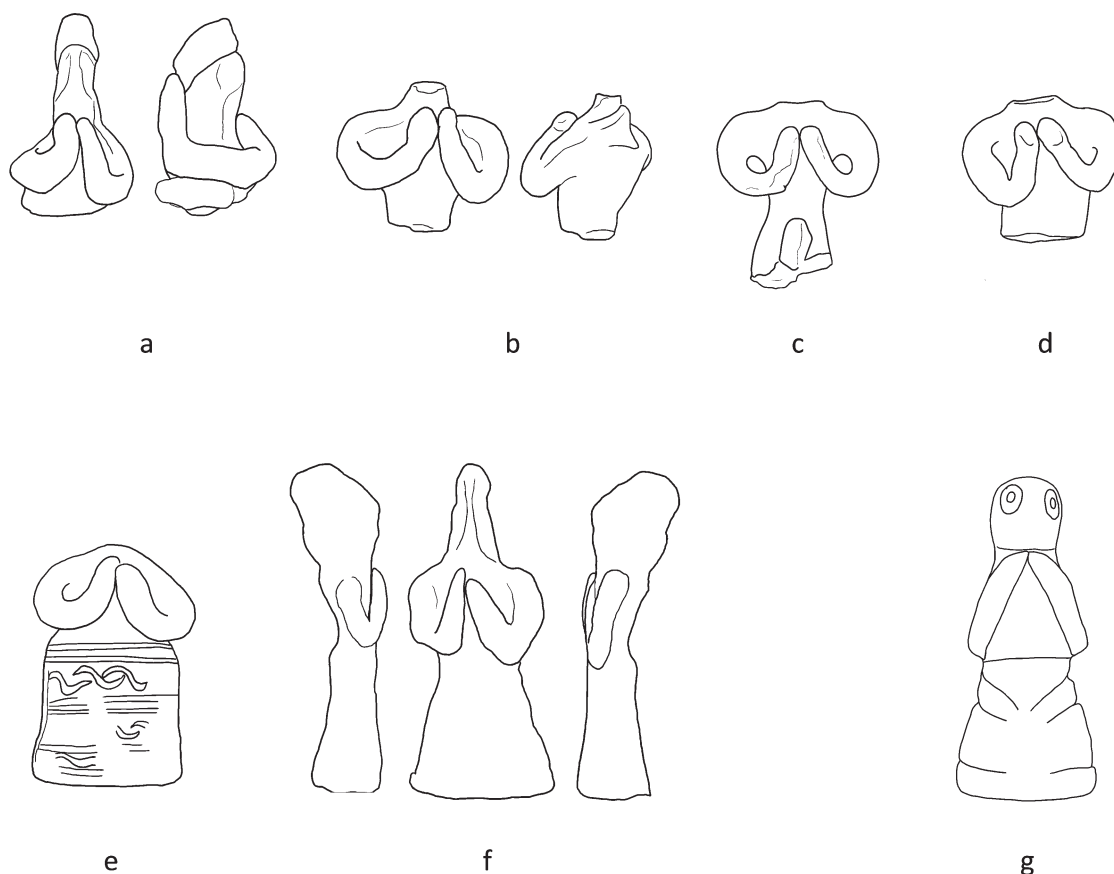

Fig. 19: Figures with hands gathered at the base of the neck, MM I to LM III B: a) Phourni, Archanes, Burial Building 9; b–c) Petsophas; d) Piskokephalo; e) Agia Triada, Complesso della Mazza di Breccia; *f) Agia Triada, 'villa'; g) Armenoi, tomb 76 (drawing U. Günkel-Maschek, after a) Sakellarakis – Sapouna-Sakellaraki 1997, 516, fig. 506 (second from left); b) Rutkowski 1991 b, pl. XXXII, figs. 12–13; c) Rutkowski 1991 b, pl. XX, fig. 1; d) Platon 1952, 632, fig. 13 (bottom row, fifth from right); e) La Rosa 1998, 149, fig. 49; f) Verlinden 1984, pl. 41, cat. no. 89; g) Tzedakis 1980, pl. 688 ε).*

lead us to seek an explanation for the reasons that might have led to the adoption of the gesture on the Middle Minoan figurines, rather than serve as an argument for the rejection of the gestures' interpretation as expressions of grief. But I would like to look at some other types of gesture with similar connotations before attempting to give an explanation.

A gesture that conveys the same expressive content is touching the side of the neck. This is a self-touching cue that observers of body language have found is used primarily by men to provide comfort and reassurance when feeling insecure, anxious, concerned, or emotionally distressed (Navarro 2008, 40, fig. 9; 43). At least two male figurines from Petsophas are touching the side of the neck with one hand (Fig. 18a–b), thereby representing their (and the dedicators') feelings towards the focus of the cult at this peak sanctuary. Another expression of despair is the placing of the two hands close together high on the chest at the base of the neck, which is shown by both male and female figurines from Petsophas, Piskokephalo, and other peak sanctuary sites (Fig. 19). In the later history of art, this gesture 'stands for a feeling of intense, long-lasting pain and above all for one's own inability or even impossibility to change a situation' (Pasquinelli 2007, 164 [author's translation]). For its Minoan use, an original funerary association is indeed by one of its earliest depictions which comes from the MM IA context of Burial Building 9 at Archanes, namely the clay figurine which was found together with three skulls in secondary deposition (Fig. 19a; Sakellarakis and Sapouna-Sakellaraki 1997, 210). In the LM I period, the same gesture appeared on a clay figurine (Fig. 19e) from the *Complesso della Mazza di Breccia* – the structure serving the *Tomba degli Ori* as well as cult activities carried out for the dead in the courtyard framed by the two structures on the edge of the cemetery at Agia Triada (Puglisi 2003, 188, 191). A bronze figurine with the same gesture was reported from the 'villa' (Fig. 19f).

This selection shall suffice for now to support the hypothesis that a considerable proportion of the figurines dedicated in peak sanctuaries (and at Piskokephalo) express grief, pain, worry, and/or anxiety as the appropriate behaviour towards a focus of the cult practised in these places. Given the place where most of the figurines were displayed, a sanctuary, I would like to hypothesise that this behaviour was addressed to a deity – Given the funerary connotations of the gestures but also the notions of worry, anxiety, and emotional distress conveyed by them, the suspicion arises that this could have been a deity who had suffered a terrible fate and died and/or was thought to be absent and/or in another world.

Mourning at a Deity's Tomb?

At this point, I would like to return to the LM I representations in seal images and bronze figurines, which partly continue the gestures of the Middle Minoan period, partly add new expressions of grief, worry, and anxiety. While the bronze figurines' original context of display is unknown, the figures in the seal images repeatedly occur in the same contextual settings: male and female figures kneeling at a boulder, and female figures standing in front of a tree-crowned structure. This structure is most often referred to as a shrine and thought to be a focus of ecstatic behaviour and invocations of divine epiphany (*e.g.* Warren 1988; Marinatos 1989). However, such interpretation does not explain the expressions of grief, worry, or anxiety shown *e.g.* by the female figures standing in front of the tree-crowned structure on the seal impression from Chania (Fig. 10) or on the seal impression from Knossos (Fig. 11).

In the search for an explanation of the emotional expressions shown towards the building with the tree growing out of it, it may be worth turning once again to Egypt, where the concept of mourning for a deceased deity who resides in the underworld has an element that is strikingly similar to the structure in Minoan depictions: the tomb or 'mound of Osiris'. Its main characteristics have been described as follows: 'The tomb lies on an island, or at least in the immediate vicinity of the shore. This corresponds first of all to the god's relationship to the water and is also reminiscent of the idea of the primeval mound. The tomb itself is divided into an "Upper" and a "Lower Duat", the former cannot be interpreted in more detail, but is probably directly connected with the sacred grove, the latter is a stone building of 16 × 12 cubits, which, like the real
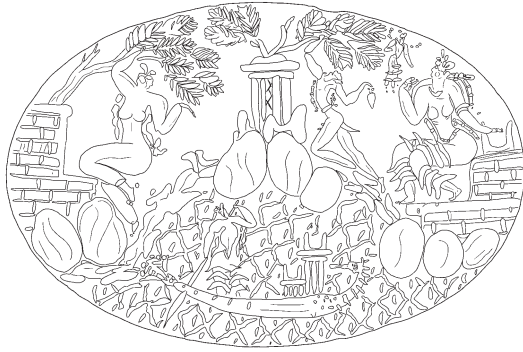
Fig. 20: Ring of Minos, allegedly from Knossos (drawing U. Günkel-Maschek, after Dimopoulou-Rethemiotaki 2005, 124–125).

Duat, has seven gates. A mound of sand was heaped up in the middle, which served as a place of burial during the annual funeral ceremonies. Next to the tomb of Osiris was a sacred grove, which was probably intended to serve as a place of residence for Ba and is to be regarded as an image of the god's creative power. This also applies to the tree that stands directly on the coffin or grows out of the body of the god and thus symbolises the resurrection' (Budka 2000, 14 [author's translation]; see also Colonna 2018, 227–239).

The visual concept of the Minoan structure shares many of these characteristics, even if not all of them are always present within one and the same depiction: the division of the tomb into an upper part associated with the tree and a lower part consisting of a stone building is clearly visible in many of the depictions (*e.g.* Figs. 6–7, 10–11, 20–21); its location in the vicinity of the shore is suggested by the gold ring from Pylos (Fig. 16) and by the Ring of Minos (Fig. 20); that the 'mound' contains a burial is suggested by the depiction of a pithos inside it beneath a tree on the gold ring from Vapheio (Fig. 2; *cf.* Persson 1942, 36–37); this depiction also suggests the existence of a 'mound-with-tree-only' motif, an observation also made by Nanno Marinatos, who noted that the tree and shrines were also shown separately (Marinatos 1989, 131; see also Figs. 8–9). The Egyptian reference to gates in the stone precinct finds its equivalent in the central opening of the Minoan depictions (*e.g.* Figs. 6–7, 10, 20–21). Marinatos compared these openings to the false doors in Egyptian funerary architecture, 'the purpose of which was to allow communication between the living and the dead', and she identified them as 'loci for communication with the beyond', suggesting that 'it is on this spot that some contact with the deity is expected to take place' (Marinatos 1993, 121; *cf.* Marinatos 1989, 140). The door in the Minoan structure may represent the gate of the tomb and locus for communication with its interior. Inside the precinct there must have been an elevation that allows us to see much more of the tree than just the upper part that we would expect to see if the tree were growing from the ground. Rather than assuming that 'the tree always grows on top of the constructed shrine' (Marinatos 1989, 131), we can perhaps imagine a similar kind of mound inside the Minoan structure, on which the tree grows. Upon close inspection, such a 'mound' is indeed visible in the detailed depiction on the 'Ring of Minos' (Fig. 20). Inside this mound, there may have been the dead deity, to whom the expressions of grief and the lamentation of the figures standing in front of the structure were addressed.

In view of these striking parallels, I would like to propose an interpretation of the tree-crowned structure as the tomb of a Minoan deity (or hero), conceived as absent, deceased, or dwelling in another world – similar to the concept of the 'mound of Osiris' in Egypt. The worship of this deity (or hero) began in the early Middle Bronze Age and involved the establishment of peak sanctuaries such as the one on Petsophas. The transfer of the self-hugging gesture in particular to representations on signet-rings and bronze figurines (in addition to the figurine in Berlin [Fig. 1], an LM I bronze figurine from Trianda on Rhodes shows a related gesture, see Marketou 1998, 59–60, fig. 7; *cf.* Kekes 2021, 7, fig. 8) reflects in a special way the adoption of the associated emotional expression by the palatial elite. This elite integrated the expression of sadness, grief, worry, anxiety, and lamentation into a complex cycle of representation which was introduced in LM I to illustrate a significant religious narrative – the Divine Drama cycle, as I will refer to it in my forthcoming volume. Its representations not only adorned signet rings and sealstones, but were also closely linked to the architectural form of the lustral basin, as evidenced by the findings at Xesté 3, Akrotiri, where a tomb painted on the wall was the focus not only of the
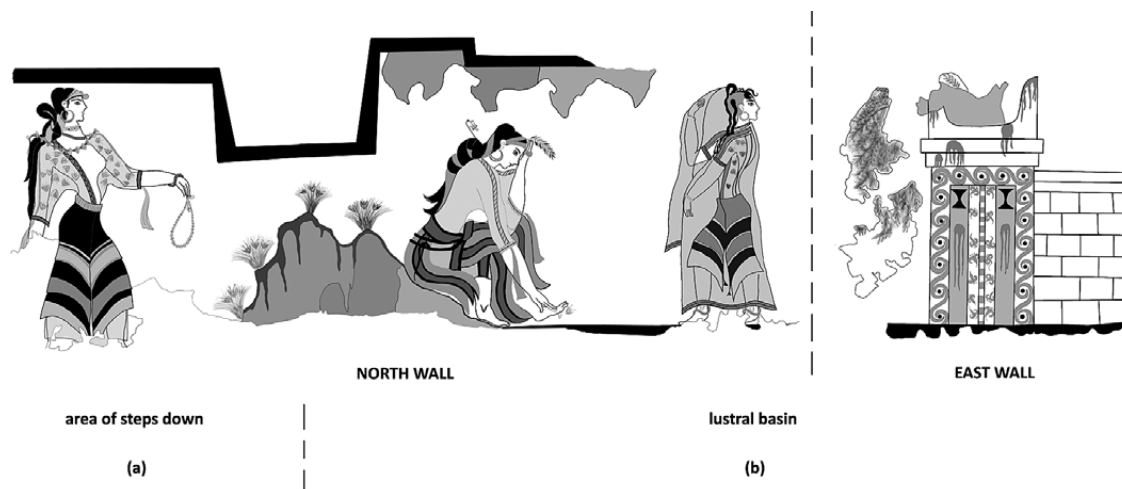
Fig. 21: Painting from the north and east wall of the lustral basin in Xesté 3, Akrotiri, Thera (drawing U. Gün-kel-Maschek, after Doumas 1999, 136–137, fig. 100; Vlachopoulos 2007, pl. XXVIIa).

seated woman covering her face in pain and the veiled girl looking back in horror, shock or surprise, but also of any ritual activity within the sunken space (Fig. 21). It is reasonable to assume that the lustral basin, whose use "in connection with chthonic ritual" (Shaw 2011, 161) has long been suspected, was in fact the architectural structure used to perform ritual activities based on the narrative surrounding the tomb of the dead deity (or hero). With the proliferation of lustral basins as part of the 'palatial architectural style' (Driessen 1989/1990) during the LM I period, the cult was carried to all corners of Minoan Crete, becoming an essential pillar of the LM I religious system, with the palatial and/or priestly elite as its main agents.

But let us return to the gestures which characterise the LM I representations of the Divine Drama cycle. The expressions of grief, worry, and anxiety directed towards the tomb in the above-mentioned representations are found on individual female figures: figures covering the face with the flat of the hand (Fig. 21), figures touching the suprasternal notch while turning their heads away, the other arm stretched out longingly towards the tomb (Fig. 10), or figures extending the arm towards a male figure (Fig. 9), the latter suggesting that it is indeed a male figure who is the cause of their misery and worry. It is possible that we are not dealing with human female worshippers at all, but rather with a myth represented entirely by mythological protagonists. Perhaps in some cases the main female figure even represented the partner/widow of the absent male figure.

However, the expression of grief over the deity's absence was not limited to female figures, but was also performed by male actors, insofar as kneeling before a boulder refers to the absence of the same deity. Persson (1942) identified the boulder as a funerary pithos and the kneeling figures as those who mourned the death of the vegetation god. The identification as a funerary pithos was rightly doubted by Niemeier (1989, 174–176), but his conclusion that these were therefore not representations of mourning rituals but invocations of divine epiphanies, is not self-evident. Rather, considering the nature of the gestures as analysed before, the stone can more convincingly be read as a place associated with an absent or dead deity, and evokes mourning for him. Although similar suggestions have been made before (see now Morris and Goodison 2022, 21 with further references), ultimately we lack any evidence of the religious narrative that could shed light on the relationship between the stone and the deity.

Women and men also participate in the Divine Drama cycle in the enigmatic action of pulling or shaking the tree growing from inside the tomb, sometimes in the same scene as mourners kneeling at a boulder (Figs. 6–7) or women standing passively and touching the suprasternal notch (Fig. 11). These tree-shakers are not overt mourners, but figures performing an action that is significant in this context and presumably as necessary as the 'correct' display of emotions at

the boulder or for the deity represented by the tomb. Exactly what the figures are doing is difficult to determine. On the one hand, their behaviour is characterised by an 'agonistic' element, as Caroline Tully explains in her contribution to this volume, *i.e.* it is an agitated behaviour that reveals the agony or frenzy with which the figures turn towards the tree. On the other hand, it can be observed that the tree is usually, but not always, in full leaf: while full leaves adorn the tree in the presence of the single female mourning figures and of the tree-shakers, only single leaves can be seen on the otherwise bare branches when the group of female lamenters approaches the tomb on the gold ring from Pylos (Fig. 16). The shaking or pulling of the leafy tree may therefore have had a different purpose or occasion than the lamentation at the less leafy tree. The frequent depiction of lamenting women, even without a tomb, reflects the popularity and importance of this lamenting event during the LM I period (Fig. 14).

The depictions in the LM I Divine Drama cycle thus represent the visual narrative for a cult dedicated to a dead deity (or hero) dwelling in the underworld, whose absence from the world of the living (deities?) was met with expressions of grief, worry, and/or anxiety as well as with lamentation, possibly in keeping with the annual cycle. The idea for this cult, which was monopolised by the palatial and/or priestly elite in LM I, had its roots in the peak sanctuary cult, where figurines showing grief and anxiety were already put on display in the Middle Minoan period. Could these peaks have been the 'burial mound(s)' of this deity? It is worth noting that similarities and indeed 'some conceptual overlap' between the communal rituals at the tholos tombs and the cult at the peak sanctuaries have been noted in the past (Peatfield 1987, 90; 1990, 125). This includes certain gesture types that first appear on figurines placed in MM I tombs and shortly afterwards on figurines offered at peak sanctuaries. Together with the origin of a whole group of gestures from Egyptian tomb paintings, where they symbolised respectful mourning for the deceased, there thus seems to be a strong case for the emergence or introduction of the cult of a deity dwelling in the underworld in the early Middle Minoan period, which was then developed into the sophisticated Divine Drama cycle of the LM I period.

Mourning Gestures After the End of the LM I Period

This cult was practised by the palatial/priestly elite throughout the island, with the underlying myth – visually expressed in the Divine Drama cycle – permeating their administrative activities and personal appearance. But all this came gradually to an end with the filling of the lustral basins in the LM I B period and completely with the destruction of the palaces and 'villas', at the end of the LM I period, with the exception of Knossos.
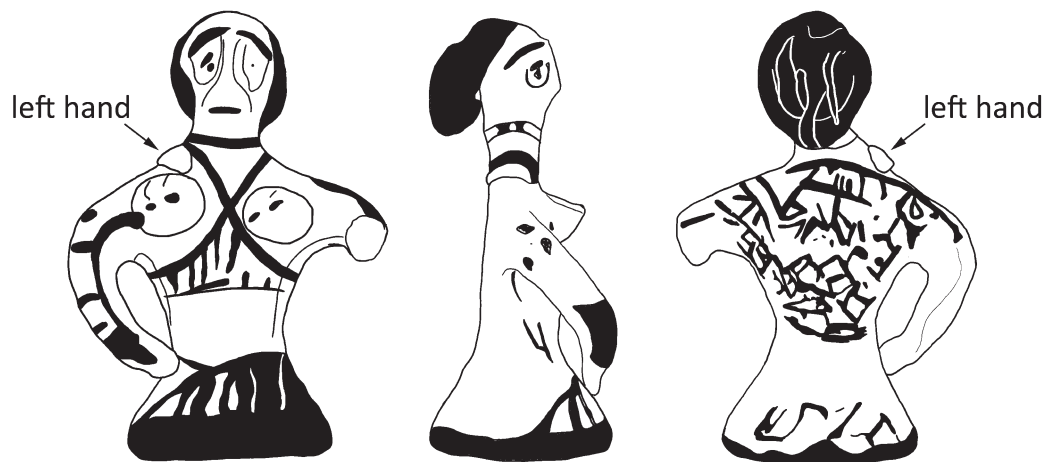

Fig. 22: LM III A clay figurine from Metochi Kalou (drawing U. Günkel-Maschek, after Dimopoulou-Rethemiotaki and Rethemiotakis 1978, 99, fig. 39).
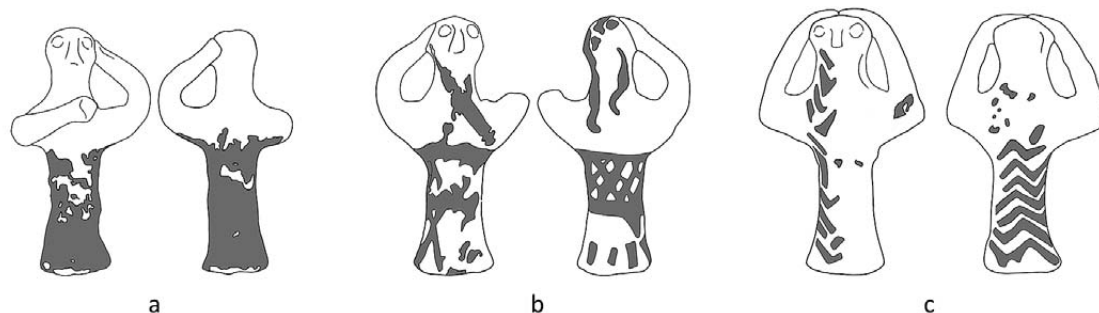
Fig. 23: Three LM III C to Protogeometric clay figurines from a tomb in east Crete (drawing Ute Günkel-Maschek and B. Houllis, after Schmid 1967, pl. 58, fig. 2).

The depiction of the gestures expressing grief, notably those already used for this purpose in the Middle Minoan period, nevertheless continued in the LM II and LM III period, now mainly in funerary contexts. A female figurine with one hand on the opposite shoulder was found in a tomb at Metochi Kalou (Fig. 22). The excavators suggested that the figurine was performing the same gesture of worship as the figurines from Piskokephalo, but probably as a deity rather than a worshipper (Dimopoulou-Rethemiotaki and Rethemiotakis 1978, 100–101). A presumably male torso with one hand on the side of the neck and the other on the chest was found in the LM III A2 *Tomba del Sarcophago Dipinto* at Agia Triada (Fig. 18c). At Armenoi, a steatite pendant in the shape of a female figurine with the hands joined below the neck was found in one of the niches carved into the dromos wall of LM III B tomb 76 (Fig. 19g). At both Armenoi and Chania, figurines with the hands joined on the chest – a gesture already found in the MM I A burials of Archanes and on plenty of clay figurines from Petsophas – were placed in LM III A/B tombs (Godart and Tzedakis 1992, pl. CLII, 2; Rethemiotakis 1998, 46, cat. no. 189, pl. 18α–γ). At Gournia, an LM III A2/B burial contained the clay rhyton shaped as a female figure touching her forehead with her fingertips in the same way as the bronze figurine from Psychro, which the excavators had already identified as an attitude of mourning (Fig. 15b; Hawes et al. 1908, 46, no. 11).

In the LM III C or Protogeometric period, the self-hug appears combined with a hand-on-head gesture amongst a trio of mourning figures from a tomb in East Crete (Fig. 23a). A second figurine in the same group originally had both hands touching the sides of the head (Fig. 23b), the third one both hands placed on top of the head (Fig. 23c). This display of the self-hugging gesture side-by-side with the better-known types of mourning gestures confirms the continued understanding of this self-comforting arm pose as a display of grief and its logical suitability for funerary contexts. The touching of the sides of the head with both hands remained associated with burial on Crete until the Geometric-Archaic period, as evidenced *e.g.* by a seated figure from tomb B at Arkades (Levi 1931, 184, fig. 205).

The deposition of figurines in tombs is generally regarded as "a sign of the Mycenaean influence which began to be active in Crete in LM III" (Nilsson 1971, 300), with the figurines known from tombs representing Cretan 'naturalistic' types (Dimopoulou-Rethemiotaki and Rethemiotakis 1978, 99). However, Minoan-inspired self-touches were indeed represented in Mycenaean tombs as early as the LH II period, namely by a 'Minoanising', if not Minoan, figurine from Peristeria (Hägg 1981, 37, fig. 1; *cf.* French 1972, 109), and continued into later times, as shown, for example, by a figurine from a tomb at Kara Hymettos (French 1972, pl. 17a). The Mycenaean deposition of such self-hugging figurines in tombs, therefore, not only reflects the earlier and still contemporary Minoan deposition of figurines with gestures of grief in tombs, but also, and most importantly for the present argument, acknowledges their Minoan significance as such expressions of grief.

Summary

The gestures and postures listed here can be interpreted as representations of behaviour and expressions of emotion of which some have served for millennia to depict figures expressing pain and grief over *e.g.* a terrible fate or the death of a person. Others were identified as expressions of worry, insecurity, and emotional distress that are still in use today. In the MM and LM I periods, expressions of grief and emotional distress were displayed towards a deity (or hero) who was considered absent or deceased and presumably resided in the underworld. The existence of a Bronze Age Cretan deity whose death was ritually mourned every year, as proposed by Evans, Persson, and also Nilsson (albeit with a different twist, as noted above), thus becomes a tempting scenario yet again. In Egypt and the Near East, the myths of Osiris and Tammuz illustrate the complex foundations of such religious practices, and there is no reason to believe that Bronze Age Crete was any different in this respect. Although one might argue against following Egyptian parallels too closely in reconstructing Cretan Bronze Age religious myths, it can be countered that the consistent and detailed Minoan representation of gestures corresponding to those common in Egypt – and not just one or two, but a large number of gestures, of which only a selection has been discussed here – during the Middle and early Late Bronze Age suggests a more intensive engagement with the representations (and their contexts and meaning) than merely a stimulation by occasional imported depictions or visits to Egypt. The partly original, partly continued funerary connection in later times points in the same direction. At the same time, the lively, even theatrical style of the LM I representations, as well as elements such as the pithos, the boulder, or the design of the tomb, testify to the specific 'Minoan' character of the Divine Drama cycle and to the fact that Cretan craftspeople had long since adopted the language of gesture to express the ideas that dominated religious life on Crete independently.

The association with the death or absence of a deity may not extend to all figurines that were dedicated in peak sanctuaries, but it does to those figurines with gestures that can clearly be read as expressions of grief, worry, or emotional distress. Other gestures not considered in the present discussion may well have served other purposes within the same cult. However, it is also possible that certain gestures are to be understood under different aspects than previously assumed. For example, the opening of the garment, recently observed by Platon on clay figurines from Piskokephalo and interpreted as "revelation of the breast" (Platon 2014), could instead be an early representation of 'exposing the breasts' in mourning. In any case, the representations of gestures expressing grief in the peak sanctuaries show that such behaviour was an essential element of the cult practised at these sites. Consequently, the figurines were dedicated in the peak sanctuaries to commemorate the death and absence of the deity by expressing their grief, thereby showing the appropriate and respectful behaviour that suited its worship. Such celebrations and their mythological underpinnings could indeed explain the later understanding of Juktas as the burial place of Zeus (see Karetsou 1981, 152–153 with further references).

The development of this cult originated from communal rituals at tombs at the beginning of the Middle Minoan period and led to the establishment of the peak sanctuaries, including an overlapping range of gestures of the figurines that were dedicated in both contexts. In the LM I period, the cult was taken over by palatial or priestly elites, who made it an essential aspect of cult practice in the 'villas' and palaces. Special architectural forms, such as the lustral basin, whose use had gradually developed during the Middle Minoan period (*e.g.* Shaw 2011, 161), now became a standard feature of the 'palatial architectural style'. The continued use of some of the expressions of grief, worry, and emotional distress, and the addition of new ones, in representations on signet-rings and seal-stones, on precious pendants, as well as on bronze figurines and in wall paintings, testify to the persistence in the visual narratives of the LM I period of the same basic idea. The absent or dead deity was now symbolised by his tomb, or by the boulder as another symbolically significant locus of mourning and lamentation.

After the end of the LM I period, which also marked the end of the palatial/priestly elite officially practicing the cult across the island, not all these gestures were abandoned. On the contrary, some of the gestures continued to characterise figurines given to the deceased in accordance with their understanding as respectful expressions of sadness and grief, thereby ensuring the eternal mourning of the dead in this world and the dead person's well-being in the afterlife.

References

Alexiou, M. 2002. *The ritual lament in Greek tradition.* 2nd rev. ed. Lanham: Rowman & Littlefield.

Brandt, E. 1965. *Gruss und Gebet. Eine Studie zu Gebärden in der minoisch-mykenischen und frühgriechischen Kunst.* Waldsassen: Stiftland.

Budka, J. 2000. "Die Osiris-Mysterien in Abydos und das Osirisgrab." *Kemet* 9.2: 11–14.

Cavanagh, W., and C. Mee. 1995. "Mourning before and after the Dark Age." In *Klados: essays in honour of J. N. Coldstream,* edited by C. Morris, 45–61. *BICS Suppl.* 63. London: Institute of Classical Studies, University of London.

Chen, H., H. Shi, X. Liu, X. Li, and G. Zhao. 2023. "SMG: a micro-gesture dataset towards spontaneous body gestures for emotional stress state analysis." *International Journal of Computer Vision* 131: 1346–1366.

Colazilli, A. 2018. "Weeping figurines: function and symbolism of some rare mourning records found inside ancient Egyptian tombs." In *Proceedings of the 10th International Congress on the Archaeology of the Ancient Near East 25–29 April 2016, Vienna,* edited by B. Horejs, C. Schwall, V. Müller, M. Luciani, M. Ritter, M. Giudetti, R. B. Salisbury, F. Höflmayer, and T. Bürge, 221–233. Wiesbaden: Harrassowitz.

Coldstream, J. N. 1973. "Chapter VIII: The jewellery and other small finds." In *Knossos: the sanctuary of Demeter,* edited by J. N. Coldstream, 130–176. *BSA Suppl.* 8. London: Thames and Hudson.

Collignon, M. 1903. "De l'origine du type des pleureuses dans l'art grec." *RÉG* 16: 299–322.

Colonna, A. 2018. "The Tomb of Osiris. Perception, representation and cultural construction of a sacred space in the Egyptian tradition." In *Tradition and transformation in Ancient Egypt. Proceedings of the Fifth International Congress for Young Egyptologist, 15–19 September, 2015, Vienna,* edited by A. Kahlbacher and E. Priglinger, 225–241. Vienna: Verlag der Österreichischen Akademie der Wissenschaften.

Coulson, M. 2004. "Attributing emotion to static body postures: recognition accuracy, confusions, and viewpoint dependence." *Journal of Nonverbal Behavior* 28: 117–139.

Davaras, C. 1969. "Trois bronzes minoens de Skoteino." *BCH* 93: 620–650.

Davaras, C. 1976. *Guide to Cretan antiquities.* Park Ridge, NJ: Noyes.

Davis, J. L., and S. R. Stocker. 2016. "The Lord of the Gold Rings: the Griffin Warrior of Pylos." *Hesperia* 85: 627–655.

Dimopoulou, N. 2004. *The Ring of Minos and gold Minoan rings. The epiphany cycle.* Athens: Archaeological Receipts Fund.

Dimopoulou-Rethemiotaki, N. 2005. *The Archaeological Museum of Herakleion.* Athens: John S. Latsis Public Benefit Foundation.

Dimopoulou-Rethemiotaki, N., and G. Rethemiotakis. 1978. "Υστερομινωικό νεκροταφείο στο Μετόχι Κλού Ηρακλείου." *ArchDelt* 33: 40–109.

Dominicus, B. 1994. *Gesten und Gebärden in Darstellungen des Alten und Mittleren Reiches.* Heidelberg: Heidelberger Orientverlag.

Doumas, C. 1999. *The wall-paintings of Thera.* 2nd ed. Athens: Thera Foundation.

Driessen, J. 1989/1990. "The proliferation of Minoan palatial architectural style: (I) Crete." *ActaArchLov* 28–29: 3–23.

Evans, A. 1905. "The prehistoric tombs of Knossos." *Archaeologia* 59: 391–562.

Evans, A. 1921. *The Palace of Minos at Knossos,* Vol. 1. London: Macmillan.

Evans, A. 1930. *The Palace of Minos at Knossos,* Vol. 3. London: Macmillan.

French, E. 1972. "The development of Mycenaean terracotta figurines." *BSA* 66: 101–187.

Furtwängler, A. 1889. "Erwerbungen der Antikensammlungen in Deutschland. I. Berlin 1888, 2. Antiquarium." *AA* 4: 87–94.

Furtwängler, A. 1900. "Neue Denkmäler antikischer Kunst II." In *Kleine Schriften von Adolf Furtwängler.* Vol. II, edited by J. Sieveking and L. Curtius, 453–486.

Godart, L., and Y. Tzedakis. 1992. *Témoignages archéologiques et épigraphiques en Crète occidentale du néolithique au minoen récent III B. Incunabula Graeca* 93. Rome: Giorgio Bretschneider.

Hägg, R. 1981. "Official and popular cults in Mycenaean Greece." In Hägg and Marinatos eds. 1981, 35–40.

Hägg, R., and N. Marinatos, eds. 1981. *Sanctuaries and cults in the Aegean Bronze Age.* Stockholm: Svenska Institutet i Athen.

Hawes, H. B., B. E. Williams, R. B. Seager, and E. H. Hall. 1908. *Gournia, Vasiliki, and other prehistoric sites on the Isthmus of Hierapetra, Crete: excavations of the Wells-Houston-Cramp Expeditions 1901, 1903, 1904.* Philadelphia, PA: American Exploration Society.

Karetsou, A. 1981. "The peak sanctuary of Mt. Juktas." In Hägg and Marinatos, eds. 1989, 137–153.

Kekes, C. 2021. "Speaking bodies: an approach to the Egyptian and Aegean ritual gestures of the Bronze Age (preliminary remarks)." In *Current Research in Egyptology 2019: Proceedings of the Twentieth Annual Symposium, University of Alcalá, 17–21 June 2019,* edited by M. A. Cárcamo, 1–11. Oxford: Archaeopress Publishing Ltd.

Kleinsmith, A., P. R. De Silva, and N. Bianchi-Berthouze. 2006. "Cross-cultural differences in recognizing affect from body posture." *Interacting with Computers* 18.6: 1371–1389.

Kramer-Hajos, M. 2015. "Mourning on the larnakes at Tanagra: gender and agency in Late Bronze Age Greece." *Hesperia* 84.4: 627–667.

Kucharek, A. 2011. "Totenklage und Osirisklage zwischen Negierung und Transzendenz." In *Klagetraditionen. Form und Funktion der Klage in den Kulturen der Antike,* edited by M. Jaques, 21–38. *Orbis Biblicus et Orientalis* 251. Fribourg and Göttingen: Academic Press Fribourg and Vandenhoeck & Ruprecht.

La Rosa, V. 1998. "La c.d. tomba degli ori e il nuovo settore nord-est dell'insediamento di Haghia Triada." *ASAtene* 70–71: 121–175.

La Rosa, V. 2000. "To whom did the Queen Tiyi scarab found at Hagia Triada belong?" In *Κρήτη − Αίγυπτος. Πολιτισμικοί δεσμοί τριών χιλιετιών,* edited by A. Karetsou, 86–93. Athens: Kapon.

Levi, D. 1931. "Arkades: una città cretese all'alba della civiltà ellenica." *ASAtene* 10–12: 9–710.

Lhommet, M., and S. C. Marsella. 2014. "Expressing emotion through posture and gesture." In *The Oxford Handbook of Affective Computing,* edited by R. Calvo, S. D'Mello, J. Gratch, and A. Kappas, 273–285. Oxford: Oxford University Press.

Margariti, K. 2019. "Gesturing emotions: mourning and affection on Classical Attic funerary reliefs." *BABESCH* 94: 65–86.

Marinatos, N. 1989. "The tree as a focus of ritual action in Minoan glyptic art." In Pini, ed. 1989, 127–144.

Marinatos, N. 1993. *Minoan religion. Ritual, image, and symbol.* Columbia, SC: University of South Carolina Press.

Marketou, T. 1998. "Bronze LB I statuettes from Rhodes." In *Eastern Mediterranean: Cyprus –Dodecanese – Crete 16th–6th cent. B.C. Proceedings of the International Symposium. Rethymnon 13–16 May 1997,* edited by V. Karageorghis and N. Stampolidis, 55–72. Athens: The University of Crete and The A. G. Leventis Foundation.

Matz, F. 1959. *Göttererscheinung und Kultbild im Minoischen Kreta.* Wiesbaden: Steiner.

Mayer, M. 1892. "Mykenische Beiträge II." *JdI* 7: 189–202.

Merthen, C. 2005. "Beobachtungen zur Ikonographie von Klage und Trauer. Griechische Sepulkralkeramik vom 8. bis 5. Jh. v. Chr." Ph.D. diss., Würzburg University.

Millward, E. 2013. "Mourning for the deceased: an overview of current research into the gestures and attitudes of grief in Ancient Egypt." *Rosetta* 12.5: 43–50.

Morris, D. 2002. *People watching. The Desmond Morris guide to body language.* London: Vintage.

Morris, D. 2019. *Postures. Body language in Art.* London: Thames and Hudson.

Morris, C., and L. Goodison. 2022. "In touch with the Minoans: gestural performance and experience in Bronze Age Crete." In *Tracing gestures: the art and archaeology of bodily communication,* edited by A. J. M. Gardner and C. Walsh, 13–30. London: Bloomsbury Academic.

Myres, J. L. 1902/1903. "Excavations at Palaikastro II: the sanctuary site at Petsofa." *BSA* 9: 356–387.

Navarro, J. 2008. *What every body is saying.* New York: William Morrow.

Niemeier, W. D. 1989. "Zur Ikonographie von Gottheiten und Adoranten in den Kultszenen auf minoischen und mykenischen Siegeln." In Pini, ed. 1989, 163–186.

Nilsson, M. P. 1971. *The Minoan-Mycenaean religion and its survival in Greek religion.* New York: Biblo & Tannen.

Pasquinelli, B. 2007. *Körpersprache: Gestik, Mimik, Ausdruck.* Berlin: Parthas.

Peatfield, A. 1987. "Palace and peak: the political and religious relationship between palaces and peak sanctuaries." In *The function of the Minoan palaces. Proceedings of the Fourth International Symposium at the Swedish Institute in Athens, 10–16 June, 1984,* edited by R. Hägg and N. Marinatos, 89–93. ActaAth 4°, 35. Stockholm: P. Åströms.

Peatfield, A. 1990. "Minoan peak sanctuaries: history and society." *OpAth* 18: 117–132.

Persson, A. 1942. *The religion of Greece in prehistoric times.* Berkeley and Los Angeles: University of California Press.

Pini, I., ed. 1989. *Fragen und Probleme der Bronzezeitlichen Ägäischen Glyptik. 3. Internationalen Marburger Siegel-Symposium 5. – 7. September 1985, CMS* Suppl. 3. Berlin: Gebr. Mann.

Platon, L. N. 2014. "Η «χειρονομία της αποκάλυψης»: ένα άγνωστο μέχρι σήμερα στιγμιότυπο των μινωικών τελετουργιών ενηλικίωσης." *CretChron* 34: 65–81.

Platon, N. 1951. "Το ιερόν Μαζά (Καλού Χωριού Πεδιάδος) και τα μινωικά ιερά κορυφής." *CretChron* 5: 96–160.

Platon, N. 1952. "Ανασκαφαί περιοχής Σητείας." *PAE* 107: 630–648.

Puglisi, D. 2003. "Haghia Triada nel periodo Tardo Minoico I." *CretAnt* 4: 145–198.

Rethemiotakis, G. 1998. *Ανθρωπομορφική πηλοπλαστική στην Κρήτη από τη νεοανακτορική εως την υπομινωική περίοδο. Αρχαιολογική Εταιρεία* 174. Athens: Αρχαιολογική Εταιρεία.

Rethemiotakis, G., and N. Dimopoulou. 2003. "The "Sacred Mansion" Ring from Poros, Heraklion." *AM* 118: 1–22.

Rutkowski, B. 1991a. "Prayer (adoration) gestures in prehistoric Greece." *ArcheologiaWar* 41: 9–20.

Rutkowski, B. 1991b. *Petsofas. A Cretan peak sanctuary. Studies and Monographs in Mediterranean Archaeology and Civilization* I. 1. Warsaw: Polish Academy of Sciences.

Sakellarakis, Y., and E. Sapouna-Sakellaraki. 1997. *Archanes. Minoan Crete in a new light, Vols. I–II.* Athens: Ammos Publications.

Sapouna-Sakellaraki, E. 1971. *Μινωικον ζωμα.* Athens: Papadakis.

Sapouna-Sakellaraki, E. 2012. *Κύθηρα: το μινωικό ιερό κορυφής στον Αγιο Γεώργιο στο βουνό. Τα ευρήματα.* Athens: Βιβλιοθήκη της εν Αθήναις αρχαιολογικής εταιρείας.

Sapouna-Sakellarakis, E. 1995. *Die bronzenen Menschenfiguren auf Kreta und in der Ägäis.* Stuttgart: Steiner.

Schmid, H. E. 1967. "Frühgriechische Terrakotten aus Kreta." In *Gestalt und Geschichte: Festschrift Karl Schefold zu seinem 60. Geburtstag am 26. Januar 1965,* edited by M. Rohde-Liegle, 168–173. Bern: Francke.

Shaw, J. W. 2011. "Tracing the ancestry of the Minoan Hall system." *BSA* 106: 141–165.

Sphakianakis, D. 2016. "Κεραμεική και ανθρωπόμορφα ειδώλια." In *Βρύσινας II – Η κεραμεική της ανασκαφής 1972–1973. Συμβολή στην Ιστορία του Ιερού Κορυφής,* edited by I. Tzachili, 185–228. Athens: Τα Πράγματα.

Spiliotopoulou, A. 2018. "Τα πήλινα ανθρωπόμορφα ειδώλια των μινωικών ιερών κορυφής: τυπολογικές, τεχνοτροπικές και ερμηνευτικές παρατηρήσεις με βάση το υλικό του ιερού στον Κόφινα Αστερουσίων." Ph.D. diss., University of Athens. https://freader.ekt.gr/eadd/index.php?doc=45175&lang=el.

Tzedakis, Y. 1980. "Αρχαιότητες και μνημεία Δυτικής Κρήτης. 1973. Ανασκαφές." *ArchDelt* 29: 917–921.

Vasilakis, A. 2005. *Das archäologische Museum Iraklion. Führer durch die Sammlungen.* Athens: Adam.

Vermeule, E. 1991. "Myth and tradition from Mycenae to Homer." Marsyas 32: 98–121.

Vlachopoulos, A. 2007. "Mythos, logos and eikon. Motifs of early Greek poetry in the wall paintings of Xeste 3." In *Epos: reconsidering Greek epic and Aegean Bronze Age archaeology. Proceedings of the 11th International Aegean Conference, Los Angeles, UCLA – The J. Paul Getty Villa, 20–23 April 2006,* edited by S. P. Morris and R. Laffineur, 107–118. *Aegaeum* 28. Liège: Université de Liège.

Warren, P. 1988. *Minoan religion as ritual action. SIMA-PB* 62. Gothenburg: Gothenburg University Press.

Watrous, L. V. 1991. "The origin and iconography of the Late Minoan painted larnax." *Hesperia* 60: 285–307.

The meaning of action in figurative imagery is conveyed through bodily posture, placing the depicted figures – humans, gods, or hybrids – in relation within coherent visual narratives. Especially for societies with few deciphered texts, the analysis of gesture, posture, movement, and facial expression is crucial for understanding ancient 'webs of significance'. With 29 papers from a conference held in Heidelberg in 2021, this volume examines 'body language' in Minoan Crete and Mycenaean Greece and proposes new ways of interpreting non-verbal communication in Aegean Bronze Age iconography.