

# The seascape in Aegean Prehistory

Edited by *Giorgos Vavouranakis*



Monographs of the Danish Institute at Athens  
Volume 14

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*To Matti Egon,*  
*– a distinguished representative of Greek maritime culture*

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# Politics of the sea in the Late Bronze Age II-III Aegean: iconographic preferences and textual perspectives<sup>\*</sup>

Vassilis P. Petrakis

## Introduction: aims and methodological considerations

“islands (...) are *living spaces (habitats)* surrounded by radical shifts in habitat.”<sup>1</sup>

Terrell’s definition, with its intellectual debt to biogeography,<sup>2</sup> provides us with an excellent starting point for assessing a universal human perception of waterscapes, as it emphasises that any encounter with them is by definition an encounter with a prime aspect of otherness, a habitat *alien* to humans. Familiarity with (and survival in) the waterscape entails specific knowledge whose rudiments do not occur instinctively to human mind, but have to be learned from experience or, more significantly, from more experienced individuals. This fact forms the basis of a differential access to maritime knowledge that immediately bears upon *conceptual asymmetries* in the way waterscapes (of which seascapes are the vastest and most imposing) are perceived. To reverse the title of a recent paper by Gabriel Cooney,<sup>3</sup> ‘seeing sea from the land’ is crucial to the formation of diverse possible attitude towards seascapes.

In Mediterranean archaeology the importance of the sea far exceeds that of a mere geographical labelling of the discipline. Various depending on an array of topographical or cultural variables, people living in (or having access to) coastal environments experience a sporadic, frequent or constant encounter and/ or interaction with this enormous mass of water. It may be a commonplace that sea is ambivalent and that its cultural conceptualisation encompasses extremely diverse values of quite simi-

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<sup>\*</sup> I would like to thank Giorgos Vavouranakis for inviting me to contribute to this volume, as well as for his support and patience during its preparation. I am indebted to Dr Christos Boulotis for his ever-stimulating remarks and for a discussion on the Gla frescoes and some of the ideas expressed in this study. Professor Michael Cosmopoulos kindly shared information on the new fresco from Iklaina. It is my pleasure to thank Professors Lefteris Platon, Nagia Sgouritsa and Fritz Blakolmer for helpful discussions, as well as Professor Oliver Dickinson for reading and commenting on an advanced draft. Professor José L. Melena kindly allowed me to use drafts of forthcoming transcriptions of Pylian and Knossian Linear B texts and Dr Dimitri Nakassis allowed me to cite his unpublished doctoral dissertation on Pylian prosopography. Dr Nikos Kaltsas, Dr Lena Papazoglou, Dr Athanasia Kanta and Dr Vassilis Aravantinos kindly facilitated my autopsy of Pylian, Knossian and Theban documents in the few instances when such need arose. Dr Carol Hersenson (University of Cincinnati), Professor Shelley Wachsmann and Dr Michael Wedde are warmly thanked for the permission to reproduce images for the accompanying figures. Alexandra Salichou read patiently and improved the clarity of this text. I am also obliged to the anonymous reviewer whose critical eye enabled me to spot and correct obscure passages and mistakes that had slipped through. Full responsibility for those that remain lies with the author. My research has benefited from the support of the Melina Merkouri Foundation, to whose Administrative Board I wish to express my deep gratitude.

<sup>1</sup> Terrell 1999, 240 (original *italics*) responding to Rainbird 1999.

<sup>2</sup> One of Rainbird’s points against the application of island biogeography to the study of island Prehistory has been the uncompromisingly ‘processual’ character of the former and the fact that it downplayed the importance of human agency. Yet, the very fact that the *object* of ‘island archaeology’ concerns past human activity *within a particular category of ecosystems* places biogeography and ecology at the heart of the very definition of the discipline. We should be aware that an attack on the relevance of biogeographical theory altogether would be to throw the baby out with the bathwater.

<sup>3</sup> Cooney 2003.

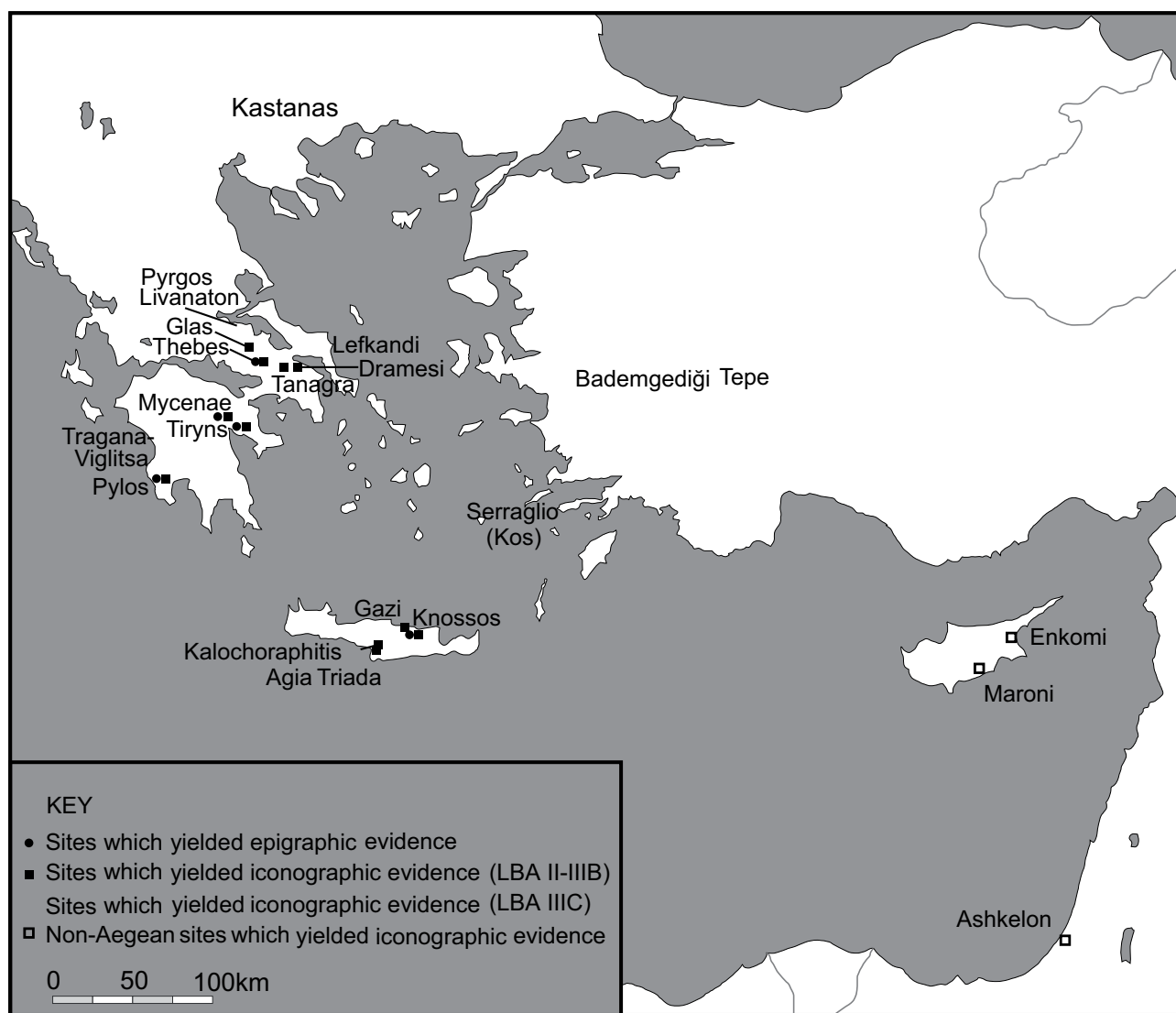


Fig. 1. Map of the Aegean and the eastern Mediterranean with main sites discussed in the text (basic map after Daniel Dalet/ d-maps.com; modified by G. Vavouranakis).

lar properties; it can be both a venue of communication and a reason of isolation, both a lively resource and a hostile environment or even a deadly threat and, of course, the imagined home of controversial supernatural beings and a vital aspect of cosmological order.<sup>4</sup> The diverse attitudes towards the sea are cultural artefacts defined by each individual or each community's potential and success in 'mining' the physical properties of the seascape: where a farmer sees a boundary, a mariner sees an opportunity. Habitat diversity urges specialisation and differentiation (perhaps initially, but not exclusively, as an adaptation strategy) and forms conditions of aspectual inequality. Moreover, this very

'multivalence' lies at the heart of the seascape's potential as a symbolically charged area.

By definition, the conceptual reference of a symbol extends beyond its immediately perceived physical properties and is defined culturally (and therefore never objectively). Subjectivity and ambiguity are inherent to symbolic interpretation and the same object embodies different meanings in different contexts for *different* recipients; the latter point implies that human agency should by no

<sup>4</sup> For a recent review of Greek attitudes towards the sea (through 1<sup>st</sup> millennium BC literary *testimonia*) see Lindenlauf 2003, 416–9 (with basic references).



means be underestimated. Of course, to paraphrase A. Appadurai, a symbol is ‘a scarce resource’; its interpretative diversity is not unlimited and it cannot be infinitely re-interpreted, or else it loses its reliability and strength; one has to look precisely for the “norms, pertaining to authority, continuity and interdependence which govern the terms of the debate” over a symbol’s meaning.<sup>5</sup> However, while symbols may be ambiguously *consumed*, they are *produced* aiming at interpretative precision and explicitness: their possible ‘etic’ ambiguity can contrast their ‘emic’ clarity.<sup>6</sup>

This chapter aims to explore symbolic aspects of the seascape and of human activities taking place in it through the examination of images and texts from the Late Bronze Age (thereafter LBA) II–III Aegean<sup>7</sup> (Fig. 1). The choice to consider imagery and textual evidence alongside (at least as long as they co-existed in the ‘palatial’ phases) will be accounted for through a very brief and selective discussion of their nature and interpretative potential. Imagery should not be understood only as a set of representations resulting from the interaction between the human agent creating the image (‘artist’), the nexus of conventions underlying the formation of imagery at culture-level (Lyvia Morgan’s “idiom” as close to ‘style’<sup>8</sup>) and the actual real-life prototypes of imagery. The analogy between language and imagery implied and used by Morgan<sup>9</sup> seems at least heuristically useful. There is certainly something of value in applying the division between the material and ‘non-material’ properties of an image-bearing artefact to a ‘holistic’ approach to imagery: the interaction between its two substances, as a material artefact bearing a representation *and* as a visual representation with meaning, is crucial to iconographical interpretation.<sup>10</sup>

It is of paramount importance to stress the *selectivity* of iconography. Imagery depicts (either real or imagined) aspects of the world, but *not everything* (real or imagined) is depicted; along with ‘idiom’, the selection of *which* aspects of reality or imagination will be visually represented is a cultural condition. Access to the formation, maintenance and manipulation of imagery is usually subject to control, which may *-inter alia-* take the form of specialist artisans *attached* to sociopolitical elite group(s),

so that iconographical preferences must be comprehended as parts of elite strategies of ideological manipulation and *not* passive reflections of reality. For the purposes of this discussion, I consider as ‘elite’ all those groups that had political aspirations that could indeed be materialised and the potential to fashion any aspect of imagery accordingly.

This selectivity should caution against using imagery as a source of information on *actual* practice. It is of course highly likely that the meaning of an image reflects the significance of its prototype, yet the ‘significance’ has to be further specified by asking two fundamental questions: who initiated or supported its creation (the identity of the ‘patron’<sup>11</sup>)

<sup>5</sup> Appadurai (1981, 217) made this point originally with reference to the ideological manipulation of the past.

<sup>6</sup> The terms ‘emic’ and ‘etic’, ultimately derived from structural linguistics, reflect the dichotomy between the standpoint in the subject’s own terms (in our case, how LBA Aegeans saw things) and the extraneous standpoint (how a 20<sup>th</sup>–21<sup>st</sup> century researcher views the Aegeans). Although this division has been largely explored in ethnography and despite its subsequent massive introduction in archaeological thinking by Post-Processualist writings, it is extremely useful in our discussion and interpretation of iconographical and textual material.

<sup>7</sup> Chronological abbreviations used: LBA I or Early LBA for LH I–IIA, LM I and LC I, LBA II for LM II and LH IIB, LBA III for LM/ LH/ LC IIIA–C and PBA for Postpalatial Bronze Age or LH/ LM/ LC IIIC. LM II–IIIA1, where the ‘Room of the Chariot Tablets’ Linear B deposit might also be placed (Driessen 2000), sets the earliest limit of what O. Dickinson has named the “Third Palace Period” (Dickinson 1994, 13 fig. 1.2). Absolute dates for each ceramic phase here follow Rehak & Younger 2001, 391 table 1 and Shelmerdine 2001, 332 table 1.

<sup>8</sup> Morgan 1985, 9; Morgan 1988, 14. T. Earle (1990, 73) has explicitly highlighted the ambivalence of definition of ‘style’ from an archaeological perspective by acknowledging that ‘style’ is both a passive tradition, learnable at and during social integration of an individual, and an “active medium of communication by which individuals and social groups define relationships and associations”.

<sup>9</sup> Morgan 1985, where she *passim* refers to “syntax”, “idioms”, “code” and “language” in Minoan iconography.

<sup>10</sup> This corresponds to John Bennet’s scheme for the analysis of a Linear B administrative document, which distinguishes between its properties as an *artefact*, with its own taphonomy, degree of preservation, material constraints and context, and as *text* (Bennet 1988, 511 fig. 1).

<sup>11</sup> I here accept that the overwhelming majority of (if not entire) the ‘artistic’ production of the Aegean Bronze Age is not predominantly linked to the modernist view of art as experi-

and who may be intended as its recipient? Along the same argumentation lines as above, it is imprudent to assume the significance of the prototype on the basis of its iconographic counterpart *alone*, because this would be a perfectly circular argument that would constantly ‘feed’ the initial assumption: the belief in the absolute reliability of iconography.<sup>12</sup> It cannot be denied that an image is created, maintained and consumed predominantly because someone wishes to display a purposeful message and wishes to have it received by certain people. Inferences about the message of an image should be, at least in pre-industrial contexts, a reference to the context of its creation and use and less on the very individual who executed it. Whether and how far the message reflects ‘reality,’ it must be researched, not assumed, and anyway this must succeed the study of the image *per se*.

Elements of the above theoretical comments on the formation of imagery could be applied *mutatis mutandis* to the formation of written documents. Although an administrative text is expected to record ‘true’ facts in a more straightforward manner, it is still rather up to the interests of the elite administration (which is a cultural variable) how much of the ‘true’ facts will be recorded and how will they be contextualised. Both categories of evidence reflect different aspects of what *we* (from our *etic* perspective) may term an ‘elite bias’, different filters through which Aegean LBA II–III elites chose to record whatever suited or interested them from a range of available real or imagined subjects.

## Maritime imagery in the ‘Palatial’ LBA II–III Aegean

The LBA II–III period in the Aegean has been ‘blessed’ with diverse genres of evidence that can be interlinked and integrated. This period sees the flourishing, collapse and aftermath of Aegean literate administrations which practiced record-keeping in clay documents using the Linear B writing system to record the earliest form of Greek so far preserved. The sophistication of the economic structure of these complex institutions and their apparent literacy are sufficient reasons to maintain here

a clear distinction between the ‘palatial’ phases and the period immediately following the collapse of these administrations and this distinction is explicit in the differing artistic output of the two periods<sup>13</sup>. Beginning with Spyridon Marinatos’ mainly art-historical (and for this very reason still valuable) overview of Creto–Mycenaean “θαλασσογραφίες” (Greek term for representations of seascapes),<sup>14</sup> Aegean Bronze Age maritime imagery is so far analytically treated in thematic studies.<sup>15</sup> In the past two decades or so, the primacy of the interest of Aegean prehistorians in ‘trade/ exchange’ or ‘for-

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mentation in form and style and creative exploration. I accept as more likely that the choice of subject and production of the artefacts that comprise our corpus of ‘Aegean imagery’ involved entities much broader than the individual ‘artist’, such as the communal preferences of the elite that ‘patronised’ such production.

<sup>12</sup> The succession of the following sentences indicate the sort of circular reasoning involved: ‘We have scenes of warfare’ → ‘This is a warlike society’ → ‘Since this a warlike society *and* we have warfare imagery, imagery reflects the actual state of things’. The ‘conclusion’ is really the initial assumption needed to proceed from the first to the second sentence.

<sup>13</sup> As a convention, the LH/ LM IIIA–B ceramic phases will be referred to as ‘palatial’, despite the fact that clear evidence for ‘palatial’ administrations *at the end* of LM IIIB in Crete is controversial (Rehak & Younger 2001, 458–9 with references). This adjective will be equally conventionally extended to the preceding LBA II (LM II/ LH IIB), although it is hard to support the notion ‘palatial’ outside Knossos at this phase. The ‘postpalatial’ Bronze Age (PBA) conventionally will hereafter designate only the LH/LM/LC IIIC periods. It should also be strongly born in mind that ‘palatial’ may disguise a degree of diversity in political organization, as most regions in the Greek mainland and the islands are not known to have strong interactions with any ‘palatial’ administration (or relevant evidence has yet to be produced) and therefore remained ‘non-palatial’ to a substantial degree throughout LBA III. Moreover, significant variation *among* LBA III administrations (e.g. Knossos and Pylos) should not be overlooked.

<sup>14</sup> S. Marinatos 1931 (a chapter of his 1925 doctoral dissertation of such θαλασσογραφίες in ancient art). This research also formed the basis of his important 1933 article on ship iconography.

<sup>15</sup> See e.g. Karali 1996 on Minoan marine invertebrate imagery (particularly molluscs), S. Marinatos 1933, Gray 1974 and Wedde 2000 (the last three all concerning ships, the latter being one of the most comprehensive, exhaustive and methodologically sound subject-oriented overviews of Aegean Bronze Age iconography).

eign contact'<sup>16</sup> may ensure that maritime matters attract scholarly interest. However, it would seem that the majority of Aegeanists view the sea in its economic sense, as a venue through which commodities are mobilised and various forms of exchange, including most prominently long-distance trade, are accomplished. Although the economic significance of maritime activities cannot be overestimated, for the purposes of this chapter the question needs to be explicitly made: Is this economic perspective satisfactory for the interpretation of the importance of the sea and maritime activities, as depicted in Aegean LBA III imagery and included in contemporary administrative documents?

The brief exploration of LBA IIIA-B imagery below will follow a different way of categorising the evidence in broad categories according to the artefact type (and, therefore, the corresponding craft) that accommodates the image. In this manner, imagery on plaster, ceramics and glyptic will be discussed separately, followed by a survey of textual evidence that is contemporary to (and often contextually linked with) this iconographic material. The special properties of certain artefacts on which imagery is depicted and the special status of specific crafts/ 'artistic media' need to be taken into consideration as factors significantly affecting the iconographic message.

### *Painted plaster decoration*

Painted plaster (mural frescoes or stucco floors) are of special importance because of their immobility and immediate architectural associations and spatial references, that make the study of 'pictorial programs' both feasible and appropriate. In most cases, this specialised craft is assumed to have had a particular status, which is confirmed by its contextual and chronological associations. One may argue for a change towards 'centralisation' of plaster with *figural* decoration in the LBA III Aegean, as it is nearly exclusively found within structures that belong or are immediately adjacent to 'palatial' administrative complexes.<sup>17</sup> However, even more compelling for the status of the craft is the chronological implication: decorated plaster in general nearly vanishes after the collapse of LBA III Aegean administrations.

Maritime imagery is found on both horizontal (painted stucco floors) and vertical (wall-paintings) plastered surfaces in a number of LBA III sites (Table 1). It is fair to state that maritime subjects are the *exclusive figural* subjects for LBA III *floor* decoration,<sup>18</sup> while even some of the more abstract patterns have been argued to refer to representations of the sea *per se* (such as the tricurved arches<sup>19</sup> or 'wavy' lines), although the patterns of veined stone are equally convincing prototypes.<sup>20</sup> LH III plaster floor decoration features a separation of the surface in painted and/or incised grid squares,<sup>21</sup> which is, however, not always measured and executed with

<sup>16</sup> Cullen (2005, 54 Table 3.5, source: *IDAP*).

<sup>17</sup> However, it must be noted that fragmentary evidence from sites which have not produced remains of administrative activity indicates that undecorated, monochrome or plaster with simple abstract motifs may occasionally be found outside 'palatial' or 'quasi-palatial' contexts (e.g. Nichoria: Walsh & McDonald 1992, 458, Zygouries: Hirsch 1977, 23). See also M. Shaw 1997, pl. CLXXXIX.

<sup>18</sup> Hirsch 1977. These appear alongside abstract decorative motifs that may imitate carpets (Rodenwaldt) or stone paving (Hirsch).

<sup>19</sup> S. Marinatos (1931, 116–7 figs. 5–6) has already intriguingly argued for an interpretation of this motif as reflecting the sea surface just disturbed by a breeze and reflecting Aegean sunshine. Televantou (1994, 163) suggested that such indication of the sea through a motif originates in crafts that make no use of colour, such as repoussé metalwork.

<sup>20</sup> The only way to decide between the two would be colour, yet precise colour conventions are very imperfectly understood in Aegean art and no conclusive results can be reached on this basis. Although one could draw on the 'contextual' association of specific abstract motifs with securely identified maritime themes, such as marine fauna or ships, it could be hazardous to try to devise an 'one-to-one' set of correspondences in these cases; there remains enormous work to be done before we can define an Aegean equivalent for the strict composition rules and near-obsession with pictorial consistency observed in, e.g. Egyptian painting.

<sup>21</sup> Its origin had been sought before in painted Helladic imitations of Neopalatial Cretan square stone paving (Hirsch 1980, 461–2), but the existence of *painted* Minoan prototypes has been argued on the basis of a striking Minoanising plaster floor from the Canaanite 'palace' of Tel Kabri (Israel) dating to the local MBA IIB in the late 17<sup>th</sup> century BC (Niemeier 1996). Niemeier's theory does not leave enough room for the contextual difference between Minoan art in Neopalatial Crete and Minoanising art (even if indeed produced by Cretan artisans sent abroad) in a Canaanite setting. In this context, it may be significant (though an *argumentum ex silentio*) that clear

Site	Area/ Building or Room	Location	Subjects depicted	Date
Knossos	‘Domestic Quarter’: ‘Queen’s Megaron’	Upper floor? <sup>1</sup>	Dolphins <sup>2</sup> ; small fish	LM IIIA1
Knossos	‘Domestic Quarter’: East-West Corridor	Wall painting (dispersed)	Nautili (part of frieze with repetitive animals)	LM IIIB?
Agia Triada	<i>Sacello</i> H	Floor (found <i>in situ</i> ) <sup>3</sup>	Large mollusc; at least 11 dolphins and fragments showing many examples of at least 2 different fish species (quasi-parallel arrangement)	LM IIIA
Tiryns	Room VII <sup>4</sup>	Floor (found <i>in situ</i> )	Square grid pattern; heraldic ‘back-to-back’ arrangement of dolphins; single octopuses appear independently per square, both alternating with tricurved arches <sup>5</sup>	LH IIIB
	Room XXI <sup>6</sup>	Floor (found <i>in situ</i> )		
Pylos	Room 6 <sup>7</sup>	Floor (found <i>in situ</i> )	Square grid pattern; abstract patterns indicating veined stone slabs and a <i>single</i> octopus	LH IIIB
Pylos	Corridor 49 (adjacent to Room 50) <sup>8</sup>	Floor (found <i>in situ</i> )	Square grid pattern; 3 dolphins per square in parallel arrangements alternating with various abstract motifs.	LH IIIB
Pylos	Room 50 <sup>9</sup>	Floor (found <i>in situ</i> )	Square grid pattern; 3 dolphins per square in parallel arrangements alternating with various abstract motifs; fish (alone in square 6E and with dolphins in square 5B) also represented	LH IIIB
Mycenae	Room 30 <sup>10</sup>	Wall-paintings	Suggested identification as ‘ship cabins’ ( <i>ikria</i> ) (at least 4 different panels)	LH IIIB
Pylos	Outside NE wall of palace <sup>11</sup>	?	Certain ship representation (rigged pole survives)	LH IIIB
Pylos	Room 32, wall-fill (in secondary use?) <sup>12</sup>	?	Tail of a marine animal (large fish or dolphin?) and a part of a (border) floral motif	LH IIIB
Pylos	Room 2 (Inner Propylon) <sup>13</sup>	Wall-painting	Nautili frieze with horses and architectural façade.	LH IIIB
Pylos	Room 16 <sup>14</sup>	Wall-painting	Nautilus (almost certainly part of a frieze)	LH IIIB
Pylos	Room 20 <sup>15</sup>	Wall-painting	Nautili frieze	LH IIIB
Pylos	NW slope dump <sup>16</sup>	Wall-painting	Nautili frieze	LH IIIB
Pylos	NW area outside the ‘palace’ <sup>17</sup>	Wall-painting	Nautili frieze	LH IIIB
Pylos	SW area outside the ‘palace’ <sup>18</sup>	Wall-painting	Nautili frieze	LH IIIB
Pylos	Hall 64 <sup>19</sup>	Wall painting?	Naval scene with at least 3 vessels (one at least without mast)	LH IIIB?
Thebes	K. Douros plot <sup>20</sup>	Wall-painting?	Fragments of a possibly extended marinescape scene (including a variety of fish species and dolphins)	LH IIIB
Gla	Plaster dump E of Room N1 <sup>21</sup>	Wall-painting	Minimum 7 dolphins in light-blue/grey background; minimum 2 nautili (clearly identifiable by the naturalistic representation of their tentacles) and possible representations of marine flora	LH IIIB
Gla	Room H4 (dispersed) <sup>22</sup>	Wall-painting (south wall?)	Mollusc tentacles (probably nautili)	LH IIIB

Table 1 (opposite). Maritime imagery on decorated plaster in the LBA III Aegean (references are restricted to most essential).

#### Notes to Table 1

<sup>1</sup> The suspicion (expressed earlier by S. Hood, see Hirsch 1977, 12) that this was not a wall-painting as originally reconstructed is most explicitly argued for by Koehl 1986.

<sup>2</sup> Morgan (1988, 61, citing the advice of zoologist F. Fraser, B.M.N.H.) identifies these mammals as *Stenella styx* (Euphrosyne Dolphin), although she notes the artistic hybridization of features from different species in the way dolphins are represented in Aegean art. It would seem that creatures, whose familiarity with both the ‘artist’ and the recipients of the imagery is predominantly based on sporadic encounters, tend to be represented according to artistic conventions rather than real-life observation.

<sup>3</sup> Hirsch 1977, 10–11 (with references), figs. 1–3; Militello 1999, 345–7, fig. 1 (with references). L. Banti in 1939 initially favoured a Neopalatial date; a LM IIIA1–2 date is currently accepted (following Banti’s revision of her own dating and P. Militello’s meticulous study of the Agia Triada frescoes: Militello 1999, 347 with references).

<sup>4</sup> Hirsch 1977, 38–9 (no. G20), figs. 22, 24, 25b.

<sup>5</sup> If the latter abstract motif is accepted as an artistic convention of the sea (see *supra*), then the physical (due to alternation) link of the three subjects would become conceptual as well.

<sup>6</sup> Hirsch 1977, 40–1 (no. G24), figs. 26–7.

<sup>7</sup> Hirsch 1977, 34 (no. G8), figs. 16, 17a.

<sup>8</sup> Hirsch 1977, 35 (no. G10), figs. 17b, 21.

<sup>9</sup> Hirsch 1977, 35 (no. G11), figs. 17c, 20.

<sup>10</sup> Shaw 1980.

<sup>11</sup> M. Shaw 1980, 177–8, ill. 12; M. Shaw 2001, 38–40, fig.

1. The identification was also made nearly simultaneously, yet independently, by J. van Leuven (M. Shaw 2001, 38, n. 5).

<sup>12</sup> Lang 1969, 128–9, pl. 71, col. pl. H; M. Shaw 2001, 40, Taf. 6:2.

<sup>13</sup> Lang 1969, 147–9 (1 F 2), pls. 79–81, col. pl. J, R.

<sup>14</sup> Lang 1969, 149, pl. 79, col. pl. J.

<sup>15</sup> Lang 1969, 149, pl. 81, col. pl. I.

<sup>16</sup> Lang 1969, 149–50, pls. 82–3, col. pl. R.

<sup>17</sup> Lang 1969, 150, pl. 84, col. pl. I.

<sup>18</sup> Lang 1969, 150, pl. 85, J.

<sup>19</sup> Breccoulaci 2004; 2005.

<sup>20</sup> Spyropoulos 1971; Boulotis 2000, 1097, n. 4, 1131, 1141, fig. 8 (with references).

<sup>21</sup> Iakovidis 1998, 186, col. pls. VIIIA (dolphin fragments), VIIIB (Argonaut fragments), IX (preliminary reconstruction of dolphin fresco).

<sup>22</sup> Iakovidis 1998, 184.

the presumed care, as can be evident from surprising inaccuracies in the stucco floor in Room 6 (the ‘*megaron*’) in the Pylos Main Building (see also below).<sup>22</sup>

Final Palatial Crete has yielded two important plaster floors with marine fauna representations from Knossos (the ‘Dolphin Fresco’, originally reconstructed as a wall-painting) and Agia Triada (known as the ‘Banti Floor’). A most interesting aspect of the reconsideration of the famous Knossian representation by Robert Koehl is his intriguing reconstruction of a border of inlaid purple limestone sculpted in sea-rock shape (a form already familiar from the Marine Style) that can be interpreted as the *frame* of the overall marinescape composition.<sup>23</sup> Turning our attention to the Mainland, evidence for decorated plaster floors predominantly comes from LH IIIB structures at the major administrative complexes. The spatial distribution of the figural maritime motifs, namely octopuses and heraldically arranged dolphins, in the Tiryns Upper Citadel shows a restriction to certain rooms, which may

be meaningful as it involves spacious areas whose great importance we would have good reasons to assume otherwise: the ‘large *megaron*’ (=Room VII) and the vestibule (=Room XXI) of a small structure immediately to the east of the ‘small *megaron*’ (=Rooms XVII–XVIII). The special link between vestibule XXI and the large ‘*megaron*’ is not immediately apparent, but the connection between the importance of the most spacious Room VII and the appearance of the maritime subjects is hard to dismiss as coincidental, especially when *no* such images are identified in the portico and vestibule (Rooms V–VI) of this hall.<sup>24</sup>

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extant evidence for the application of painted square grid on plaster floors from MM–LM Crete (even in LM III) is still missing.

<sup>22</sup> See Hirsch 1977, fig. 16. Some inaccuracies have also been noted in the planning of the grid in the ‘large *megaron*’ (Room VII) at Tiryns (Hirsch 1977, 37).

<sup>23</sup> Koehl 1986, pls. 25 (preserved inlaid slab), 26 (colour reconstruction).

<sup>24</sup> Hirsch 1977, 39–40 (nos. G21–22), fig. 22.

In the LH IIIB Main Building at the 'palatial' complex of Ano Englianos (Pylos) in western Mesenia, some quite discernible variation in the way the single octopus is executed can be detected in the grid squares among the three floor areas where the marine fauna has been depicted.<sup>25</sup> In Room 6 (the 'megaron' again), the importance of the solitary octopus seems outstanding: this image, the single figural motif on the floor of this important spacious hall, decorated the square directly in front of the possible location of a luxurious seat ('throne?') and between it and the central hearth. Although its precise significance still eludes us, the location and the choice for the decoration of this square indicates equally strongly the importance of the object being thus demarcated (a possible 'throne?'), as well as the significance of the maritime associations of the figure employed for this special demarcation, which is so far unparalleled in other extant decorated floors from the Aegean. In areas 49 and 50, which adjoin each other, certain differences from the Tirynthian pattern can be detected: (a) the three dolphins per square are arranged in parallel, (b) the figural maritime subjects are accompanied by a *variety* of abstract motifs (of which none compellingly represents the water and the tricurved arch motif is absent from Pylos) and (c) fish have been added in the range of marine fauna represented on the floor of Room 50.<sup>26</sup> One is tempted to note that the floor decoration of Room 50 looks like an attempt to adjust into the grid system an arrangement of the images more at home in an undivided surface: one is reminded of a similar arrangement of dolphins and fish in the Agia Triada grid-less seascape floor. On the contrary, the 'heraldic' dolphin pairs at Tiryns suggest a syntax more consistent with the attempt at easier symmetry than the square grid indicates. However, one further conclusion may be more significant; on the basis of the Pylian and Tirynthian evidence, a link between the use of figural marine subjects for floor decoration and the importance of the areas thus decorated can be plausibly suggested.

Frescoed wall decoration from at least three Mycenaean administrative complexes (Mycenae, Pylos and Thebes),<sup>27</sup> albeit fragmentary, has recently revived the interest in the significance of maritime symbolism in the later LBA. The amazing discover-

ies at Thera had, *inter alia*, a profound impact in the way motifs and themes related to maritime activity could be thereafter recognised; the identification by Maria Shaw of a series of panels from wall decoration in Room 30 of the 'palace' complex within the citadel of Mycenae as '(ship) cabins' (*ikria*<sup>28</sup>), drew a parallel to the well-known (and significantly better-preserved) frescoes from the West House at Akrotiri (Room 4).<sup>29</sup> The abstraction of the LH IIIB presentations notwithstanding, thematic similarity with the Thera fresco is intriguing, although the Mycenae fresco shows a cabin with significant differences from the Thera one.<sup>30</sup> More significant however is the location of both images in small

<sup>25</sup> Hirsch 1977, fig. 17a-c. However, especially within Room 50 the octopuses exhibit a degree of similarity (Hirsch 1977, 35), which *may* indicate stencil drawing.

<sup>26</sup> Hirsch 1977, 35 fig. 20. The fish in square 5B are identified as 'sharks' by Hirsch.

<sup>27</sup> Although these are too fragmentary for any meaningful analysis, one should also mention fresco fragments of marinescape imagery from beneath the LH IIIB1 House of the Oil Merchant at Mycenae (dolphins) and from a LH III context at Argos (molluscs) (see Boulotos 2000, 1131 n. 154 with references).

<sup>28</sup> For the appropriateness of the Greek word *ἱκρία* see M. Shaw 1980, 167 n. 1 where it is admitted that its use for ship cabins is post-Homeric and metonymic. The term's popularity with reference to these Aegean images is entirely due to its use by S. Marinatos in the Akrotiri preliminary reports. Here the term will be used conventionally.

<sup>29</sup> M. Shaw 1980. For this theme in Akrotiri see Morgan 1988, 137-42 and Televantou 1994, 33-46, 131-56. The symbolism of Aegean *ikria* has recently come again into focus thanks to the analytical publication of a new presentation on an one-handed LM IB cup from Building A at Mochlos, where Davaras argues for the possible interchangeability between the 'altars' or 'shrines' observed aboard in certain Neopalatial images, such as the 'Ring of Minos' or the 'Mochlos Ring', and '*ikria*' (Davaras 2003, 7-9).

<sup>30</sup> (1) The possible location of the Mycenae cabins *amidships* (a central pole is possibly shown) contrasts the placement of Thera cabins close to the stern and (2) the Mycenae cabins lack the roofing and emblematic ornamentation of fictitious floral motifs of their Thera counterparts. Televantou (1994, 147) has advanced two alternative scenarios to explain the appearance of the theme in LH IIIB Mycenae suggesting influence from a (hypothetical) Cretan or Cycladic prototype either directly or through the intervention of an earlier Mycenaean example. However, both scenarios are speculative and downplay the fluctuations in artistic interrelations and iconographic significance from the early to later LBA.

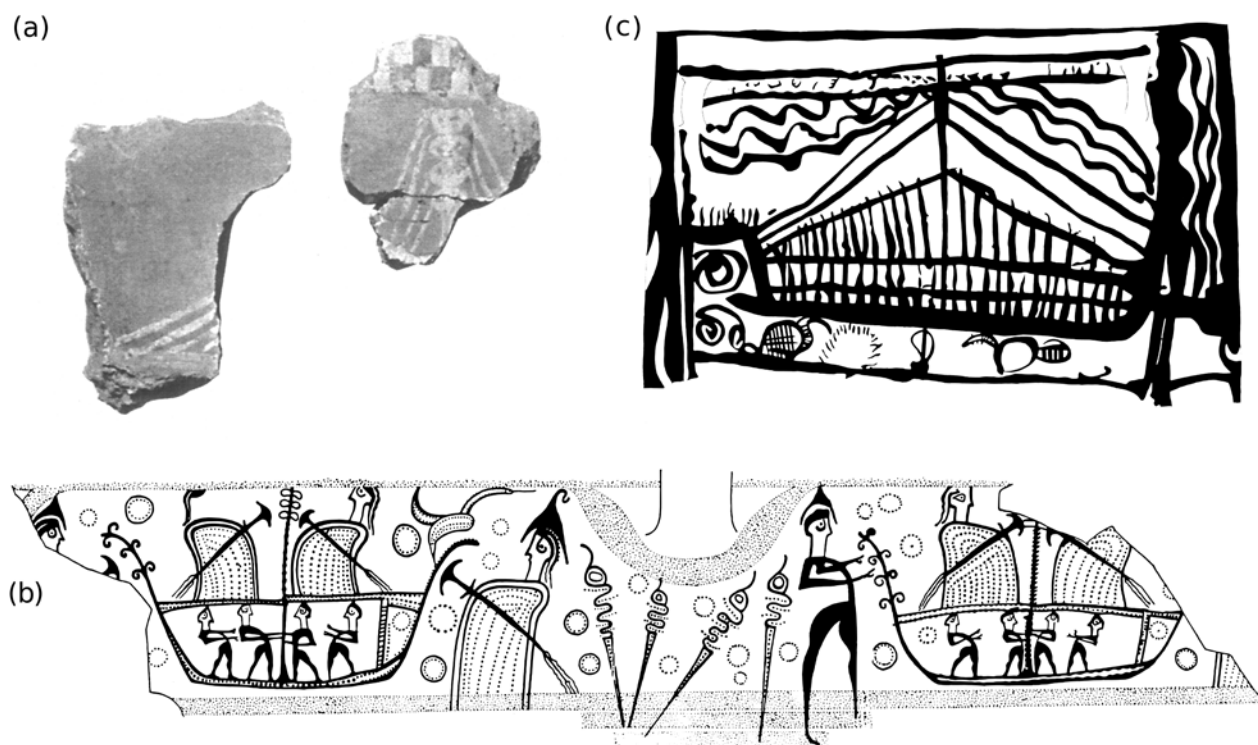


Fig. 2. LBA IIIB ship imagery: (a) Pylos ship fresco fragments (LH IIIB, after Lang 1969, pl. L; courtesy of Department of Classics, University of Cincinnati), (b) Enkomi tomb 3 amphoroid crater (LH IIIB, after Sjöquist 1940, fig. 20:3), (c) Gazi larnax (LM IIIB, after Wachsmann 1997, 346, fig. 10). Figures not to scale.

rooms,<sup>31</sup> in panels arranged in a frieze-like manner, a spatial configuration which supports their similar 'functions'.

M. Shaw's compelling identification of a *ship representation* on fragment 19 M ne from a Pylian plaster dump<sup>32</sup> (Fig. 2a) enhanced significantly our knowledge of maritime imagery in LBA III 'palaces,' a thematic category previously represented at Pylos by the *nautili*<sup>33</sup> friezes.<sup>34</sup> Regarding the ship fresco, Shaw has suggested its original location in Hall 64 (Southwestern Building) in accordance with the possible military interpretation of the image she advocates, as this Hall yielded the well-illustrated battle imagery. Although there is no compelling reason to accept this provenance,<sup>35</sup> Shaw's insistence that there must have been a naval theme in this area, compatible with the militaristic overtones of its extant fresco imagery proved to be extremely intuitive.

Recent ongoing work on material that had been omitted or not given sufficient focus in Lang's monumental publication, undertaken as part of the

<sup>31</sup> Although both Mycenae 'palace' Room 30 and Akrotiri West House Room 4 could have been residential spaces, I see no compelling reason to rely on Tsountas' and Marinatos' original interpretation of these rooms as bedrooms (cf. M. Shaw 1980, 177). Shaw has also suggested that similar cabins may be depicted in some obscure fragments from Thebes (M. Shaw 1980, 178 ill. 13, found with the Kadmeion procession), although their fragmentary state impedes any secure restoration.

<sup>32</sup> M. Shaw 2001, 38–40, fig. 1.

<sup>33</sup> With the exception of the remarkable Knossian composition and in spite of their popularity in the Palace Style, *nautili* are a quite rare theme in fresco-painting.

<sup>34</sup> Such friezes come from the Inner Propylon or Room 2 (1 F 2), Room 20 (3 F 20), Room 16 (2 F 16), the NW slope dump (4 F nws), and from the areas NW and SW outside the 'palace' (5 F nw, 6 F sw) (Lang 1969, 141–3, pls. 79–85, col. pls. I, J, R).

<sup>35</sup> On the contrary, there are some significant clues for the opposite. Shaw's main argument is the presence of the checkerboard pattern above the ship, a motif she considers only known from Hall 64 in Pylos (M. Shaw 2001, 42). However, checkerboard has also been retrieved from Room 5, the 'megaron's' Vestibule (see Lang 1969, 68, on fragment 14 H 5), as well as in Room 20 and fragments from other plaster dumps. More significantly, as recent progress in the conservation and

Hora Apotheke Reorganisation Project (HARP) under the general direction of Jack Davis and supervised by Haricleia Brecolaci, has revealed one more ship fresco, bearing a zig-zag pattern previously unattested among Pylian imagery.<sup>36</sup> Placing this new naval scene in the wider context of the 'violent' iconography of Hall 64 where it was found and evaluating its role in shaping a coherent 'Pylian identity'<sup>37</sup> is tempting. Ongoing work<sup>38</sup> shows that, *unlike* the ship from the southeast slope dump, where a mast pole is clearly discernible, the image from Hall 64 is entirely untypical in the context of LBA III Aegean ship imagery. Pending its final publication, we may anticipate a possible parallelism of the *unicum* zig-zag pattern running along its hull with earlier images that bear a similar motif in the same position, such as the well-known polychrome matt-painted sherds from Volos *Kastro*.<sup>39</sup> Additionally, the absence of a mast and the *possible* presence of a structure in stern position (cabin or parasol?) are strongly reminiscent of Neopalatial glyptic ship images, collectively labelled as 'ritual craft'.<sup>40</sup> The interpretation of this entirely untypical image, itself a part of scene which included at least three vessels, is still unclear, although a military one must be considered as doubtful for the time being, since human figures have not yet been reported. However, its overall *early* connotations,<sup>41</sup> surprising as they are, are so strikingly evident that the possibility of a deliberate conservatism, even archaism, possibly of some religious motivation, might also be tentatively entertained.<sup>42</sup>

As this text goes to the press, new and important discoveries at Iklaina, a site that must have been a district centre in the Pylian 'Hither Province', may revolutionise our picture of LH Messenia. Fresco fragments from the 2009 season (reportedly dated by associated pottery to no later than LH IIIA1) reveal part of a naval scene with a ship (part of the bow is probably discernible) and two male rowers, accompanied by two dolphins.<sup>43</sup>

Fragments of a large-scale marinescape fresco representation (including various fish species and dolphins) were recovered in a rescue excavation at Boeotian Thebes (K. Douros plot), c.400 m south-east of the 'House of Kadmos,' but its whereabouts are not yet fully clear.<sup>44</sup> In LH IIIB Gla (Boeotia)

painted plaster fragments with marine fauna have also been recovered.<sup>45</sup> The extremely fragmentary material came from the plaster dump east of Room N1, which included at least seven naturalistic dolphins, can be plausibly interpreted as material removed from building N (Rooms N1-N3). The interpretation of the fragments as *wall-paintings* seems safely deduced from the evidence of mud-brick imprints traced on the backside of some of them.<sup>46</sup>

The fragments comprising the 'Argonaut Frieze' were found in the 'Domestic Quarter' (Knossian complex: East Wing).<sup>47</sup> The state of preservation does not allow us to discern whether this is part of a larger composition with a greater thematic range

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study of Pylos plasters has confirmed, the black pigments in the checkerboard from Hall 64 and on 19 M ne can be distinguished chemically (Brecolaci 2004).

<sup>36</sup> Brecolaci 2004.

<sup>37</sup> Davis & Bennet 1999.

<sup>38</sup> Brecolaci 2005. Since this material is still not properly published but still under study, all notes presented here must be considered as provisional.

<sup>39</sup> For the well-illustrated Volos matt-painted sherds, probably advanced to late MH, see Immerwahr 1985; Wedde 2000, 319 nos. 545-6; Petrakis 2006, 194 fig. 4, 218 no. 11 with references. Until the proper publication of the find, it is not possible to reject a link with the 'horizontal ladder' pattern on certain LH IIIC ship images on pictorial pottery (see *infra*), although this would not be expected.

<sup>40</sup> Wedde 2000, 339-40 nos. 901-12; see especially the gold signet-ring no. 902, a stray find made at 1927 near Herakleion, now at Ashmolean Museum (Inv. No. 1938.1129), which shows a zig-zag motif along the hull (also in Evans 1928, 250, fig. 247b).

<sup>41</sup> These early links are even further augmented by the Thera parallels cited for the oars of the scene (Brecolaci 2005).

<sup>42</sup> Another Pylian ship image might bear some resemblance to the new ship fresco: the sketch on the *verso* of tablet **PY An 724**.

<sup>43</sup> Cosmopoulos 2010 (p. 14, fig. 33a of the \*.pdf document) and pers.com.; Petrakis 2010, 56.

<sup>44</sup> Spyropoulos 1971; Boulotis 2000, 1097, n. 4, 1131, 1141, fig. 8 (with references).

<sup>45</sup> The Gla frescoes are under study by Dr C. Boulotis (for a summary presentation of the painted plaster from Gla based on preliminary notes of his study, see Iakovidis 1998, 183-7 and Boulotis 2000, 1120-1, 1131-3, figs. 19-20).

<sup>46</sup> I wish to thank Dr C. Boulotis for kindly providing this crucial information.

<sup>47</sup> Evans 1935, part 2, 888-91, figs. 870-1, Suppl. Pl. LXIV; Immerwahr 1990, 177 [Kn 32]; Hood 2005, pl. 8.5a-b.



or if it consisted of the repetition of nautil in a horizontal row, in a truly frieze-like manner. It may be significant that the most extensively preserved Knossian maritime compositions come from the same area (Domestic Quarter); moreover, the same area of the East Wing may preserve certain indications of what Immerwahr considers as stylistically (no more and no less than that) more advanced fresco presentations, among which the ‘Argonaut Frieze’ figures prominently.<sup>48</sup> Serious gaps in the documentation and stratigraphic reconstruction of any part of the Knossian complex notwithstanding, it is interesting to note that such a view may somewhat bridge the gap between the Knossian fresco production and the seeming popularity of nautil in the Pylian complex (references in Table 1).

A relatively good case can be made that the spatial interlink of these themes within the artificial architectural environment may somehow reflect an abstract contemporary Aegean cosmological ideology: With the exception of Gla, maritime imagery with no apparent human intervention (e.g. marine fauna or abstract designs with possible maritime associations) is reserved for floor decoration. On the contrary, human maritime activities (which are predominantly identified by the representation of ships or ship apparatus) are found on the walls. However, in the light of the recent evidence from Gla, Maria Shaw’s suggestion of an “aversion on the part of Aegean artists to painting a seascape on a wall, where it might create the impression of a vertical plane”<sup>49</sup> may need to be modified.

Aegean LBA III perceptions of ‘pictorial programming’ might indeed be more complicated than hitherto assumed; however, one needs to bear in mind the remarkable agreement among actual ‘palaces’ (centres of literate administrations) on this specific point. Perhaps Gla, a site which lacks evidence for record-keeping and whose position in the settlement hierarchy of LBA Boeotia we are not yet positioned to assess, should be seen as the ‘odd one out’ here, rather than suggesting the invalidity of the link between floors and marine fauna themes, shared by Tiryns, Pylos and Knossos (Theban evidence being ambiguous), which were all administrative centres at some point during LBA III. Even if Agia Triada had never been the seat of an

administration in post-LBA I times, the occurrence of marinescape floor decoration there concurs with this site’s remarkable prosperity during LM IIIA2.<sup>50</sup>

### *Pictorial ceramic decoration*<sup>51</sup>

The abundance of maritime motifs among pictorial pottery styles of the LBA II–III Aegean certainly deserves attention. The same range of marine invertebrates (octopuses and nautil) that appear in plaster also predominate in the Cretan ‘Palace Style’ (LM II–IIIA1), whose themes have been argued to express the political ideology of the contemporary Knossian elite<sup>52</sup>. This may indeed be hinted at by the correspondence, both stylistic and thematic, but also occasional and non-systematic, between this special ceramic class and fresco presentations. Although the earlier appearance of a similar ceramic monumentality occurs in Mainland elite funerary contexts in the earlier LBA, what we may legitimately call the ‘Palace Style’ continues mostly from the LM IB Special Palatial Tradition; its earlier Helladic attestations can be considered as a response to the emerging need for conspicuous mortuary consumption of the early Mycenaeanised Helladic world. Although true Marine Style largely ceases to exist along with the Neopalatial administrations,<sup>53</sup> a range of maritime subjects, including octopuses,

<sup>48</sup> Immerwahr 1990, 99, 142 and 177, where the ‘Frieze’ is called “Postpalatial?” Although the question-mark reveals her hesitation, ‘Postpalatial’ in Immerwahr’s work implies an LM IIIB date.

<sup>49</sup> M. Shaw 1997, 489. However, she acknowledges the swallowfish frieze from LC I Phylakopi whose “rhythmical composition makes it practically assignable to the class of “wall-paper” decoration” (M. Shaw 1997, 489, n. 50). This aesthetic evaluation of the Phylakopi frieze is weak though, as the same “wall-paper” repetition is what characterises (on even a greater degree) LH IIIB decorated floors as well.

<sup>50</sup> La Rosa 1997.

<sup>51</sup> I have presented and briefly considered aspects of the corpus of MBA–LBA Helladic and Cycladic ship representations on pictorial pottery in Petrakis 2006 (catalogue updated in early 2004; addenda in the present section on Postpalatial pictorial pottery).

<sup>52</sup> Hiller 1995.

<sup>53</sup> There are a few remarkable exceptions though, such as the Ephyraean goblet (a typical LM II shape) from the ‘Unexplored Mansion’ with true Marine Style decoration (see references in Mountjoy 1984, 183 [Kn 97], pl. 28b).

*murex* shells and nautili, figures prominently among Knossian Palace Style jars and their earlier Mainland homologues.<sup>54</sup> Marine vertebrates, predominantly fish-like creatures, which could in one or two obscure cases be dolphins, are one of the two most prominent themes of a newly emerged class of Knossian pictorial pottery, whose development is contemporary with the peak of the Palace Style (LM II-III A1).<sup>55</sup>

Marine motifs are also ubiquitous as filling motifs in all phases defined by Vermeule and Karageorghis<sup>56</sup> in their survey of LH III pictorial pottery; although they chose deliberately not to consider the mass of the category known as ‘Octopus Vases’, attributing the Early Pictorial I (LH III A1 early) marine scenes to Cretan (Marine and Palace styles) influence,<sup>57</sup> two white-dotted octopuses dominate the *main* views of the famous ‘Zeus crater’ from Enkomi ‘pushing’ the notorious balance-holding ‘god’ to the side.<sup>58</sup> The so-called Maroni Fisherman fragment (Early Pictorial III, end of LH III A1) depicts a naked (?) youth holding a fish from its tail, a posture and theme vividly recalling the late MC Phylakopi stand.<sup>59</sup> As in Cypriot and Levantine material, fish are relatively rare among Early and Middle Pictorial (LH III A1-2) vase-painting from the Aegean, although some notable examples stand out.<sup>60</sup> The rarity of marine scenes is noticed in Middle Pictorial II, although the use of the whorl-shell increases amidst the earlier preference for floral or other abstract filling motifs in Middle Pictorial III (end of LH III A2).<sup>61</sup> A strange marine creature (a large fish or a cetaceous mammal?) appears to chase a chariot in a well-known Ripe Pictorial I (early LH II B) amphoroid crater from Enkomi, an unusual combination of terrestrial and marine themes that has even been interpreted as a humoristic allusion.<sup>62</sup> Also relevant in this context may be the LH II B1 terracotta ‘rhyton’ from the Tiryns Epichosis decorated with painted scale pattern, obviously intended to represent a large predatory fish<sup>63</sup>. Although the species is not readily identifiable, it is interesting that a marine animal was included among the powerful animals preferred for the Aegean figure-head rhyta repertoire, most of which are associated with distinct masculinity or aggression (e.g. bull, lion, boar).

With notable exceptions, such as the amphoroid crater from Enkomi tomb 3 (Ripe Pictorial I) (Fig. 2b), ship imagery is extremely rare in LH pictorial pottery before LH II C.<sup>64</sup> The Enkomi images, albeit possibly aiming at non-Helladic tastes (as the

<sup>54</sup> For marine invertebrates and the tricurved arch/ “sea” motif in the Knossian Palace Style see Niemeier 1985, 13–43, 95–8 respectively. For a catalogue, full with distribution charts of different decoration syntaxes and motifs, of Mainland monumental so-called ‘palatial amphorae,’ which peak at LH II A, see Kalogeropoulos 1998.

<sup>55</sup> The other one being birds. Crouwel & Morris 1995 provide the essential catalogue and discussion of this material from Knossos. An important suggestion by Hiller (2006) attempts to link the emergence of this new pictorial style with the Amarna style in Akhenaten’s Egypt. This theory concerns us peripherally here, since it enable us to view the popular birds of this early Knossian pictorial pottery as part of ‘waterscape’ scenes, particularly riverscapes, along with reeds, papyrus, waterbirds and perhaps felines. However, popularity of such imagery in Amarna may not be necessarily linked with the Knossian themes, since such or similar scenes had already made their appearance in earlier LBA (e.g. the Mycenae Shaft Grave V and Routsis tangless inlaid daggers (LH I and LH I/IIA respectively), the riverine scenes in the Miniature Frieze in Room 5 of the West House at Akrotiri, Thera (LC I) or the ‘Birds and Monkeys Frieze’ from the House of the Frescoes, Knossos (LM I), see thoughtful survey in Morgan 1988, 34–40).

<sup>56</sup> Vermeule & Karageorghis 1982.

<sup>57</sup> However, they noted the remarkable amphoroid craters with large white-dotted octopuses from Enkomi and Alalakh, as well as the impressive Maroni fish-vase. The latter they saw as reflecting influence from frescoed decoration with the “torsional diving arrangement” of its large “sharklike predators rather than dolphins” (Vermeule & Karageorghis 1982, 17 nos. III.7–9).

<sup>58</sup> Vermeule & Karageorghis 1982, 14–5 no. III.2.

<sup>59</sup> Vermeule & Karageorghis 1982, 24 no. III.30.

<sup>60</sup> Vermeule & Karageorghis 1982, 77 nos. VII.7–12.

<sup>61</sup> Vermeule & Karageorghis 1982, 31–2.

<sup>62</sup> Vermeule & Karageorghis 1982, 40–1 no. V.18

<sup>63</sup> Voigtländer 2003, 130, 230–1, Taf. 94: R3; Koehl 2006, 131, no. 369. Sherds from a similar rhyton (Voigtländer 2003, 130, 230, Taf. 94: R1) were also found in the same deposit. Three LH III A2–III B1 fish-shaped rhyta are known from Ugarit and Near Eastern imitations have been published from Kamid el-Loz (Lebanon) and Enkomi (Koehl 2006, 124–5, nos. 339–41; 241, no. WA3; 243, no. C2), which implies that the shape was primarily responsive to Levantine preferences.

<sup>64</sup> Vermeule & Karageorghis 1982, 45, pl. V.38; this statement leaves aside material of uncertain date as well as representations that have been placed at the II B2–II C ‘transitional’ period (e.g. Mountjoy 2005).

concentration of pictorial pottery in Cyprus and the Levant may indicate), show a heraldic arrangement of two imposing male figures aboard, plausibly identified as status warriors by their swords, which could indicate a military connotation for the composition. A group of Ripe Pictorial II (LH IIIB late) vases from Cyprus depict fish of various kinds and arrangements, not unusually juxtaposed with birds,<sup>65</sup> and this appears to correspond with a revival of the overall popularity of the theme in contemporary Greek mainland.<sup>66</sup> The same relative popularity of fish (plus a few possible dolphins) observed in the earlier Knossian pictorial pottery seems to feature also in the Transitional Pictorial phase on the Mainland.<sup>67</sup>

The dependence of LBA figural vase-painting on other Aegean arts and crafts is not straightforwardly apparent. Generally speaking, it is easy to see some influence from fresco-painting in earlier examples of pictorial pottery (LM II-III A1 and those termed as ‘fore-runners’ by Vermeule and Karageorghis<sup>68</sup>), but the stylistic affinities of the two media seem far more distant in the later LBA III. Although the whole issue is extremely complex to handle with in this short overview, one issue particularly akin to LH III pictorial pottery has been what could be termed its ‘thematic unawareness’: subjects that are logically incompatible appear together (e.g. fish and birds in a row, large fish and a chariot or flowers and whorl-shells together as fill-motifs). Although the symbolic significance of juxtaposing subjects from different cosmological realms (land and water) is a possibility (but see *infra* on N. Marinatos’ ‘Octopus Garden’), other explanations have been put forward. Susan Sherratt has produced the most interesting interpretation of this condition, suggesting that most fill-motifs deliberately aim to imitate Aegean ‘figural textile-work’ and that thematic ‘compositions’ aim at a concentration of elite symbols (e.g. chariots, horses, bulls) on the same pot or group of pots that would become usable by socially pretentious and aspiring groups.<sup>69</sup> In the same argumentation line, it would also be likely that the employment of marine themes had elite connotations as well. If Sherratt’s suggestion is followed, it would seem that thematic selection and combination on pictorial pottery seems not to aim at narrative compat-

ibility, but as *accumulating* images with compatible and supplementary prestige connotations. This view could place the study of ‘pictorial programs’ (at least as far as pottery is concerned) on an entirely new basis and remains to be tested as a starting point for the study of composition principles in Aegean art.

The function of LBA III *larnakes* as funerary containers may bear significantly on the meaning of the imagery they accommodate, although it is not clear in which way. Maritime themes are not uncommon in LM III examples, yet they are extremely rare on LH examples, all from the chamber tomb cemeteries at Tanagra (Boeotia).<sup>70</sup> Marine fauna (in descending order of frequency: octopuses, fish, nautili, shell and starfish) appear most frequently on the chest-shaped type and persist throughout the LM IIIA-C period. Merousis has noted that seascape compositions with more than one animal species are extremely rare, while most motifs exist solely. Most intriguingly, we do have evidence for the representation of ships in at least three LM IIIB examples, from Gazi (Fig. 2c), from Kalochoraphitis and from a private collection in Switzerland without secure provenance and one from Tanagra (Boeotia)<sup>71</sup> that have often raised the

<sup>65</sup> Vermeule & Karageorghis 1982, 57–8 nos. V.126–141.

<sup>66</sup> Vermeule & Karageorghis 1982, 105–6 nos. IX.112–122.

<sup>67</sup> Vermeule & Karageorghis 1982, 117–9 nos. X.83–117.

<sup>68</sup> Especially items considered as Cretan imports; Vermeule & Karageorghis (1982, 74–5 nos. VII.H–K) catalogue a Palace-Style jar (LM II-III A1) from Deiras tomb 6, a LM IIIA1 pyxis from Mycenae, the remarkable LM IIIA1 ‘basket’ from Varkiza (with marinescape subjects) and a pictorial fragment (LM II?, from a large crater or even a *larnax*) from Pindar Street, Thebes, depicting the quite rare (for *any* period) ‘fishing-by-net’ theme.

<sup>69</sup> Sherratt 1999, 189.

<sup>70</sup> No particular significance should necessarily be placed on this concentration, as the Tanagra chamber tomb cemeteries feature a highly untypical –by Helladic standards– concentration of *larnakes* anyway. N. Marinatos 1997 and Merousis 2000b comment on the differences between LM and LH *larnakes*. The Tanagra material remains largely unpublished and even incompletely presented, yet the rarity of marine themes on these *larnakes* has already been noted: Marinatos 1997, 289; Merousis 2000b, 278.

<sup>71</sup> For the remarkable LM IIIB *larnax* from Gazi, see Alexiou 1973. For the other two see Merousis 2000a, 138 cat.no. 79 and 196 cat.no. 220 respectively. The Swiss *larnax* is illustrated

question of the relevance of maritime journeys to Aegean afterlife beliefs (see *infra*).

### *Terracotta boat models*

Aegean models (i.e. three-dimensional reduced-scale imitations) of sea vessels are certainly a special artefact category, although poorly informative on the morphology of their prototypes: They mostly depict small boats (of the sort of small boat depicted in monochrome manner in the South Miniature Frieze at the West House), rather than ships with mast and sails and are usually very abstracted. The presence of terracotta boat models seems initially compatible with what *could* be the offering of a boat model in a burial rite represented on the long-side panels of the Agia Triada sarcophagus (LM IIIA2), yet their occurrence in LBA funerary contexts is not at all overwhelming: With few exceptions (including two boat models from Tanagra cemetery at Boeotia), published examples do not seem to have been deposited in burials.<sup>72</sup> Examples are known from Agia Irini,<sup>73</sup> Mycenae, Tiryns, Athens Agora, Argos, Asine and Phylakopi.<sup>74</sup> With reference to the ‘boat model’ depicted as if offered in the Agia Triada sarcophagus, it may be significant with reference to Cretan afterlife beliefs that such boat models are so far absent from LM III mortuary contexts altogether and are extremely rare in LM III Crete in general.<sup>75</sup>

### *Glyptic*

Aegean Bronze Age glyptic is an intriguing category of image-bearing artefacts that have had both symbolic and, at least theoretically, practical (i.e. sphragistic) administrative use. It is difficult not to link the demise (but, interestingly, not total abandonment) of the specialised craft of seal-engraving after LBA IIIB with the nature of a seal as an administrative tool and the demolition of the context of socio-economic activity in which their function and status configuration was to be understood. The fact that apparently *early* seals were impressed in the vast majority of the extant corpus of the LH IIIB administrative sealings<sup>76</sup> and the immediately implied use of century-old administrative seals is very intriguing, as it appears to

counter, rather than follow changes in iconographic preferences during this period.

Ship imagery is definitely more common in Neopalatial glyptic than in later Aegean groups<sup>77</sup> and the theme is even more rare on glyptic thought to have been produced on the Mainland. The same would also apply to identifiable marine fauna, which clearly forms a minority in the iconography of Aegean LBA glyptic either as main or as filling motifs (although the so-called ‘talismanic’ group are at least partly responsible for this Neopalatial maritime bias).<sup>78</sup> It is interesting to note that in most cases where water *does* appear it accompanies ter-

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in Wachsmann 1998, 131 fig. 7.7. For the Tanagra *larnax* see Spyropoulos 1973, 21, pl. 10 and Wedde 2000, 330. I do not here accept that the Episkopi (near Hierapetra) LM IIIB *larnax* depicts a ship (Wedde 2000, 330 no. 697). The crescent hull is apparently four-wheeled and this seems most likely to be an untypical rendering of a chariot.

<sup>72</sup> Of the 28 more or less likely LBA IIIA-C examples, only 5 (2 from Tanagra, 2 from Megalo Kastelli (Thebes) and 1 from Mycenae Tsountas chamber tomb 79 have a secure provenance from a funerary context (counting based on the catalogue in Wedde 2000, 308–12). Following Wedde (2000, 195 n. 150), excluded here are the ivory duck pyxides from Zapher Papoura (Knossos) and Mycenae.

<sup>73</sup> Early LBA possible bronze models of ‘longboats’ from Agia Irini recall the lead (EBA?) long-boats (or dug-out log-boats?) presumably from Naxos and now in the Ashmolean Museum (Oxford), whose authenticity, however, has been questioned (see Wachsmann 1998, 69–70, fig. 5.1: lead boat models, 102, figs. 6.33–34: bronze boat model from Agia Irini).

<sup>74</sup> Reference is here restricted only to the relatively securely dated examples. For the full corpus see Wedde 2000, 308–12, nos. 301, 307, 309, 311–5, 317–36.

<sup>75</sup> One should mention the terracotta models from Knossos Unexplored Mansion (LM IIIA1) and Agia Triada Piazzale dei Sacelli (LM IIIC) (Wedde 2000, 309 no. 301, 311 no. 325).

<sup>76</sup> Krzyszkowska 2005, 233–5, with references.

<sup>77</sup> E.g. Alexiou 1973, 12.

<sup>78</sup> Younger 1988, 205–9. A few of the latest Knossos and Pylos sealings may be worth-mentioning here: The notorious ‘horse on ship’ sealing from Knossos (Wedde 2000, 346 no. 958), has long been recognised as the result of the horse’s image as “superposed” upon the ship’s (Evans 1928, part 1, 244 fig. 141a). It is unclear whether there is any structural relationship between the two images, but it is highly unlikely that sea-transport of equids has anything to do with this superimposition and we do not have any evidence for Aegean image composition ever formatted in such a way. Four dolphins swimming round a single octopus are depicted on Pylian inscribed seal-

restrial, not aquatic subjects.<sup>79</sup> This would indicate that in the case of the representation of aquatic animals (fish, dolphins and invertebrates) in glyptic, waterscape functioned as a prerequisite, which was to be ‘assumed’ by the viewer and therefore need not be explicitly represented.

This section seems the most appropriate place to mention the quite unusual *graffiti* of ships on the Dramesi ‘stele’ (early LH or LH IIIB?).<sup>80</sup> In addition to its being uncomfortably schematic, this iconographic idiom is so poorly represented in Aegean material that its conventions are very difficult to illuminate.<sup>81</sup> However, the Dramesi *graffiti* (either early LH or LH IIIB) also include one of the earliest representations of the enigmatic ‘horizontal ladder’ pattern in Aegean ship imagery, a stylistic convention that will be discussed below with reference to LH IIIC examples on pictorial pottery.

## Maritime affairs in Aegean LBA III ‘palatial’ administrations: Texts in context

The need to record economic activities that motivated the composition of the extant Linear B documents makes it nearly a commonplace that information on spheres other than that of ‘palace’-administered economy can only be deduced by implication with varying degrees of certainty. Maritime activities are no exception and despite their obvious economic significance, maritime activities occur very erratically in the extant textual corpus<sup>82</sup>. Biases both inherent in the textual data (a ‘palace’-centric view) as well as due to accidents of discovery make *ex silentio* arguments inappropriate. Evidence from the documents can be broadly divided into indirect (implying contacts or familiarity with places and activities that presuppose navigation) and direct (concerned explicitly with maritime activities). Other, more subtle references to maritime affairs of the Linear B administrations will not be pursued here. It is, for instance, highly plausible that references to *a-ne-mo i-je-re-ja* ἀνέμων ἱέρεϋα ‘priestess of the winds’ as oil recipients in clearly religious contexts (KN Fp(1) 1.10, Fp(1)

ings Wr 1326.α and Wr 1330.α (CMS I, 312), whose texts, however, have been produced by different scribes. A longboat with men aboard is depicted on two more sealings from metal rings (the non-inscribed CMS I Supplement 193 and the inscribed CMS I Supplement 179 = PY Wr 1415.α). However, Aegean evidence does not sufficiently support a consistent link between specific themes in seal imagery and the owner’s administrative responsibility.

<sup>79</sup> Younger 1988, 319.

<sup>80</sup> Although the function of the slab is not known, its funerary context is relatively secure: it comes from the dromos of a damaged tomb near Dramesi, currently in the Schematari Museum. Its date has been debated though: Blegen (1949) suggested a LH I date but a LH IIIB date has also been proposed (see entry in Wedde 2000, 328). The unclear interpretation and date of a stone Knossos pyramidoid artefact ‘embraced’ by a naturalistic octopus relief accounts for its restriction to this footnote reference (Niemeier 1985, 15 Abb. 3:15 accepts a Final Palatial (LM II–IIIA1) date). Evans (1935, part 2, 650–2 fig. 635) dated this artefact to LM II as stylistically close to “Palace Style” depictions of such molluscs and interpreted as “clearly a weight” *approximating* –as the excavator of Knossos readily admits– 60 ‘light’ Babylonian *minas* (Evans 1935, part 2, 651). Its alternative interpretation as a symbolic anchor of religious significance, supported by the choice of depiction of a marine animal (Davaras 1980), has gained less support (see De Fidio 1998–9, 42 who follows the ‘orthodox’ interpretation of the object as a weight).

<sup>81</sup> A schist slab from Kouphota (near Siteia) is somewhat obscure and has no clear context (Wedde 2000, 328 nos. 678–80). Other parallels for LBA ship *graffiti* on stone come from Cyprus: a Late Cypriot IIIA (12<sup>th</sup> century BC) stele from Enkomi and from the walls of Temple I and on the altar of Temple 4 at Kition (see Wachsmann 1998, 147–8, figs. 7.33–8 with references). Yet the hypothesis that these “*may* represent Achaean [*sic*] ships” (Wachsmann 1998, 147, original *italics*), if based (as it seems to be) on some LH IIIC pottery found in the site, is very fragile. The “ship” *graffito* from a gypsum block in the inner (‘sepulchral’) chamber of the monumental Temple Tomb at Knossos (Evans 1935 part 2, 956, Suppl. pl. LXVIIb) has been rejected by Gray (1974, 44) and is considered as doubtful by Wedde (2000, 238, 316 no. 508). While its date is uncertain (arguably, but not certainly LM II–IIIA), its unique features (a sharp triangular component) and its destruction during the last war impede its proper interpretation.

<sup>82</sup> Four important synthetic papers (Killen 1985, 262–70; Palaima 1991; Olivier 1996–7) and segments in a general textbook (Ruipérez & Melena 1996, 166–7, 176–80) have commendably assembled the evidence and attempt a preliminary analysis. The fact that economising managing of ‘palatial’ affairs was the *raison d’être* of these documents should not be used as an indication that the economic exploitation of the properties of the seascape was the exclusive formative agent of LBA III Aegean attitude(s) towards the sea. Although the transport of the LM IIIB inscribed stirrup-jars (now generally accepted as mostly of west and south central Cretan production) demonstrates an aspect of overseas trade (presumably in oil) *between* Aegean *literate* administrations in the 13<sup>th</sup> century BC, this will not be treated here.

13.3 [twice]) reflect the incorporation of the very practical concern over sail-filling blows into Knossian state ritual; however, although reasonable, the nautical associations of this cult personnel are not readily apparent in their textual environment.

*Indirect evidence: Ethnic adjectives, toponyms and LBA Greek onomastics*<sup>83</sup>

As commonly noted in relevant surveys, the only direct evidence for contact between two LBA III Aegean polities *may* be included in tablet **MY L (<X) 508** from the ‘House of Shields’ at Mycenae (LH IIIB1): the allative *te-qa-de* (Θήγ<sup>w</sup>ανς-δε) is justifiably perceived as a safe reference to a shipping of *pu-ka-ta-ri-ja* (a type of cloth<sup>84</sup>) ‘to (a) Thebes’, presumably from Mycenae, where the inscription was produced and found. Killen reads much into the fact that this exceptional record was found at Mycenae (although not in the ‘palace’ proper), which might hint at the exceptional position of Mycenae as a hub in the nexus of interconnections among Aegean ‘palatial’ polities<sup>85</sup> or at the ‘clearinghouse’ function of the ‘Ivory Houses’ complex, to which the ‘House of Shields’ belongs.<sup>86</sup>

The distribution of textual occurrences of adjectives and types plausibly deriving from this toponym in all four major Linear B collections (Knossos, Pylos, Mycenae and Thebes itself)<sup>87</sup> might indicate Thebes’ supremacy in inter-polity contacts<sup>88</sup> or suggest that more than one sites bore that name in the 2<sup>nd</sup> millennium BC. The latter option seems for the time being the more prudent of the two; moreover, it may hint at the homonymic complication that the ethnic adjective *au-to-te-qa-jo* on **TH Ug 4** may have been devised to resolve; this unparalleled formation, unattested outside Thebes, is transcribed as *\*Aùtoθηβαῖος* and might mean ‘true, genuine Theban’, as commonly accepted,<sup>89</sup> or, even more likely, ‘a Theban of this place’ (αὐτῶ [adverb] Θηβαῖος).<sup>90</sup> Although the possibility of homonyms can be entertained with regard to the Pylian and Knossian occurrences of the ethnic adjective *te-qa-ja*, *te-qa-jo* may be confidently accepted as referring to a Boeotian Theban in the context of an inscribed nodule found at the very same site, but probably, as all nodules from the same assemblage, accompanied

commodities produced at the hinterland (**TH Wu 47.β**).<sup>91</sup>

<sup>83</sup> References to commodities that could have been imported to the administrative centres, even if nearly certainly involving navigation, will not be discussed here as their relevance is peripheral. For instance: if *e-re-pa* ‘ivory’ reached Pylos through a Cypriot or Levantine ship, its references do not give any evidence for Pylian maritime activities (although it would be relevant if trade were the object of this study). For the sake of consistency, I will not discuss here even the more secure case of Knossian references to purple-dyed textiles (presumably reflected in the *murex* sea-shells found in Minoan sites). For references to such commodities see Palaima 1991, 283–4 and Olivier 1996–7, 285–6.

<sup>84</sup> Possibly *\*πυκταλία* (Aura Jorro 1993, 167–8, *s.v.*). Knossian evidence suggests a special status for this kind of textile, which is reported as being *po-pu-re-ja*, ‘purple-dyed’ (**KN Lc(1) 561.a** (erased); **L(7) 474**; **L 758.b**), see Aura Jorro 1993, 141, *s.v. pu-ka-ta-ri-ja* cloth may be further indicated by the ligature *TELA+PU*, where the syllabogram *PU* would stand as an acrophonic abbreviation of the full spelling. In nearly all cases where *po-pu-re-ja* cloth is *certainly* indicated, the type of cloth involved is *pu-ka-ta-ri-ja* or *PU*. However, the acrophonic *po* occasionally accompanying plain *TELA* at Knossos might also indicate purple-dyed textiles.

<sup>85</sup> Killen 1985, 268–9; see also Bendall 2007, 271.

<sup>86</sup> Bendall 2007, 273; cf. Shelmerdine 1997.

<sup>87</sup> *te-qa-de* **MY, TH**; *te-qa-ja* *\*Θήγ<sup>w</sup>αῖα*: **KN, PY**; *te-qa-jo* *\*Θήγ<sup>w</sup>αῖος*: **TH**; *te-qa-i* *\*Θήγ<sup>w</sup>αῖς* (Locative Pl.): **TH**. Also comment in Bartoněk 1988, 137 and sufficient references in Aura Jorro 1993, 333–4, *s.vv.*

<sup>88</sup> First argued by Bartoněk 1988, 137 but more recently resurrected in order to support the identification of the Boeotian centre with the *Abhijāva* of certain Hittite references.

<sup>89</sup> Aura Jorro 1985, 146, *s.v.*

<sup>90</sup> The adverb would be spelled *\*a-u-to* in Linear B; this type survived in later Doric, cf. Ionic αὐτοῦ, which occurs frequently in Homer with meanings related always to a precise indication of ‘here’ (right here/ there, in this very place *vel sim.*). Although there is no word-divider between *a-u-to* and *te-qa-jo*, such an omission is not rare in Linear B records.

<sup>91</sup> This, as well as the majority of the Theban **Wu** series, were found in the Liangis plot, which is located at the periphery of the area enclosed by the Mycenaean fortifications, possibly near some entrance to the fortification of the Kadmeia. The generally accepted interpretation of these nodules is that they reflect a periphery-to-centre flow of commodities that were later to be summarised onto longer documents analogous to the Pylian ‘mixed commodities’ **Un** records and eventually to be consumed in collective feasting occasions (Piteros *et al.* 1990, 181–3). The allative type *te-qa-de* (**TH Wu 51.β, 65.β** and **96.β**) indicates an viewpoint extraneous to the Theban centre, possibly from the administrative periphery indicated by the Euboean toponyms the occur in the same assemblage. However, it does not necessarily follow that the sealings were produced at these peripheral sites.

Maritime transportation of livestock from Euboean sites to the Theban administration is also implied by toponyms *ka-ru-to* and *a-ma-ru-to* (Κάρυστος and Αμάρυνθος respectively) on Theban inscribed nodules **Wu 55.β** and **Wu 58.γ**.<sup>92</sup> In that case, it is the close proximity that facilitates a more secure identification of the LBA toponyms with their historic homonyms. If we wish to move towards areas more distant from Thebes itself, the recently published and intensively discussed Thebes tablets (Odos Pelopidou deposit) yielded new exciting evidence of this kind with the reference *ra-ke-da-mi/mo-ni-jo* in the **Fq** series<sup>93</sup> interpreted as an ethnic adjective or, more likely, as a (derived) anthroponym.<sup>94</sup> Even if this is eventually accepted as a reference to southeastern Peloponnese, its precise definition remains elusive (Is a site called ‘Lakedaimon’ or a territory implied?). Peloponnesian references in this Theban series are further augmented if one accepts that *a-ka-de-i* relates to Arcadia.<sup>95</sup> The adjective *za-ku-si-ja/ -jo* modifies non-functional and old wheels at Pylos (**PY Sa 751; 787.B**) and perhaps wool at Mycenae (**MY Oe 122**). A less clearly read occurrence (*za-ku-si-jo*) identifies rowers (to be discussed further below) on the long inventory of **PY An 610.12**. The occurrence of early Mycenaean built and tholos tombs in Zakynthos (Keri, Planos) might suggest a plausible link with southwest Peloponnese, where this tomb-type shows its most dense LBA concentration, so the appearance of the ethnic on Pylian texts finds at least some indirect archaeological corroboration. Pylian occurrences of *ke-re-si-jo*, *we-ke* describe two variants of a specific bronze tripod ideogram (*\*201d<sup>vas</sup>* in **PY Ta 641.1** and *\*201b<sup>vas</sup>* in **Ta 709.3**<sup>96</sup>), clearly designating their Cretan craftsmanship in these cases;<sup>97</sup> the analysis of archaeological correlates of ideograms by Vandenabeele and Olivier has supported the attribution of the types thus ideogramatically represented to LM workshops.<sup>98</sup>

However, more obscure and difficult to interpret are certain one-off textual references to familiar toponyms found in sites remarkably distant from the sites bearing the same names in post-Bronze Age times. The possible reading of the ethnic *na-u-pi-ri-jo-i* (Dative Plural in **KN Fh 5432**) on

a Knossian document<sup>99</sup> may or may not relate to the Argolid site. In this case, excluding the possibility of a similar LBA Cretan toponym must rely upon the absence of *\*na-u-pi-ri-jo* from other LM documents. Similarly, the significance of a ‘flock supervisor’ at Knossos named *a<sub>3</sub>-ku-pi-ti-jo* (**KN Db**

<sup>92</sup> Aravantinos 1987; Palaima 1991, 278.

<sup>93</sup> Masculine Dative Singular *\*Λακεδα(ι)μνίω*, ‘to the Lakeda(i)monian’: **TH Fq 229.4**, 253.[3], 258.3, 275.3, 284.[3], 325.[1], 339.[3], 382.[3]. *ra-ke-<da>-mi-ni-jo* in **Fq 254[+255]** is in all probability a scribal mistake. In five instances by Scribe 305 (**TH Fq 229.4**, 253.[3], 258.3, 275.3, 284.[3], 254[+255.13]) *ra-ke-da-mi-ni-jo* is accompanied by what was initially read as the ideogram FAR (flour). Palaima (2006a, 145–8) has argued persuasively that the sign transcribed as FAR in the *editio princeps* is in fact sign *\*65, ju* which plausibly stands for *υἱός / huyos* (< Proto-Greek *\*huyus* < PIE *\*suyus*), ‘son’ (also in Duhoux 2002–3, 237–47). An interesting variant for the name is provided by **TH Gp 227.2** (probably by Scribe 306): *ra-ke-da-mo-ni-jo-u-jo*, which, apart from being explicit on the presence of the Mycenaean word for ‘son’ (*-u-jo*), also features the inter-consonantal vowel *-(m)o-* (as opposed to the dead vowel in *-mi-*), which produces the more familiar *Λακεδα(ι)μόνιος*, ‘Lakeda(i)monian’. Duhoux (2007, 102–3) has shown that this onomastic variation has historical parallels (Κλεομένης, Κλέου(μ)νις). The overall interpretation of the word seems to be more likely the ‘son of (a man called) Lakeda(i)m(o)nios’ rather than the ‘Lakedaimonian son’ or ‘son of (a place called) Lakedaimon’.

<sup>94</sup> Yves Duhoux has argued with good reason that *ra-ke-da-mi-ni-jo* could very well be an *anthroponym* (Duhoux 2002–3, 179), supported by the references to ‘son’ (see previous note).

<sup>95</sup> Masculine Dative Singular, possibly *Ἀρκάδεμ*, ‘to the Arcadian’: **TH Fq 240, Fq 276**. Other possible (but far less convincing) references to ‘foreigners’ from the same Theban assemblage may be included in **Fq 214**: *a-ra-o* (from Halai in Opuntian Locris, unrelated to any maritime itinerary) and an *o-to-ro-no*, ‘Othronian’ (too far fetched in my opinion). Recently, Alexander Uchitel drew an attractive analogy between the new Thebes **Fq** tablets and Sumerian texts mentioning ‘messengers’ stations’ at Lagash (Ur III period) as well as Persian documents from Achaemenid Hadaran (Uchitel 2004). Uchitel’s suggestion might imply that the Theban centre sent rations to personnel placed in distant locations, which is so far unparalleled in other ‘palatial’ administrations, but this has implications apparently beyond the scope of this work.

<sup>96</sup> See the classification of these ideograms in Bennett & Olivier 1973, 231.

<sup>97</sup> Aura Jorro 1985, 348 *s.v.*

<sup>98</sup> Vandenabeele & Olivier 1979, 225–33; Palaima 1991, 281; Olivier 1996–7, 285. However, Matthäus (1980, 114) is less confident about this identification.

<sup>99</sup> See Palaima 1991, 280 for reference to the new joins for this document.

**1105.B** Αἰγύπτιος) is difficult to evaluate: the number of the sheep he is in charge of is rather modest and the main implication of this occurrence is linguistic, not historical.<sup>100</sup> The same can be said for the (ex-ethnic) personal name *mi-sa-ra-jo* (**KN F(2) 841.4**), interpreted as \*Μισράγος (< W. Semitic *mišr* = Hittite *mizri*, ‘Egypt’). Such diplonymy with regard to extra-Aegean territories might also be paralleled in the case of references to Cyprus (see below).

The case of *ethnica* referring to regions in the eastern Aegean and western Anatolia and identifying female textile workers at the Pylos **A**-series (*ra-mi-ni-ja* < Λάμνος<sup>101</sup>; *ki-si-wi-ja*<sup>102</sup> \*Χῤῖαι < toponym \*Χῤῖος, later Χίος; *mi-ra-ti-ja* < Μίλᾱτος; *ze-pu<sub>2</sub>-ra<sub>3</sub>* < Ζεφυρία;<sup>103</sup> *ki-ni-di-ja* < Κνίδος) is more clear, as it may reflect an interest in acquiring personnel (of undetermined status) from an area that is, for once, geographically *consistent*.<sup>104</sup> Moreover, the inter-association of these occurrences in thematically similar Pylian texts enables us to resolve the question of whether this LBA Milātos referred to Anatolian Miletus or the Cretan Milatos in favour of the former. However, the many references to *mi-ra-ti-jo* from the new Thebes tablets (Odos Pelopidou deposit),<sup>105</sup> isolated as they seem to be from other West Anatolian references, could equally well refer to the Cretan site and we should not project without hesitation the Pylian testimony here.

*ku-pi-ri-jo* (almost<sup>106</sup> unanimously interpreted as Κύπριος) is perhaps the term that has attracted most attention, due to its potential to illuminate Aegean-Cypriot relations in the LBA as well as the role of Cypriot in ‘trade’ patterns of the Aegean LBA III ‘palaces.’ As is the case with Theban *ra-ke-da-mi-ni-jo*, there is no way of determining the extent of geographic reference of the toponym whence the ethnic was derived (presumably \**ku-po-ro*, Κύπρος); we are thus desperately uncertain whether the entire island, a territorial polity or a specific Cypriot site are indicated. Palaima has conveniently highlighted the main features of the term stressing the wide range of commodities and activities it is associated with (textile industry, dye material, coriander and oil), including a reference to what seems to be a religious offering of honey *ma-ki-ro-ne* \*Μαγίρονει (Dat.) ‘to *Magirōn*’ (**KN Gg(2) 995**),

a Knossian *hapax*, plausibly identifiable as a theonym.<sup>107</sup> Palaima makes the important point (albeit ultimately an *argumentum ex silentio*) that, unlike the Pylian textile workers from E. Aegean/ W. Anatolia, \**ku-pi-ri-ja* women are not mentioned. Correlated with the extremely differential distributions of Anatolian and Cypriot imports in the Aegean, Palaima’s assumption that this silence is meaning-

<sup>100</sup> We have certainly more salient sources (e.g. Keftiu representations and references, Aegean *Aegyptiaka* or Egyptian *Aegaeaka*) to address the complex set of questions relating to relations between Egypt and the Aegean world in later LBA.

<sup>101</sup> The ethnic occurs certainly only in **PY Ab 186.B** (feminine) and possibly in **An 209.2** (masculine). Note the identification of a shepherd in **PY Cn 719.6** and **328.4** as *ra-mi-ni-jo* (\*Λάμνιος, personal name or ethnic ‘Lāmnian’ > ‘Lemnian’?). The locality where this Λάμνιος supervises his flock of sheep is *pi*-\*82, along with a shepherd called *ku-pi-ri-jo* in the **719.7** (Κύπριος, see below), so that this contextual association points rather to the interpretation of both as ethnics.

<sup>102</sup> Note the possible occurrence of personal names deriving from this ethnic in some Knossian texts (**V(2) 60.2**; **Xd 98**; **Od(1) 570.b**).

<sup>103</sup> Reported as an ancient name for Halicarnassos (Str. 14.656).

<sup>104</sup> The essential readings on these references are still Hiller 1975 and Chadwick 1988. Palaima 2007 offers the most recent overview of references of Anatolian ethnic adjectives on Linear B documents, focusing on the problems of finding the name Τρώς among these, although he finally concludes, with good reason, that types *to-ro*, *to-ro-o* or *to-ro-wo* are more likely linked with /Tlōs/.

<sup>105</sup> Masculine Dative Singular, Μιλᾱτίω: **TH Fq 177.2**, **198.5**, **214.[12]**, **244.2**, **254[+]****255.10**, **269.3**, **276.3**.

<sup>106</sup> One should mention the early transcriptions of the adjective as \*Γύβλιος, deriving from Gubla (ancient name for the city later known as Byblos, thus potentially same as Βύβλιος) supported by O. Szmerenyi and M. Doria (Palaima 2005, 48 n. 41 [with references] calls this -justifiably- a “wild card”).

<sup>107</sup> A specific Cypriot link for *ma-ki-ro-ne* was suggested originally à propos the publication of the join among the four components of this tablet in Killen & Olivier 1966, 63; Aura Jorro 1985, 419, s.v.; Palaima 2005, 22–3. Μαγίριος is attested as an *adnomen* to Apollo in two Cypriot syllabic inscriptions from Pyla. As a justification of the Linear B spelling, one may compare the spelling variation among Doric μάγιος, Attic μάγειος and Aeolic μάγοιος ‘butcher’ ‘meal-preparer’. It is quite thought-provoking to consider that this is a true LBA theonym, whose initially *sacrificial* LBA semantic context was later transferred onto the 1<sup>st</sup> millennium BC as a widely used term for *meal* preparation and butchery, as sacrificial victims were often to be consumed. Palaima has already made the highly attractive suggestion that what we have here is a case for an “arguably a Cypriot deity installed in Mycenaean Crete” (Palaima 2005, 33).



ful and indicative of Cyprus' "different relationship with the Mycenaean centres than those along coastal Anatolia" gains credence.<sup>108</sup> Equally important, I wish to argue, may be the regional variations in nuances of the term *ku-pi-ri-jo*: Its contexts are far more diverse in Knossian documents, while all Pylian occurrences most probably are personal names (**Cn 131.3**; **Cn 719.7**; **Jn 320.3**; **Un 443.1**).<sup>109</sup> Two interpretations of this term in the Knossian texts are the most compelling: either *ku-pi-ri-jo* refers to individuals (whether Cypriots or not) that had a considerable role in the management of the relationship between the Aegean LBA III administrations and the Cypriot polities (or a polity),<sup>110</sup> or it may also occasionally refer to commodities destined for Cyprus.<sup>111</sup>

Knossian *a-ra-si-jo* would most probably not have attracted significant attention at all, were it not for its phonetic similarity to *Alashiya*, the now generally accepted Egyptian, Hittite and Syrian name for Cyprus.<sup>112</sup> If the shepherd name *a-ra-si-jo* on **KN Df 1229** is indeed referring to *Alashiya*,<sup>113</sup> then the most exciting implication is not that of an added Cypriot reference in Mycenaean onomastics, but that LBA Greek-speakers knew and used a name for Cyprus that had become virtually obsolete already in Homer and later Greek and, most importantly, that LBA Greeks may have perceived some kind of *differentiation* (plausibly, but not necessarily geographical) between *Alashiya* and *\*ku-po-ro*, as could be the case between *a<sub>3</sub>-ku-pi-ti-jo* and *mi-sa-ra-jo*; this hypothesis would explain the coexistence of both names as onomastic resources in the Knossian documents, as well as their different trajectories in 1<sup>st</sup> millennium Greek.

Fishing is not attested at all in the extant Aegean administrative documents and the low status of this activity throughout classical antiquity suggests that the silence of the records may reflect the actual lack of 'palatial' interest. Even if Pylian *de-ku-tu-wo-ko* (**Un 1322.3**) is read 'to the net-maker' (*\*δεκτυφογῶ*), as the context of this reference allows,<sup>114</sup> we do have good iconographic evidence for the use of nets in trapping from the far more prestigious *hunting* scenes.<sup>115</sup>

Finally, a source of indirect evidence for the familiarity of LBA Greeks with maritime activities,

<sup>108</sup> Palaima 2005, 29. For imports see the catalogues and tables in Cline 1994 and the further quantification in Manning & Hulin 2005.

<sup>109</sup> Reference of *ku<-pi-ri-jo>* cloth (**KN L(8) 1647**) and wool (e.g. **TH Of 26**) depends on the interpretation of the single syllabogram *ku*, both ligatured and as adjunct, as an abbreviation for *ku-pi-ri-jo*, which is arguable (accepted by Palaima 2005), but not yet definite. The *full* spelling *ku-pi-ri-ja* defining the wool ideogram appears in the new text of **KN Od 667** (Melena *apud* Bennett *et al.* 1989, 204–5). We should note the possibility that *ku* applied to the *Cyperus* ideograms **\*124**–**\*125** may be interpreted as an abbreviation for the *Cyclades*, where this plant was renowned and obtained from in classical times (Fortes 2000; Palaima 2005, 26). However, the collective geographic name *Κυκλάδες* ('the encircling ones') does not occur before Herodotos.

<sup>110</sup> Killen (1995) argued persuasively for this, accepting that Knossian *ku-pi-ri-jo*, when used as personal name, seems to function as a 'collector.'

<sup>111</sup> This is the interpretation favoured in Palaima 1991, but see Palaima 2005 for a more balanced discussion.

<sup>112</sup> This identification, hotly debated in previous decades, has now been generally settled. A recent petrographic study of letters mentioning Alashiyan affairs from Tel El-Amarna (Egypt), Akhenaten's short-lived capital, and Ras Shamra (Syria), ancient Ugarit, has suggested their provenance from the region of Troodos Mt. in central Cyprus (Goren *et al.* 2003). This study has also broader implications for the sociopolitical organization of LBA Cyprus, since the fabric of those letters is different than that of the Enkomi 'Cypro-Minoan' tablets.

<sup>113</sup> Most likely *Ἀλάσσιος*. There are indeed other possibilities, although the Alashiyan connection is the most commonly featured in the literature, like for instance with Homeric *Ἀλήσιον* in Elis. We may also notice that the epithet known from a Phoenician inscription is *Alasiōtās*, not *Alās(s)ios*, but Palaima argues convincingly that *both* Mycenaean *a-ra-si-jo* and Alashiya could have derived from a hypothetical non-Greek *Ἀλασσα* (Palaima 2005, 49 n. 54).

<sup>114</sup> **PY Un 1322** also refers to quantities of **\*120** (GRA, wheat or barley) to an *i-te-we* (Dat; Nom. *i-te-u* *\*ιστεύς* 'loom-worker') in .4 and also records the term *we-a<sub>2</sub>-no* in .5 probably to be reconstructed as *we-a<sub>2</sub>-no-wo-ko* 'maker of *we-a<sub>2</sub>-no* cloth' here as well as in .6 (cf. *\*ἑῃᾱνός* > Homeric *ἑᾱνός* from IE *\*wes-*). For *de-ku-to-wo-ko*, *i-te-u* and *we-a<sub>2</sub>-no* see Aura Jorro 1985, 165 and 289 and Aura Jorro 1993, 414 respectively.

<sup>115</sup> Guest-Papamanoli (1996, 343–4) considers an interesting ethnographic analogy between Minoan net-trapping of animals and *battue* hunting at Cameroon. Hunting nets are depicted in contemporary artefacts, such as the Tiryns Boar Hunt (Immerwahr 1990, 130) or the LM IIIB *larnax* from Armenoi chamber tomb 7 (Merousis 2000a, 112–3, Cat. No. 20, pl. 7 *bottom*). Palaima (1991, 284–5) notes the possible 'hunters' (*ku-na-ke-ta-i*, literally 'leaders of dogs') mentioned in **PY Na 248** and allows for a maritime association through the intermediate link of cloth production terms in both **PY Un 1322** and **Ad 684** (where the sons of Pylian rowers are mentioned). Needless to say, both organic remains and icono-

Table 2. LBA Greek personal names with components semantically related to maritime activities. From the semantic range of positive meanings that \**e-u* εὖ may take, I have chosen in each case the nuance that seemed most appropriate.

Linear B spelling <sup>1</sup>	Alphabetic spelling	Textual occurrences	Scribe	Find-place <sup>2</sup>	Etymology
<i>a-pi-a2-ro</i> (I: 80)	Ἀμφίθαλος	<b>PY An 192.1</b>  <b>PY Ea 109</b> <b>PY Ea 270</b> <b>PY Ea 922.a</b> <b>PY On 300.2</b> <b>PY Qa 1297</b>	22  43 43 43 Class ii 15	Room 8 (Archives Complex)  Room 8 (Archives Complex) Room 8 (Archives Complex) Room 8 (Archives Complex) Room 8 (Archives Complex) Room 99 (Northeastern Building)	ἄμφι ‘both sides’ + ἄλς ‘sea’ ‘‘sea-girt’’
<i>e-u-na-wo</i> (I: 263)	*Εὐνάφος	<b>KN As(2) 1520.9</b> <b>KN Bk 799 verso .2</b> <b>KN Dv 1206.B</b> <b>KN Np(2) 5725</b>	105 104 117 134	Corridor of Sword Tablets? (East Wing) Area of Bull Relief (North Entrance Passage) East-West Corridor (East Wing) Area of Bull Relief (North Entrance Passage)?	εὖ ‘good’ + νᾱῦς ‘ship’ (*νᾱϜ-)
<i>e-u-o-mo</i> (I: 263)	Εὐχορμος	<b>KN Vc(5) 127</b>	124-s	Room of the Chariot Tablets (West Wing)	εὖ ‘well’ ‘suitable’ + ῥορμος ‘harbour’ adj. use in Homer <i>Od.</i> iv 358, ix 136: λιμὴν εὐχορμος
<i>e-u-po-ro-wo</i> (I: 264)	*Εὐπλοφος	<b>KN V(3) 7620.3</b>  <b>PY Jn 601.2</b> <b>PY Jn 693.8</b>	115  2 2	West Magazine VIII  Room 8 (Archives Complex) Room 7 (Archives Complex)	εὖ ‘easy’ + *πλόφος > πλόος > πλοῦς ‘navigation’
<i>na-u-si-ke-re</i> [-we] (I: 466)	*Ναυσικλέφης	<b>KN Xd 214</b>	124-x	Room of the Chariot Tablets (West Wing)	νᾱῦς ‘ship’ (*νᾱϜ-) + *κλέφος ‘glory’, ‘fame’
<i>na-wi-ro</i> (I: 466)	*Νάφιλος	<b>KN Db 1507.B</b>	117	East-West Corridor (East Wing)	νᾱῦς ‘ship’ (*νᾱϜ-) + anthroponym suffix – ἴλος?
<i>o-ku-na-wo</i> (II: 23)	*Ωκύναφος	<b>KN V(2) 60.4</b>	124-B	Room of the Chariot Tablets (West Wing)	ὠκύς ‘fast’ + νᾱῦς ‘ship’ (*νᾱϜ-)
<i>o-ti-na-wo</i> (II: 53)	*Ορτίναφος	<b>PY Cn 285.14</b>	1	Room 8 (Archives Complex)	ὄρνυμι ‘rouse’ + νᾱῦς ‘ship’ (*νᾱϜ-)

<sup>1</sup> Arab numbers within parentheses in far left column refer to pages in Aura Jorro 1985 (I), 1993 (II).

<sup>2</sup> Site is indicated by each document’s abbreviated prefix (**KN** = Knossos; **PY** = Pylos).

and more specifically navigation, is the evidence of certain *noms parlants*. The choice of name for an individual is well established as related to the social (ascribed) position (most likely of the family) and it usually makes use of things, concepts and activities that enjoy a special (but not necessarily high) status.

One may recall the lively debate between parents for naming a young boy narrated in Aristophanes (*Nub.* 62-67), where such statements are made in a comically explicit manner. It is immediately apparent from the pertinent evidence (Table 2) that such ‘maritime’ onomastics indicate, unsurpris-

ingly, a special status for ‘ship’ (ναῦς) and ‘navigation’ (πλοῦς), the nouns most commonly used as components for the pertinent personal names and, unsurprisingly again, the meaning of these *noms parlants* is always euphemistic. The strong departmentalisation of the Knossian administration, where palaeographic and thematic overlap among epigraphic assemblages is rare, impedes proper prosopographic evaluations, something apparent in the case of references to Knossian *e-u-na-wo*.<sup>116</sup> Nevertheless, judging from their positions in Knossian sheep tablets, one *e-u-na-wo* and the *hapax na-wi-ro* seem to be ‘flock supervisors’ linked with the toponyms *ri-jo-no* (unidentified so far) and *pa-i-to* /*Phaistos*/ and this may also be true for Pylian *o-ti-na-wo*, linked with *ro-u-so*; Knossians *e-u-o-mo* and *o-ku-na-wo* may be charioteers;<sup>117</sup> *na-u-si-ke-re[-we]* and Knossian *e-u-po-ro-wo* are *hapax graphomena* and occur in obscure contexts; Pylian *e-u-po-ro-wo* is certainly linked to the Pylian bronze industry; the pattern is generally inconclusive. So far, we do not possess evidence to suggest any clearcut link between the meaning of these names and the status or occupation of the individuals who bore them,<sup>118</sup> yet their existence shows that familiarity with maritime activities was significant to families whose members were linked to both the Knossian and Pylian administrations.<sup>119</sup> More important in this last respect may be the Pylian term *po-ro-wi-to* (**Fr 1218.1**; **1221**; **1232.1**; Genitive *po-ro-wi-to-jo*: **Tn 316 recto .1**), ingeniously interpreted long ago by Leonard Palmer as *\*Πλωφιστός*, the most navigable (month)<sup>120</sup> Despite reasonable doubt on whether *po-ro-wi-to* is actually a canonical Pylian ‘month’,<sup>121</sup> Palmer’s etymology remains the most convincing and, if anything, serves as a strong indicator of the importance of navigation for the Pylian polity.

### *Direct evidence: references to ship construction, maintenance and personnel*

Unfortunately, the ‘main dish’ of this brief survey of Linear B evidence is less exciting, less variable and more ambiguous than the ‘appetizers’ previously discussed. Palaima explains the general paucity of references to ships as reflecting the general paucity in explicit mention of trade,<sup>122</sup> yet he admits that

graphic evidence confirm that fishing was widely practiced as a food resource (see Sakellarakis 1974 and Powell 1992 on fishing and fishermen in Aegean art).

<sup>116</sup> Landenius Enegren 2008, 78.

<sup>117</sup> Charioteers and high-status individuals (including the Knossian ruler himself) may be assigned prestige military equipment (corselets, horses and equipped chariots) in the **Vc** records from the Room of the Chariot Tablets (Driessen 2000, 210–1) and **V(2) 60.1b** from the same find-place actually mentions *a-ni-g-ko* *\*ἀνίοχοι* ‘charioteers’ (literarily ‘they who hold the reins’).

<sup>118</sup> In his recent doctoral dissertation on Pylian prosopography, Dimitri Nakassis explored the two homonyms between the two alums (*tu-nu-pte-ri-ja*) records (**An 35** and **Un 443**) and the Pylian **Jn** series, namely *a-ta-ro* and *ku-pi-ri-jo*. *tu-nu-pte-ri-ja* was certainly shipped to Pylos, whether from Melos or Cyprus. Concluding –with good reason– that names reported in these alum records could relate to overseas affairs (traders or entrepreneurs), Nakassis notes that, if we are to identify them with the bronze-smiths with the same names, then some of the latter where also entrepreneurs: “Perhaps it is not coincidence that we also have a smith’s name *e-u-po-ro-wo*, whose name means ‘good sailing’” (Nakassis 2006, 196–7, citation from 286, n. 80).

<sup>119</sup> We will not make extended reference to onomastic or other material that can be plausibly, yet less reliably, linked with terms for the ‘sea’ in general, as in *a<sub>2</sub>-ri-e* in **An 724.5**, plausibly *\*ἄλιην*, an early Accusative Singular (object of verb *a-pe-e-ke* preceding it?) of *ἄλιεύς* ‘fisherman’. Perpillou (1968, 209) who first made this suggestion, brilliantly assumed an early meaning ‘man of the sea’ from *ἅλς* ‘sea’ (a word of non-IE etymology though, as can also be argued for suffix *-εύς*). Moreover, the Pylian ‘flock supervisor’ *po-te-u* may be *Ποντεύς* (< *πόντος* ‘sea’), but equally possibly *Πορθεύς* (see Aura Jorro 1993, 158, *s.v.*).

<sup>120</sup> Palmer 1955, 11 (commenting on **PY Tn 316**, then named **PY Kn 02**); also references in Aura Jorro 1993, 150–1, *s.v.*

<sup>121</sup> Genitive *po-ro-wi-to-jo* could indicate time, but the type is not accompanied by Genitive Singular *me-no*, *μηνός*, ‘month’ as in the case of *pa-ki-ja-ni-jo-jo me-no* on **PY Fr 1224**. However, it is true that the indication of the term *me-no* is far more popular at Knossos than at Pylos, so this may only indicate that *me-no* was self-evident at the latter site.

<sup>122</sup> The paucity of Linear B references to maritime affairs and to overseas trade in general is somewhat of a commonplace in relevant literature. The nature of the textual evidence enables us to imagine several reasons why this should be so, although none is more than reasonable speculation: Leaving accidents of recovery aside, seasonal timing, deteriorating trade at the close of the ‘palatial’ period (most documents were preserved as part of broad fire destruction horizons and this is the clear case with most Knossian and Pylian documents) and a view of LBA IIIA–B maritime trade dominated by private entrepreneurs are among the most serious assumptions put forward so far. Of course, references to trade may be hidden or implied in terms not yet interpreted in this way and Killen has argued for a special role of the individual named *ku-pi-ri-jo* as an organiser of trade between the Aegean and Cypriot polities.

we should expect more references to a *military* fleet, as military affairs are clearly *within* ‘palatial’ interests. At this point, it may be relevant to recall that we have extremely meagre evidence for warships and sea battles altogether in the Mediterranean world before the copiously illustrated (and slightly bombastic one has to suspect) defeat of the ‘Sea Peoples’ by Ramses III at the Delta in the early 12<sup>th</sup> century BC.

A mere three texts from Pylos (**An 1**, **610**, **724**) record inventories of ‘rowers’ (*e-re-ta* ἐρέται < Nom. ἐρέταις)<sup>123</sup> and were all found within the so-called ‘Archives Complex’, the locale of the final extant stage of Pylian record processing.<sup>124</sup> Allative *pe-re-u-ro-na-de* (**An 1.1**) links this ‘group’ to **An 656** where a *pe-re-u-ro-ni-jo e-qe-ta* may be recorded (.16). Killen noticed that the practice revealed in **PY An 1**, where Hand 1 recorded the formation of a crew of 30 rowers drawn from five different settlements has remarkable Ugaritic parallels.<sup>125</sup> A conservative estimation of the rowers recorded on **PY An 610** (ca. 600, since most numerals were on missing pieces of the document) enables the manning of a *minimum* of 12 ships.<sup>126</sup> The much discussed tablet **An 724** records rowers absent at *ro-o-wa*, presumably a coastal site, generally identified as the Pylian main port.<sup>127</sup> A re-examination of the document revealed a sketch of a ship on its *verso*,<sup>128</sup> which shows a bewildering thematic link with the text recorded on the tablet.<sup>129</sup> Even more intriguing however is the association of five ‘rowers’ (**An 724.5–.6**) with a prominent Pylian figure named *e-ke-ra<sub>2</sub>-wo*<sup>130</sup> and one more associated with the high-status official *ra-wa-ke-ta* (**An 724.7**).<sup>131</sup>

A number of intelinks<sup>132</sup> between these documents illuminates an aspect of Pylian maritime af-

term to the generalized meaning ‘underling’ or, alternatively, two homophones that are *both* attested in the Linear B records (Chadwick 1976).

<sup>124</sup> **An 1** and **610** were written by Hand 1, the Pylian ‘master-scribe’ (Palaima 1988, 188–9) or, rather, a high-status literate official, a fact that might attest to the importance of these affairs for the central administration. Possible evidence for identifying *e-re-ta* in two Knossian documents (**As(1) 5941.1–3** and **C 902.11** referred in the previous note) may also be considered.

<sup>125</sup> Killen 1983.

<sup>126</sup> Palaima 1991, 285. If we accept the possibility that the 30 rowers on **PY An 1** are the “full crew of the single ship” (Chadwick 1987, 79; Palaima 1991, 285), and *if* the ship referred to both **PY An 1** and **610** are of the *same* type (the latter being a crucial point), then it follows that the c. 600 rowers could manage 50 ships. Palaima (1991, 286) develops the interesting hypothesis of ‘palatial’ support for families of the rowers while the latter were on service. On **PY Ad 684** (Hand 23, *same as in An 724*) a *lat. sup.* annotation could identify some of the sons of female weavers at *pu-ro* (Pylos) as also “sons of rowers” (*e-re-ta-o ko-wo*) localised at the location *a-pu-ne-we*. If this *a-pu-ne-we* by Hand 23 is the same (a scribal variant?) as *a-po-ne-we* as a site whence rowers are recruited (**PY An 1.6** and **610.10**), then Palaima is justified to draw a parallel with the classical Athenian practice of raised rowers’ salaries aimed to support their families in their absence on service.

<sup>127</sup> Aura Jorro 1993, 261, *s.v. ro-o-wa*.

<sup>128</sup> Examination of **PY An 724** by Melena, Bennett and Palaima on 1.10.1990 (Palaima 1991, 287, pl. LXIIIb; Palaima 1992, 65, pl. XXb).

<sup>129</sup> As already noted in Palaima 1992, 65.

<sup>130</sup> This remarkable individual is argued by some scholars to be identifiable with the Pylian *wa-na-ka* (ῥάναξ, ‘sovereign, king’) (see chiefly Palaima 1995, 134–5 and 2006b, 62–3 with past references). Although I hesitate to accept this identification, the contexts in which *e-ke-ra<sub>2</sub>-wo* appears allow an alternative interpretation that leaves the main point unaltered: Even if not royal, *e-ke-ra<sub>2</sub>-wo*’s status is especially prominent and his connection with *ra-wa-ke-ta* appears to be more than simply fortuitous: They both appear together, once again, in the intriguing *do-so-mo* record of **PY Un 718** (see Petrakis 2008).

<sup>131</sup> \*λαῖῤῥάγέ(ϙ)τάς, ‘leader/ gatherer of \*λαῖρός’, if the latter is accepted as the ‘(armed) people’ (see Wyatt 1994–5 for a survey). Nikoloudis (2008) has also offered an intriguing reassessment of the function of this official (at least at Pylos) as related to the integration of external communities into the Pylian polity.

<sup>132</sup> Due to space constraints, our treatment of these issues is necessarily extremely selective and aims to give a picture in broad strokes. A more detailed overview would engage us into a much deeper textual analysis and a consideration of broader Pylian affairs that cannot be accommodated here. Del Frio 2002–3 is the most recent thorough analysis of **An 724** and its interlinks.

<sup>123</sup> *e-re-ta* as the LBA Greek term for ‘rower’ is primarily based on the compelling Sanskrit parallel *arítar* with a similar meaning (Aura Jorro 1985, 241, *s.v.*). It may be worth-stressing that this interpretation finds its stronger support among Pylian, rather than Knossian, references. Chadwick, following an early cautious note by Palmer, outlines a significant interpretative problem pertinent to the occurrence of the term as a high official title in **KN C 902**, alongside *ko-re-te-re* or *u-wo-qe-we*. Chadwick ingeniously points to Greek ὑπηρέτης ‘servant’, whose second component is morphologically the same and suggests a semantic development from a technical nautical

fairs, probably a militaristic one, as *o-ka* \*ὄρχα ‘military unit’ (cf. ὄρχη) in **An 656.1, .11** may indicate;<sup>133</sup> fragments of both **An 724** and **An 610** were found on the same location within Room 8 (of the ‘Archives Complex’ at Pylos), a fact that gains significance from the fact and they both deal with affairs of the prominent *e-ke-ra<sub>2</sub>-wo* (**An 610.13; An 724.5**);<sup>134</sup> there is a broad correspondence between the numbers of rowers recorded with the same toponyms in **An 1** and **An 610**, which approaches a rough 1:5 ratio.<sup>135</sup> The presence of the *o-ka* leader (**An 654.11**) *ta-ti-qo-we-u* on **An 724.8** also cannot be coincidental. The broad picture from these interconnections points to the military purposes behind the compilation of these documents; what is more interesting, however, is that it might accord well with the iconographic *ethos* of Hall 64 (see also *supra*).

The remarkable thematic parallelism between the text on the *recto* and the sketch on the *verso* of **An 724** may point at the function of this image as an indicator of the document’s content, perhaps to the aid of helpers of Pylian ‘scribes’/ officials, which may have been illiterate.<sup>136</sup> Nevertheless, it might be important to stress the similarity of this image, mastless as it is, to some earlier ship imagery,<sup>137</sup> but also to the new ship fresco from Hall 64 (see *supra*).

A remarkable document from Knossos has also yielded the so far unique sign \*259 (**KN U 7700**), which evidently bears a resemblance to the image of a vessel, albeit utterly abstracted.<sup>138</sup> Unlike the sketch on **PY An 724 verso**, this sign functions properly as an ideogram followed by numeral 1. If the sign preceding the preserved sequence ] *re-ta* is identified as *g*,<sup>139</sup> we might have a sort of qualification for the number of rowers *alternative* to them being counted as men (ideogram *VIR* + numeral). If \*259 is indeed an ideographic rendering for ‘vessel’, an option the editors of the new text cautiously but unnecessarily hesitate to follow,<sup>140</sup> it would designate a ship’s complement of rowers; the only assumption we need to make is that this number should have been self-evident to the administration, something absolutely expected if the ‘palace’ built its own ships.

This last remark brings us to the by far most compelling evidence for ‘palatial’ involvement in maritime affairs, the occurrence of the term *na-u-do-mo*

(\*ναυδόμος < ναῦς ‘ship’ + δέμω ‘build’ ‘construct’) at both Pylos and Knossos. Their relation to ship construction is unanimously accepted, but, as Palaima recognises, their ambiguous context does not allow us to decide conclusively whether they are shipwrights, master-planners responsible for the overall construction of a single ship or specialised carpenters.<sup>141</sup> The structure of **PY Vn 865** where *na-u-do-mo* is the sole heading for a list of 12 individuals identified by their personal names leads us to two main alternatives, according to the grammatic iden-

<sup>133</sup> Aura Jorro 1993, 19–21, *s.v.* *o-ka*; an alternative interpretation as \*ὄρχα could mean ‘(office of) receptions’. Accepting a ‘military’ interpretation of the **PY An** tablets where this term appears (the so-called ‘*o-ka* tablets’) engages one to the nexus of problems related to the state of ‘emergency’ on the eve of the destruction of the Englianos complex. The so-called *o-ka* tablets are generally divided into ‘paragraphs’, distinguished by empty lines, each headed by *o-ka* designated by a masculine personal name in Genitive. It is generally assumed that this individual is the leader/ commander of each *o-ka* unit.

<sup>134</sup> It is beyond of the scope of the present work to get into the problems of the orthography and syntactic position of the type *e-ke-ra<sub>2</sub>-wo-ne* (which morphologically should be Dative but ought also to be the subject of verb –in Nominative– *a-pe-e-ke*). For recent comments on the matter see Del Frio 2002–3, 150–1 (with references).

<sup>135</sup> Killen 1983, 78. Given the certain recurrence of three toponyms among these documents, a reconstruction *ro-o-]wa* in **An 610.4** is entirely possible (suggested by Killen 1983, 74–5 and checked during autopsy by the author).

<sup>136</sup> However, it is difficult to project such an interpretation to other sketches. On the complex problems of such images see Palaima 1992.

<sup>137</sup> See already in Wachsmann 1998, 125, where it is noted that this sketchy image is quite distinct from LBA III ship imagery and more reminiscent of ‘boats’ known from MM–LM I glyptic and a late MH matt-painted jug from Argos (Protonotariou-Deilaki 1987).

<sup>138</sup> Bennett *et al.* 1989, 230–1, fig. 1; Palaima 1991, 286–7, pl. LXIIIa.

<sup>139</sup> Suggestion by Melena *apud* Bennett *et al.* 1989, 231, therefore giving out *g-re-ta* ‘rower’.

<sup>140</sup> “nous préférons le laisser dans les «non identifiés»” (Godart & Olivier *apud* Bennett *et al.* 1989, 230).

<sup>141</sup> Palaima 1991, 288. See also variety of opinions recorded by Aura Jorro 1985, 465–6, *s.v.* *na-u-do-mo*. Inconsistent with the orthography is the interpretation of the term as \*ναυοδόμοι ‘temple-builders’ from first component ναῦος ‘temple’ (later attested only in Aeolic; cf. Laconian νᾱρός, Ionic νηός > Attic νεώς, later *koine* νᾱός). For a possible derivative adjective *na-wi-jo* see below.

tification of the term in question; a Dative Singular (\*ναυδόμω, ‘for the shipwright’) would imply that the individuals mentioned in lines .2–.9 are assigned to a *na-u-do-mo*, presumably to work under his supervision; alternatively, if we accept its identification as Nominative Plural (\*ναύδομοι), **Vn 865** would be a *list* of such specialist craftsmen. Although conclusion is impossible at this point, in both cases we have reference to individuals by personal names and not as a collective group, which may be an indicator of their relative status.<sup>142</sup> Their political significance may be further hinted by the already mentioned tax exemption of a group of *na-u-do-mo*<sup>143</sup> recorded in **PY Na 568** is the largest (50 units of flax) in the **Na** series. The generally accepted link between tax exemptions and the need of the central administration for specific specialised personnel on occasion may hint, as Palaima brilliantly observes, for a *current* (and possibly urgent?) need for ship-building in the Pylian polity.<sup>144</sup> The term also occurs in a Knossian text, although its verbal context there gives no clear information.<sup>145</sup>

The reference to *na-u-do-mo* in Linear B documents from Pylos and Knossos is fairly straightforward evidence for ‘palatial’ interest in maritime affairs (although hardly evidence for proper control), against which other categories of evidence have to be counted.

Those documents whose direct relevance to maritime activities has been more controversial are left for the end of this brief endeavour. Leaving the debated interpretation of *ka-ko na-wi-jo* (in the ‘heading’ of **PY Jn 829**) as ‘ship copper/ bronze’ aside as possibly irrelevant,<sup>146</sup> the materials (mostly apparently wooden) listed in **PY Vn 46** and **Vn 879** have been offered two radically different interpretations, either as building material for architectural construction or wooden parts used in ship building. The lack of helpful pinacological and palaeographic data for these documents and the uncertainty over much of the utterly technical vocabulary included in their texts impedes any conclusive decision between these alternatives, while much discussion has circled around the interpretation of *ka-pi-ni-ja* (**PY Vn 46.2–4**) either as *καπνία*, ‘chimney’ or as deriving from *σκάφος* (hypothetical and linguistically earlier possible form \*σκάφνος) ‘boat, vessel, ship’.<sup>147</sup>

In this context, it is important to note that this use of *σκάφος* as a sea vessel is not encountered in Greek before Herodotos. Although careful in not making conclusive statements about such inconclusive information, Palaima notes that both interpretations are in line with what one is prepared to accept in the light of evidence for wall-builders (*to-ko-do-mo*, \*τοιχοδόμοι) at Pylos, and for carpenters (*te-ko-to-ne*,

<sup>142</sup> However, another possibility might be explored, though tentatively put here: that a shipwright would work with specific specialised technicians (his own ‘work-team’), which he would have asked to be sent from the central administration. Along this argument line, reference by name would answer the need for specification.

<sup>143</sup> Number is indicated by the verb *o-u-di-do-si*, which is certainly 3<sup>rd</sup> person Plural (*na-u-do-mo* being its subject).

<sup>144</sup> Palaima 1991, 287, n.71. Another exempted group is collectively noted as *ma-ra-te-we ra-wa-ke-si-jo* (**PY Na 245**) \*μαλατήρες \*λαῖγᾶγέσιοι. Although the early interpretation of *ma-ra-te-we* as ‘sailors’ (based on the Hesychian gloss μαλατήρες· ναῦται) has not met wide acceptance, Palaima (1991, 287, n.72) draws attention to their link with the high official *ra-wa-ke-ta*, to whom rowers are also linked in **PY An 724.7**. However, from a purely morphological point of view, Petruševski’s (1968, 684) suggestion for \*μαλανθήρες (Nom. Plural; Sing \*μαλανθεύς) seems to be the most plausible so far proposed, but, even if so, the meaning remains obscure (see Aura Jorro 1985, 424 *s.v.* *ma-ra-te-we*). An etymological link with μάλασσω is perhaps to be further explored, as this verb is occasionally used in a technical tense of preparing (‘softening’) raw material for further processing (usually leather, but also metals).

<sup>145</sup> **KN U 736.1**. It is also nearly certain that the term can be reconstructed from *ju-do-mo* in **PY Xa 990.1**.

<sup>146</sup> That the adjective *na-wi-jo* could be etymologically linked to *ναῦς*, ‘ship’ is unquestionable. The problem is rather pragmatological, as it is entirely uncertain what the meaning of ‘ship copper/ bronze’ would mean as opposed to other amounts of *ka-ko*. It would be quite surprising if **Jn 829** were our *sole* record of copper/ bronze coming from overseas, since this would *ad absurdum* implicate that *ka-ko* not thus designated was local or transported through land, which must have been quite time- and labour-consuming and extremely risky. Palaima (1991, 295) justifiably favours the other alternative of *na-wi-jo* as deriving from \*νασφός, ‘sanctuary, temple’ (literarily: (deity’s) dwelling), supported by the fact that this specific kind of *ka-ko* is given (amongst others) by a religious official, *ka-ra-wi-po-ro* (κλαῖφιφόρος, ‘key-bearer’). See Aura Jorro 1985, 466, *s.v.* *na-wi-jo* with standard references to which Milani 1998 and Del Frio 2005 may also be added.

<sup>147</sup> Van Effenterre 1970 originally proposed the nautical interpretation of these tablets. The issue is reconsidered in Palaima 1991, 296–301 and more systematically in Hocker & Palaima 1990–1.

τέκτονες) and ship-builders (*na-u-do-mo*) as attached specialist craftsmen in both Pylos and Knossos.<sup>148</sup> Another point should be added, however: the (probably) technical term *pa-ke-te-re* (plausibly πακτηρες < πήγνυμι) that appears on both these documents is also solely recorded *supra sigillum* on a Pylian sealing (**Wr 1415.α**) that bears the impression of a maritime theme (men aboard what seems to be a longboat).<sup>149</sup> Although such a direct link between seal iconography and their administrative use is hardly discernible in other Aegean cases, the possibility that this may not be entirely coincidental should be borne in mind.<sup>150</sup>

The enigmatic Pylian term *e-re-e-u* has also been interpreted as the title of an official responsible for rowers on the basis of the similarity of its stem with that of *e-re-ta* (the alternative being that it is an anthroponym deriving from a toponym, something like \*Ελεθεύς). Palaima has reviewed the evidence and has favoured the former possibility, emphasising links with *na-u-do-mo*.<sup>151</sup> However, a new perspective on this term has been recently offered. After critically reviewing Palaima's suggestion, John Killen noted the particular (but by no means exclusive) relation of these *e-re-e-we* with toponyms located to the Pylian 'Further Province'.<sup>152</sup> Forwarding the equally plausible etymological relation of *e-re-e-u* with \**e-ro* ἔλος 'marshland', Killen draws an ingenious link between the eastern Messenian marshlands in the valley of Pamisos and the duties that could be revealed by the etymology of the title itself.<sup>153</sup> Although Killen very cautiously does not expand on the precise function of these officials and despite the fact that material evidence on the Bronze Age land-use of the region is at present almost non-existent (with the brilliant exception of the immediate vicinity of Nichoria), we should keep in mind the fascinating possibility that these *e-re-e-we* were connected with attempts at artificial drainage of the extensive marshland valley. Although a 'palatial' involvement in the drainage of the Kopais basin is inferred by the scale of the enterprise rather than specifically indicated, the sheer size of the Gla fortress provides us with an impressive indication for what LH IIIB polities were able to achieve. Albeit in a more indirect way, Killen's reconsideration of the term also implies a connection with extensive water-scapes and 'palatial' interest in their management.<sup>154</sup>

Another problematic piece of evidence for administrative interests on maritime affairs concerns Chadwick's interpretation of the Knossian **Vf [ex V(5)]** set (Hand 125) as related to the record of ships (although never explicitly mentioned as such<sup>155</sup>), which are (presumably) transferred to near Knossos from different Cretan provincial localities.<sup>156</sup> Palaima's exhaustive pinacological reconsid-

<sup>148</sup> Palaima 1991, 300. Hocker & Palaima (1990-1) provide a more detailed discussion of these documents with an emphasis on Bronze Age ship architecture provided by Fred Hocker's expertise. Although their analysis is extremely useful, a conclusive statement is prudently lacking.

<sup>149</sup> CMS I Supplement, no.179. Since an ideogram is lacking, the interpretation of the document is unclear.

<sup>150</sup> We must also consider that πήγνυμι, from which *pa-ke-te-re* may derive (cf. Passive voice stem \*παγ- > Fut. παγήσομαι, Aor. ἐπάγην in Attic), is attested as a second component in the most usual later Greek term for a 'ship-builder' (still in use in modern Greek), ναυπηγός.

<sup>151</sup> Palaima 1991, 301-4. Pertinent texts are: **PY Nn 831.4** (Nominative Sing.); **Na 262.B** (Genitive Sing.); **An 723.1** (Dative or Nominative Dual?); **Cn 1197.5** and **Jn 881.1** (Dative Sing.). See references in Aura Jorro 1985, 239-40, *s.v.* The crucial evidence for such a link are: (1) the concurrence (first observed by Palaima) of *e-re-e-u* with a person named *u-re* on **PY Nn 831**(.2, .4); Palaima correctly notes that the only other Linear B lexeme beginning with this syllabogram sequence is the name referring to a person most likely supervised by a *na-u-do-mo* (**PY Vn 865.9**), thus the nautical associations of *e-re-e-u* are augmented. (2) One should also note that the tax-exemption recorded on **PY Na 262** for an *e-re-e-u*, which would link him with the also exempted *na-u-do-mo* (**PY Na 568**).

<sup>152</sup> Killen 2007, 165-6.

<sup>153</sup> Killen 2007, 166.

<sup>154</sup> This revised interpretation of *e-re-e-we* need not be incompatible with the links with *na-u-do-mo* emphasised by Palaima: tax-exemptions clearly indicate the vitality of the duties of both officials for the 'palatial' administration.

<sup>155</sup> Chadwick (1978, 201) suggests that the toponymic adjectives that appear in all instances in .B are feminine (Nominative Singular?) and could refer to the omitted noun ναῦς, citing the Athenian official sacred ship Σαλαμινία (< Σαλαμής, the island of Salamis in the Argosaronic Gulf) as a parallel. Of course, projecting this Attic Classical information onto the Cretan LBA is not without its problems.

<sup>156</sup> Chadwick 1978. All tablets of the set are of the palm-leaf type with a consistent structure, where sufficiently preserved: .A includes the term *po-ti-ro* followed by two personal names (each followed by numeral "1"), the latter one featuring the enclitic -qe. .B includes only one word, which in most cases seems to be a toponymic adjective.

eration of the set has revealed the sole reliance of Chadwick's argument on his highly attractive (yet inconclusive) interpretation of *po-ti-ro* as 'ποντίλοι', which he interprets as 'seamen'.<sup>157</sup>

A proper interpretation of this scanty textual evidence cannot afford losing sight of the fact that in most cases a more precise interpretation largely depends on what the researcher *expects* those documents to be about, an assumption made on the basis of the broader interests of the 'palatial' administration. Even if 'palatial' involvement in ship-building is clearly manifested (in the *na-u-do-mo* references), the actual purpose of the enterprise remains elusive.

As far as military interests remain more explicit and easily-identifiable among administrative documents than properly commercial ones, the former sphere is bound to remain –at least from our *etic* standpoint– the most likely scope for the maritime activities directly recorded in the Linear B texts. That *e-re-ta* records are interlinked with *o-ka* tablets may therefore be rather indicative, although it is difficult to decide whether patterns linking these documents to more general aspects of 'palatial' socioeconomic organisation<sup>158</sup> reflect the 'norm' or exceptionally distressful situations which were specifically Pylian. A most significant conclusion reached by Killen has been that, even if responsive to an 'emergency' state, the reaction of the Englianos center moved along modes of assembling personnel that were similar to the 'regular' system of tax-assemblage.<sup>159</sup> However, even Killen's brilliant exposition of this analogy might be insufficient for deducing the historical circumstances of the Pylian references, since we are not in position to judge whether the pattern observed<sup>160</sup> in documents such as **Cn 608** and **Vn 20** is indeed 'regular' or it also stems from a pending 'crisis' or other special administrative circumstances.

While such exploitation of the sea for military purposes may be the most safely attested among the tablets, the silence of the texts cannot sufficiently support a total disinterest of the 'palaces' for the commercial aspect of maritime activity. However, as shall be discussed further below, moving to the other extreme is not reliable either; to view the 'palaces' as the sole agents of regional or long dis-

tance trade in their contemporary Aegean world would be an inappropriate *underestimation* of the specificity and selectivity of 'palatial' economic interests on one hand, and an equally inappropriate *superestimation* of their technical means required to exercise such control.

## Post-palatial change: a view from ship iconography

The Postpalatial Bronze Age (LH/LM/LC IIIC, hereafter PBA) is widely understood as a period of instability, characterised by cultural regionalism resulting from the break of interregional commonalities. It is therefore difficult to paint a general picture of the Aegean at the time and the different regional trajectories have to be emphasised.<sup>161</sup> The demise of most crafts discussed in the previous section after the collapse of LBA III 'palatial' administrations, leaves pictorial pottery as the near-exclusive medium of figural representations in the

<sup>157</sup> Palaima 1991, 304–8. The interpretation of *po-ti-ro* as an *occupational* designation (as opposed to a personal name) seems to be safe, as indicated by the structure of most preserved tablets of the set (see footnote *supra*). In that case, *po-ti-ro* would most probably be in Nominative Plural. The only occurrence so far of ποντίλος is in Arist. *Hist.An.*, 525a, 21, where the name is mentioned as a synonym to ναυτίλος, a name used in this work of Aristotle for the mollusc nautilus or argonaut (*Argonauta argo* L.), which is notably popular in Aegean art (see *supra*). With reference to the mention of two individuals after *po-ti-ro*, Chadwick (1978, 201) makes an explicit link with Homeric evidence for the presence of *two* helmsmen or pilots (κυβερνήται, 'governors') aboard. For alternative suggestions, e.g. as a personal name \*Φορτίλος, see Aura Jorro 1993, 163, *s.v.*

<sup>158</sup> See for instance Killen 1983; Palaima 1991, 285–7; Del Freo 2002–3.

<sup>159</sup> Killen 1983, 78.

<sup>160</sup> By accepting that the same pattern as the one observed in fiscal documents appears in records such as **Vn 20** it is by *no means* implied that these parallel documents are 'fiscal' proper. The pattern may be a reflection of the structure of Pylian organization that appears in more than one aspects of the 'palatial' economy.

<sup>161</sup> Dickinson describes instability as the "keynote" feature of this period with main emphases on turbulence and population decline (Dickinson 2006, 67–76, 242–5).



LBA IIIC phase. This may go some way to explain occasionally impressive investment in high-quality craftsmanship indicated by impressive vase-painting even using some sort of ‘polychrome’ effects (e.g. the Mycenae Warrior Vase). Yet pictorial pottery did not penetrate elite tastes everywhere and this seemingly does not relate (at least not directly) to the prosperity or dearth of a region in the PBA: it is quite rare in Messenia (a region where a possible population decline is more ‘archaeologically visible’ than anywhere else) and altogether lacking in the Kephallenian cemeteries that seem to have thrived throughout LH IIIC.

Marine invertebrate fauna is made ubiquitous through the widely distributed Octopus Style stirrup jars.<sup>162</sup> Merousis notes an increase in marine fauna themes (particularly octopuses and fish) in LM IIIC *larnakes* from east Crete.<sup>163</sup> However, the most important evidence from the PBA comes from a significant corpus of ship representations stretching from Kastanas in central Macedonia (Fig. 3f) to the north up to Ashkelon in modern Israel to the east (Fig. 3g).<sup>164</sup> Crete has so far yielded very few examples, of which only the rim-sherd of a cup from Phaistos is undoubtedly correctly identified thematically and safely within LM IIIC (Fig. 3i).<sup>165</sup> These representations exhibit some degree of stylistic diversity seen most clearly when one compares the representation of human figures, e.g. the rowers from Serraglio (Kos)<sup>166</sup> and Bademgediği Tepe<sup>167</sup> with those from Pyrgos Livanaton (Phokis)<sup>168</sup> (Fig. 3e) or the recent Lefkandi representation,<sup>169</sup> mostly dated to LH IIIC Middle. Yet it is extremely important that there are three main features that define the ‘idiom’ of these representations and transcend stylistic idiosyncracies: the figure-headed prow, the ‘horizontal ladder’ pattern and the military connotations of an increasing number of examples.

The *figure-headed prow*, which in no other period becomes more prominent than in PBA iconography, has been interpreted as a sort of ‘bird-head’ device, although a close examination of quite detailed representations like the sherd from Ashkelon (LH IIIC Early) (Fig. 3g)<sup>170</sup> or the Pyrgos Livanaton sherds (LH IIIC Middle) (Fig. 3e top) should have this identification revised: the prow bears spikes

and appendages that make it better understood if described as ‘dragon-like’ or ‘sea monster-like’ (see also Fig. 3a–c; d top left<sup>171</sup>). It is likely that the earliest iconographic attestation of such prows is on a MH matt-painted sherd from Kolonna (Aigina)<sup>172</sup> while the same feature is clearly depicted (albeit sketchily) in the Gazi *larnax* (LM IIIB). The ‘bird’ identification is usually supported on the basis of the depictions of the ships of ‘Sea Peoples’ at the Medinet Habu temple reliefs: however, the Egyptian’s artist’s presumed unfamiliarity with such vessels allows for the possibility that what we see at the sea-battle relief is a conventional rendering of such ‘sea monster-headed’ prows. Michael Wedde’s reconstruction of an actual bird on the figure-headed prow of the Tragana *Viglitsa* (tholos 1) pyxis ship

<sup>162</sup> See for instance the well-known example from Perati illustrated in Dickinson 2006, 123 fig. 5.3:2.

<sup>163</sup> Merousis 2000a, 399, pl. 6 *top*.

<sup>164</sup> The material is catalogued and commented in Petrakis 2006 (also Petrakis 2004 for a summary discussion). New imagery was published while Petrakis 2006 was already in press: Mountjoy 2005 published the new LH IIIB2/ IIIC Early Transitional pictorial crater from Bademgediği Tepe (W. Anatolia) and previously unpublished representations from Enkomi (LH IIIC Middle) and Ekron (Level VIIa). Dakoronia 2006 summed up the Pyrgos Livanaton evidence with some recent fragments. The new representation of rowers from Lefkandi *Xeropolis* (LH IIIC Middle) is beautifully illustrated in the cover jacket of Deger-Jalkotzy & Lemos 2006.

<sup>165</sup> This representation has been quite well-illustrated (Laviosa 1972, 9 fig. 1b; Wedde 2000, 320 no. 609). Another representation from Phaistos is of uncertain date, from LM III whereabouts though (Laviosa 1972, 11–5; Wedde 2000, 320 no. 610 where a ‘LM III’ date is accepted).

<sup>166</sup> Vermeule & Karageorghis 1982, pl. XII.33.

<sup>167</sup> Mountjoy 2005.

<sup>168</sup> For the Pyrgos Livanaton (identified with the Homeric *Kynos*, a name that will not be used here) material see Dakoronia 1991; Dakoronia 1995; Dakoronia 1996; Dakoronia 1999; Dakoronia 2002a; Dakoronia 2002b; Dakoronia 2006.

<sup>169</sup> See Lemos *apud* Whitley 2004–5, 51, fig. 90 (Lefkandi 2004 season report) and also illustrated in the jacket of Deger-Jalkotzy & Lemos 2006.

<sup>170</sup> Wachsmann 1998, 201, fig. 8A.1.

<sup>171</sup> Petrakis 2006, 199–206. To these examples we should now add the Enkomi representation recently reconstructed and published by Mountjoy (2005, pl. XCVIIId).

<sup>172</sup> Siedentopf 1991, 55 no. 75 (with references), Taf. 14:75. The interpretation as a ship is considered as uncertain by Wedde (2000, 238).

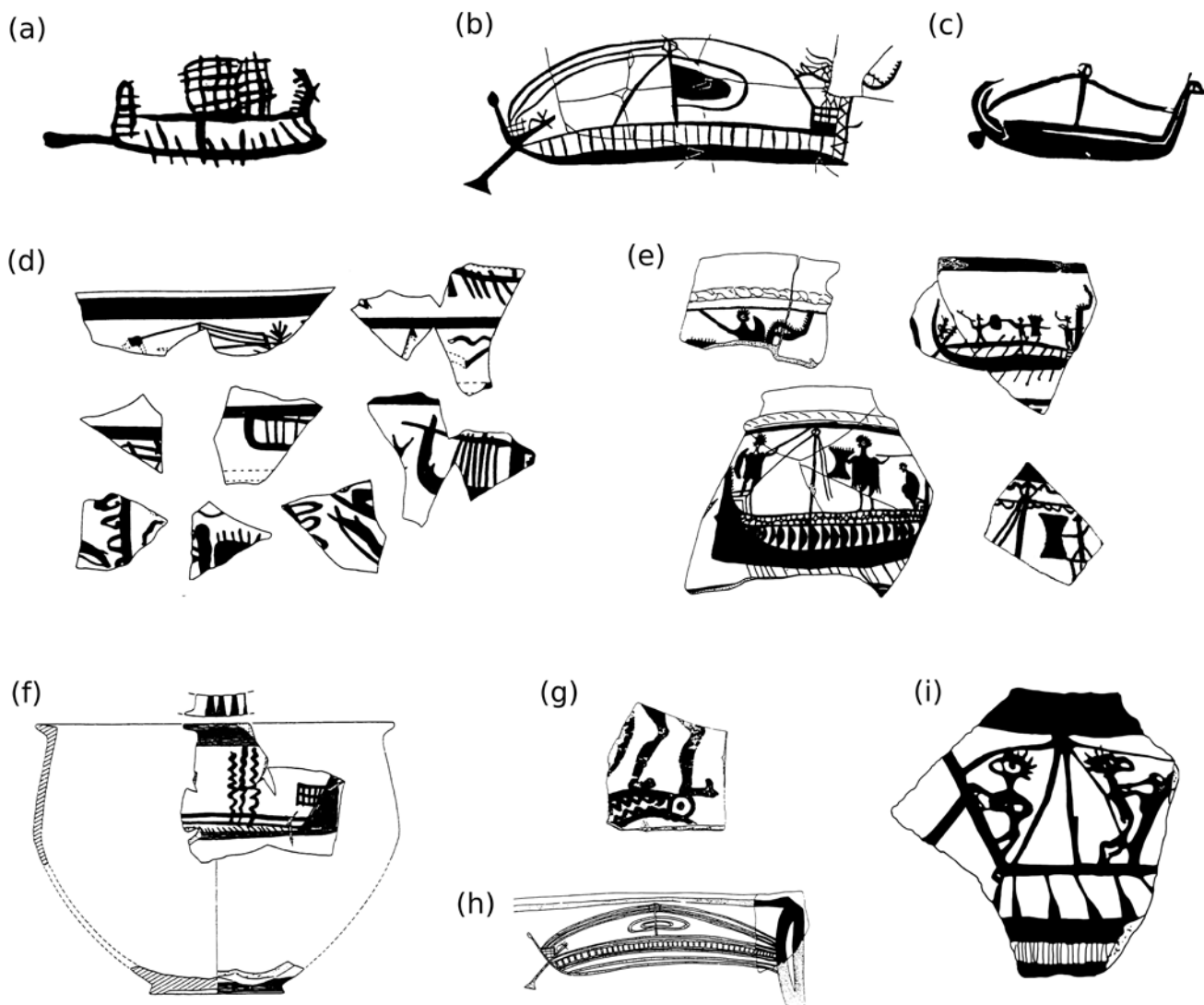


Fig. 3: Examples of PBA ship imagery. Figures redrawn by the author (Figures after Wedde 2000, courtesy of M. Wedde, except where otherwise noted). (a) Asine miniature stirrup jar, (b) Tragana pyxis (after Korres 1989), (c) Skyros stirrup jar, (d) group of sherds from the Phylakopi 'kalathos' (original drawing by P. A. Mountjoy), (e) sherds depicting Pyrgos Livanaton warships, (f) crater from Kastanas, (g) sherd from Ashkelon (Israel) (after Wachsmann 1998, 201, fig. 8A1; courtesy of S. Wachsmann), (h) krater(?) sherd from Varkiza (uncertain identification), (i) sherd from a LM IIIC cup from Phaistos (after Wachsmann 1998, 141, fig. 7.27; courtesy of S. Wachsmann). Figures not to scale.

(LH IIIC Middle)<sup>173</sup> makes the difference between bird and the creature depicted on the prow even more explicit. Egyptian ship imagery still provides an interesting interpretative clue: Although the warship as a special type of vessel is not extant in New Kingdom Egypt (rather many types of craft built for other purposes served that function when need arose), we may interestingly observe that Egyptian ships are sometimes depicted as having prows with lion-heads in whose open mouth one

can see the head of a recognisable bearded Asian.<sup>174</sup> This is a direct threat aimed at the enemy invad-

<sup>173</sup> See Korres 1989 (the most detailed study of the representation so far published) and Wedde 2000, 324, no. 643. The presence of a bird (presumably depicting a living bird, not a sculptured decoration) may be anticipated by the presence on a bird on prow in one of the ships on the Enkomi amphoroid crater (LH IIIB Early) (Fig. 2b).

<sup>174</sup> Landström 1970, 111-2 (detail 347).

ers and one directly linked to the military spirit of the representation. Likewise, a similar function for the ‘dragon/ monster-like headed’ prow seen in LH IIIC representations and paralleled in Scandinavian and Chinese sea vessels is certainly not out of place.

The ‘horizontal ladder’ pattern apparent in the majority of representations has received its most systematic treatment by Shelley Wachsmann.<sup>175</sup> However, previous considerations seem to make an assumption that might be unnecessary, namely that the motif should represent a structural “architectural element” of the actual prototype.<sup>176</sup> The problems of this interpretation of the motif as an utterly abstracted rendering of rowers based on one Pyrgos Livanaton representation and contradicting many others has been discussed elsewhere.<sup>177</sup> An alternative approach would be to examine this ‘horizontal ladder’ pattern within the context of the ‘idiom’ of LH IIIC pictorial pottery representations. A brief survey revealed that this pattern was employed on objects that have a similar quasi-cylindrical shape: human and animal neck, body of a horse/ sphinxes or griffins, serpent birds and, finally, ship’s hull.<sup>178</sup> This could strongly indicate that the pattern has no architectural morphological significance, but it is an idiomatic (stylistic in the wider sense) convention for the rendering of curvy objects seen laterally, much in the same effect as that of stippling or linear shading used by modern draughtsmen.<sup>179</sup> The pattern already appears clearly on the ship of the LM IIIB *larnax* from Gazi (Fig. 2c), on the Damesi *graffiti* ships (LH IIIB?) and its antecedents may be sought in the zig-zag motif decorating ships on the well-illustrated polychrome sherds from Volos *Kastro* (late MH) as well as on a ladder-like motif in a (controversial) ship representation from a bichrome pictorial sherd from Mycenae Grave Circle A (shaft grave V).<sup>180</sup>

Although the sea-fighting scenes depicted on the Pyrgos Livanaton vases bear a so far unparalleled explicitness for the military *ethos* of ship imagery in LH IIIC pictorial pottery, there are clearly warrior figures in the Bademgediği Tepe crater<sup>181</sup> and the Ashkelon sherd figure (Fig. 3g) could very well belong to a warrior. Such military connections of ship iconography are a recurring theme in Aegean pictorial pottery: we do have utterly abstracted figures aboard with spears from a MH matt-painted

sherd from Kolonna<sup>182</sup> and one should also remember the heraldic pair of sword-bearing high-status warriors aboard the two ships on the Enkomi amphoroid crater (LH IIIB Early). Considering these links alongside the rarity of ship imagery in pre-LH IIIC pictorial pottery, the military *ethos* of the PBA imagery does not appear as a new feature. Moreover, if we accept the interpretation favoured above for the figure-headed prow, then we may reasonably assume a military character even for some of the representations where warrior human figures are not depicted (Fig. 3a-c).

The military character of many LH IIIC representations enables us to comment upon the connection sometimes posed between LBA Aegeans and the ‘Sea Peoples’ on the basis of ship iconography.<sup>183</sup> However, the Medinet Habu reliefs, which constitute our primary source for the appearance of these Delta invaders, depict vessels with entirely symmetrical ends, each decorated as figure-headed, a feature paralleled only in the Tiryns sherd.<sup>184</sup> Assuming the full reliability of these images may not be wise, yet there is no way to demonstrate that the Egyptian royal artist employed to materialise the boasts of Ramses III could have devised this very feature. Wachsmann<sup>185</sup> has noted the central Euro-

<sup>175</sup> Wachsmann 1997, 345-9; 1998, 130-3.

<sup>176</sup> E.g. Wachsmann 1997, 345.

<sup>177</sup> Wachsmann 1997, 348; Petrakis 2004; Petrakis 2006, 206-9.

<sup>178</sup> See for instance (references are to Vermeule & Karageorghis 1982): Human neck: XI.31, XI.68; Animal necks: XI.9, XI.29 (horses), XI.72 (dog), XI.74, 77.1, 77.2 (deers); Animal body: XI.11 (horse), XI.91 (griffin/sphinx); Serpent: XI.90; Birds: XI.31.3, 83, 98, 99, 100-3, 108, 110, 112, 116-7, 124-5, 127, 141, 150.

<sup>179</sup> Petrakis 2004, 25; Petrakis 2006, 207-8.

<sup>180</sup> Wedde 2000, 317 no. 521 (Mycenae), 319 nos. 545-6 (Volos). Wedde (2000, 238-9) classifies both images as doubtful representations of ships, yet our specimen is too scarce to make positive or negative judgements.

<sup>181</sup> Mountjoy 2005, pls. XCVI, XCVIIc.

<sup>182</sup> Siedentopf 1991, 62 no. 162 (with references), Taf. 38:162. For a general survey of the importance of maritime activities for MBA Kolonna see Muskett 2002.

<sup>183</sup> Wachsmann 1997; Mountjoy 2005 also draws parallels that she argues to support such a connection.

<sup>184</sup> Slenczka 1974, 29-30, Taf. 39:1.

<sup>185</sup> Wachsmann 1997.

pean affinities of this sort of ship imagery and this makes the ships of 'Sea Peoples' and LBA Aegeans linkable only through this European 'connection.' Of course, to assume that central European and Aegean populations were included in the 'Sea Peoples' coalition on such meagre evidence is very questionable.<sup>186</sup>

## People of the sea? The importance of maritime activities for the Aegean LBA III polities and its iconographic reflections

### *The multivalent realm: Sea and its sea of meanings*

#### *Sea as a background to long-distance trade*

Dominant and enduring questions of Aegean LBA trade include the extent of its manipulation by the 'palatial' administrative centres and the existence of private entrepreneurs. That we do have such individuals (however variably interacting with the 'palatial' administrations) in Near Eastern state-level societies is clear, yet the very genre of evidence that ensures us of their existence in a principality such as Ugarit (i.e. textual) is unavailable in the LBA Aegean. Could the paucity<sup>187</sup> of textual references to interregional or long-distance trade activities indicate that this range of activities had been undertaken by non-palatial agents? That would be a highly inappropriate indirect *argumentum ex silentio* though and some other *modus explanandi* should also be considered.

Even without direct textual confirmation, it is difficult to imagine private entrepreneurs as the exclusive or main pioneers in the establishment of trade patterns and institutions; Sherratt has moved close to the other extreme in seeing location upon important trade routes as the crucial factor for the genesis and maintenance of Aegean LBA III 'palaces'.<sup>188</sup> Given the important link between trade and the rise of social complexity and state formation,<sup>189</sup> a more plausible scenario would be that non-palatial trade agents (if they existed in the same form as

in the Near East) took over aspects of exchange in times and places where central administrations felt unable or unwilling to cope. An opportunistic and peripheral involvement of these groups that *could* occasionally rise to significance seems plausible. Therefore, to view trade as an *either* centralised *or* decentralised area of human action may thus be an oversimplification of what was the actual state of things in any phase of the Bronze Age.<sup>190</sup>

Sea is one area where human activity is difficult to control in absolute, 'terrestrial' terms; even moving through a seascape presupposes certain technical means and acquired knowledge. Given that both these resources could be subject to control, its economic potential must have been an obvious object of intense competition at inter-cultural and intra-cultural level alike from the very first days of navigation.<sup>191</sup>

Explicit archaeological evidence on Aegean maritime practice has so far been scanty. Shipwrecks (e.g. Point Iria at the close of LH IIIB) and imported artefacts excepted, one is left with few securely identified constructions. Building P at Kommos, with its series of long parallel spacious (total of 1500 m<sup>2</sup>) galleries opening seaward has long ago been interpreted as a shipshed.<sup>192</sup> Although this remains a highly attractive and plausible theory, the

<sup>186</sup> This seems to be assumed in Wachsmann 1997; Most studies of the problem focus on similarities in headgear and some weaponry depicted in the Egyptian reliefs, as well as on the mention of the *Peleset* = Philistines among the invaders. See Romey 2003 for an interesting exploration of these issues and a further development of some of Wachsmann's ideas.

<sup>187</sup> One should note that more optimistic interpretations have been attempted on even less explicit evidence; see for instance Marcus 2006 on the importance of maritime activities at Tell Dab'a (ancient Avaris).

<sup>188</sup> Sherratt 2001.

<sup>189</sup> Webb 1975; Kipp & Schortman 1989. Sherratt & Sherratt 1991 are also interested (amongst other things) in the political motivation of trade patterns and the interest of incipient elite groups in the acquisition of socially prestigious objects.

<sup>190</sup> Knapp 1993, 342.

<sup>191</sup> See Knapp (1993) for a useful and thought-provoking discussion on the implausibility of *true* 'thalassocracies' in the LBA Mediterranean.

<sup>192</sup> Interpretation originally by Maria Shaw, most recently discussed in J. Shaw 2006, 37–8 with figs. 26–7, 124–5.

building's *unicum* planning and inconclusive finds offer little help in its further interpretation.<sup>193</sup>

In western Messenia, investigations within the PRAP survey indicated the existence of an ingenious and elaborate artificial harbour near the coast just off the location of the two impressive tholos tombs at Tragana *Viglitsa* (interestingly, where the LH IIIC pyxis with ship representation in Fig. 3b has been found) near the village of Romanou.<sup>194</sup> Zangger observed that a large rectangular internal 'port' had been excavated and that the flow of a small river nearby had been re-diverted seawards and through the 'port' so as to inhibit (via outward 'flushing') its blocking by sediments brought in by the sea. Tentative dating suggested a date compatible with the known administrative flourishing of the Ano Englianos complex, between 1400 and 1200 BC. Although still not fully published, the elaborate planning and organisation required for its construction and maintenance is an important indication for the significance of naval activity in the region and a most serious clue that the most influential economic institution of the region, the Englianos 'palace,' was heavily (if not exclusively) involved. Indeed the existence of this 'Port of Nestor' as interpreted by Zangger and his co-workers mainly adds to the puzzle posed by the poor textual references to maritime enterprises. Recently, Hope Simpson and Hagel suggested that such harbours (either artificial or not) along the west Messenian coastline may have been plural,<sup>195</sup> but more geoarchaeological data are needed to support such a hypothesis.

Pylos is so far the only Aegean LBA site that has produced evidence for maritime activities in all three categories (geoarchaeological, textual, iconographical). A certain degree of correspondence between them indicates a strong need of the Englianos administrators to exercise some control over shipbuilding and overseas navigation; on the other hand, we cannot be certain of the extent and intensity of this control or discern between its 'regular' or 'exceptional' character.

While the paucity of references to sea trade in the extant documents from all excavated administrative centres or our own inability to discern such references does not allow us to identify the strictly economic motivation behind this interest, other pos-

sible links, specifically Pylian, compensate for this loss. The location of naval imagery in the spacious Hall 64 (Southwestern Building) would indicate that naval enterprises and even an arguable 'palatial' control over the Western Messenian coastline was a vital part of Pylian propaganda aiming at the integrity of the polity.<sup>196</sup> The provision of coastguarding services on the part of the 'palace' must have been felt as a great benefit for the local communities in times of distress, a situation that finds strong textual support in the links between the *e-re-ta* and the *o-ka* tablets emphasised above.

Although the interpretation of the historical circumstances on the very last days of the Pylian administration is far too complex to be summarily treated here, it is nonetheless attractive to consider that the iconographic programme of Hall 64 reflected the 'normal' desire of the Englianos elite to explicitly illustrate – in a room whose size could support its function for collective assemblies – its own potential to provide security through naval defense in case such a need arose. It is therefore ironic to see, in the final conflagration that actually preserved for us the pertinent administrative records, the evidence that such an attempt, if it ever took place, was unsuccessful.

### *Ships of power*

As an alien habitat, sea is a primal aspect of wild, non-human space, and ships are almost universally embodied as the means through which man 'domesticates' the '*agrios*' (in the Hodder-ian sense) seascape. Although not wishing to draw Childean references, navigation is as much a 'revolution' as agriculture is: a novel way of *re*-locating oneself within the natural world in a comparatively more advantageous niche. The special knowledge and material cost required and the significant advantages drawn from the construction and maintenance of

<sup>193</sup> J. Shaw 2006, 125.

<sup>194</sup> Zangger 1998; Zangger *et al.* 1997, 613–23.

<sup>195</sup> Hope Simpson & Hagel 2006, 210–2. They cite evidence for LH IIIB activity around the Osmanaga lagoon (on the basis of sherd material) as indication of other similar harbour-sites.

<sup>196</sup> Davis & Bennet 1999, where the general point had been originally made, although not with regard to naval imagery.

means of navigation make ships desired objects of ideological manipulation and iconographic preferences record this very desire.

It must be stressed that a ship is as multivalent as the sea it crosses. As a ship carrying a band of pirates, a merchant ship, a warship, any vessel (and particularly the oared galley depicted in most of the LBA III representations) could be used in all these ways.<sup>197</sup> By no means are these functions mutually incompatible. To quote Malcolm Webb, “fighting and trade ... inevitably became inseparably linked during the emergence of civilisation and they have extended in scope and intensity ever since.”<sup>198</sup> In particular, Webb’s framework seems to adjust quite well to Egyptian iconographic evidence where the earliest boat imagery is connected with scenes of conflict.<sup>199</sup> In the absence of explicit archaeological evidence, the specific circumstances that shaped the social context of ship-building in the various Aegean polities remain a *desideratum*. For the time being, we can attach to this theoretical framework the apparent connection of Aegean ships with warfare and military action (traceable back to the MBA and shown more exuberantly in PBA, see *supra*).

Except for the figure-head decoration of the prow, no particular part of a ship is emphasised in imagery, unless the iconographic ‘isolation’ of the Mycenae *ikria* is interpreted in this way. Commenting on the West House (Room 4) *ikria*, Morgan has suggested (on Egyptian parallels) that cabins could have been symbols of power and high social status.<sup>200</sup> It is important to stress here the military connotations of many of these sterns in Akrotiri (explicit in the boar-tusk helmets and spears above or beside many of the ‘stern-cabins’), which may suggest a warrior-status for the occupant of the cabin.<sup>201</sup> The recent identification of a small-scale such ‘cabin’ as ‘floating’ enigmatically among the men performing the Procession in the staircase of Xeste 4<sup>202</sup> should warn us that the semantic exploration of the Thera *ikria* is far from complete. Morgan entertains 1<sup>st</sup> millennium Greek *testimonia* on the high status of the stern place (where Thera cabins are invariably placed),<sup>203</sup> but it may be meaningful that the Mycenae panels most likely depict cabins placed *amidships*, as indicated by the vertical element possibly interpreted as the central mast. The possibility of a

significant semantic distance between the Mycenae and Akrotiri images should be borne in mind,<sup>204</sup> but an alternative explanation can be put forward: that the Mycenae panels depict the iconographic combination of two elements of ship architecture that were in reality structurally different and reflect a need to create a true emblematic abstraction of a ship’s image. The creation of such synthesised icons might point to the intensification of their symbolic exploitation, rather than a retreat from earlier LBA iconographic trends.

#### *Afterlife journeys to the ‘Isles of the Blessed’: A Bronze Age or a modern fantasy?*

The suggestion of funerary ships in the Bronze Age Aegean is initially triggered by the depiction

<sup>197</sup> This is most conveniently put forward in Wedde 1999. See also Crouwel 1999 for military use of ships in LH IIIC Middle.

<sup>198</sup> Webb 1975, 194.

<sup>199</sup> Ward 2006, 127 (with reference to Predynastic textile work and the famous Narmer stone palette).

<sup>200</sup> Morgan 1988, 137–42.

<sup>201</sup> Televantou 1994, 207–18; Lang 2002, Taf. 3:4.

<sup>202</sup> Boulotis 2005, 34.

<sup>203</sup> Morgan 1988, 140 with references.

<sup>204</sup> Religious elements based upon doubtful analogies between the significance of the Egyptian *waz* motifs and their Aegean adaptations on the Thera cabin poles (Morgan 1988, 141) or on the more firmly grounded connection of single female figures (of *presumably* divine status) with boats in Neopalatial glyptic (Boulotis 1989) no longer appear in LBA III ship imagery, might reflect the *change* in interests that maritime iconography was undergoing in LBA III (an issue to be further explored below). Cultic overtones have also been suggested for the Thera ship procession and special mention should be made to those ‘illogical’ or ‘inconsistent’ features usually taken to indicate the ‘ritual’ significance of an image. The paddling scene in the West House (Akrotiri), South Frieze ship procession has been taken to indicate such an interpretation, as it is certain (and supported by the uncomfortable posture of the ‘paddlers’) that such oared long-ships were *never* intended for true paddling (Televantou 1994, col. pls. 58–66, pl. 40a, 45 and Wachsmann 1998, 106 fig. 6.42; Wedde 1999, 475): for instance, Wachsmann (1998, 105–7) suggests that paddling should be in this case understood as an “archaic cultic practice,” a deliberate archaism with religious significance. While the unpractical nature of paddling a long ship is true, the alternative interpretation of an ‘artist’ copying from the wrong copy-book –if this was actually the way Thera painters worked, which is attractive but unproven– should also be considered.

of ships on funerary containers, most vividly represented by the remarkable Gazi LM IIIB *larnax* and the supposed boat model ‘offered’ in a processional scene on one of the long sides of the Agia Triada sarcophagus.<sup>205</sup> Moreover, cross-cultural analogies have suggested a well-grounded funerary significance of ship/ boat iconography that can be detected in communities whose viability is closely related to navigation, even as distant and unrelated as Scandinavia and southeast Asia.<sup>206</sup> However, the problem remains how to ‘anchor’ such a significance of ship imagery on Aegean evidence.

The first issue posed by this sort of evidence is the notable *rarity* of ship iconography on *larnakes* altogether (three LM and one LH examples). While this is admittedly an *ex silentio* argument, the quantity of known LBA decorated *larnakes*, makes such silence significant. If this iconographic choice reflects an afterlife belief, it may follow that this belief was held by an extreme minority of the Aegean population.

As far as the interpretation of the boat model on the Agia Triada sarcophagus’ ‘Presentation Scene’ as a representation of an actual Aegean funerary practice is concerned<sup>207</sup>, the contrasted rarity of actual models found in LM III (or even LBA III in general) funerary contexts has already been stressed. In the light of certain close thematic similarities between the Agia Triada sarcophagus and the procession fresco from contemporary (end of LM IIIA1 – IIIA2) buildings from the site itself, it would perhaps be worth considering whether the sarcophagus’ imagery is a depiction of a funerary rite *per se* or of initially *non-funerary activities put at funerary use* (as it would arguably be the case with e.g. the hunting scenes of the LM III *larnakes*). The Tanagra models (probably LH IIIB) would at first add to the evidence from the *larnax* with the abstracted ship figure from the same site, but we must also bear in mind that they come from a funerary site most untypical on the Mainland in its *widespread* use of such terracotta burial containers, so their relevance to the reconstruction of a general Aegean mortuary belief should be questioned.

Leaving ship iconography aside, Nanno Marinatos has called attention to what she dubbed the “Octopus Garden” in LM III *larnax* iconography,

which she views as an idealised ‘sacred’ paradise-like landscape characterised by a “deliberate mixing of environments of elements that should logically remain separate.”<sup>208</sup> In doing so, she provides a vastly different explanation of the same ‘thematic unawareness’ that also seems to characterise many examples of LBA III pictorial pottery and which Sherratt has explained as imitation of embroidered textile work (see *supra*). Favouring one of the two alternatives may be inevitably arbitrary, as each one is based on such fundamental opposing assumptions (namely, that the objects should be seen as thematically connected or not). However, the complete absence of Marinatos’ ‘Octopus Garden’ from Helladic decorated *larnakes* (see *supra*), is an indication that, even if such imagery indeed reflects an afterlife belief, this would have been a Cretan trait.

An inevitable question would concern the significance of the single octopus, which appears as dominant in most of its attestations. Hiller has suggested the ‘daemonic’ property of this mollusc and its possible parallel function to lions or griffins as their aquatic counterpart,<sup>209</sup> but to project this interpretation (which Hiller bases on Palace Style jars and decorated stucco floors) to the radically different context of the same marine invertebrates on terracotta *funerary* containers seems unwarranted at the present state of our knowledge. Once more, however, the lack of any regional pattern in the distribution of marine subjects and its restricted popularity<sup>210</sup> poses the question why the representation of this belief had not been more popular in the first place. It is possible that explanations other than a direct reflection of LM afterlife beliefs have to be

<sup>205</sup> Gallou (2002) provides a convenient ‘positive’ account of the evidence, as opposed to the skepticism expressed here.

<sup>206</sup> Ballard *et al.* 2003.

<sup>207</sup> For this interpretation see Long 1974, 48 with references.

<sup>208</sup> N. Marinatos 1997, 288. This practically corresponds to Merousis’s ‘thematic cycle 3’ (Merousis 2000a, 393–4).

<sup>209</sup> Hiller 1995, 568.

<sup>210</sup> Evaluation based on the catalogue and statistic graphs published in Merousis 2000a, 103–96, pls. 1–7. As noted above, it is only in the east Cretan LM IIIC examples that maritime themes acquire an obvious quantitative advantage (Merousis 2000a, 399, pl. 6 top).

devised for the iconographical choices made on the growing corpus of LM III decorated *larnakes*.

### *Reflections on the fluctuating popularity of maritime iconography in the LBA Aegean*

Even the most superficial student of Aegean art will notice that most of the themes briefly overviewed above are not LBA II-III novelties but in fact appear in late MBA/ early LBA Aegean art. The consideration of the Neopalatial period as one of the most intensive image-generating periods in Aegean Prehistory is beyond the scope of this study, yet the contrast of scarce maritime themes in the later LBA can be contrasted with the abundance of these subjects earlier: ships are an important category in the Neopalatial talismanic seals, a group that ceases to be produced in later phases, the Marine Style is by far the most sophisticated and highly executed decorated ceramic production in the contemporary Aegean and the most impressive and informative scenes of maritime activity date to LBA I period: the Miniature Frieze from West House (Room 5) at Akrotiri on Thera and a miniature fresco from Agia Irini on Keos.<sup>211</sup> Especially the Theran fresco has been frequently interpreted as evidence for maritime expeditions (even extra-Aegean, e.g. Egyptian or Libyan) in LBA I times.

When considering this earlier evidence alongside the less impressive and quantitatively inferior LBA II-III evidence, it is important to focus on what kind of other changes may be *implied* by possible change in imagery preferences. Although accidents of preservation and discovery are always an unpredictable factor, the overall impression is gained by accumulating evidence from many sites and its increasing reliability calls for explanation: Maritime themes seem to be *less frequent* in LBA II-IIIB imagery in comparison to LBA I. Whatever sophisticated scenarios we may advance to trace the earlier LBA ancestry of LBA III themes,<sup>212</sup> they cannot downplay (or serve as explanatory tools for) this different pattern of iconographic choices made. A significant *exception* emerges from the study of LBA III stucco floors: marine themes are not only the predominant, but the nearly exclusive *figural* subjects so far known, although they occasionally

*co-exist* with motifs indicating veined stone slab imitation (e.g. in the Pylos 'megaron'). It may be important that the only pottery group where marine fauna is abundant (Palace Style) dates to LM II-II-IA1, i.e. *before* the expansion of Mycenaean pottery outside the Aegean in LH IIIA2, a point that may be especially important. In all other categories (wall frescoes, pictorial ceramics and glyptic), maritime themes are generally rare in LBA III.

Returning to the well-recorded Pylian evidence, we may observe that those maritime themes that Maria Shaw<sup>213</sup> has so meticulously reconstructed are found in secondary contexts: plaster dumps and a wall fill (Table 1). Although the significance and function of the Pylian plaster dumps is not yet sufficiently understood and despite good evidence from Gla that LH frescoes were frequently renewed within the same architectural phase with no thematic change,<sup>214</sup> it is still of crucial importance to note that many of the subjects recovered from the Pylian plaster dumps are *not* recognised in the *in situ* frescoes of the Ano Englianos complex (the flower-bearing female procession being one such conspicuous case<sup>215</sup>). Although we do have a couple of notable exceptions, namely a few nautili frieze fragments and the new but *untypical* naval scene from Hall 64, maritime iconography *visible* at the time of the final destruction was evidently rare. Although the Mycenae *ikria* panels were apparently visible at the time the 'palace' was destroyed, the taphonomic evidence that we have from Pylos may indicate more explicitly what is rather implied by the overall rarity of maritime imagery in 'palatial' LBA III contexts, although uncritical projections from one site to other polities should be avoided.

<sup>211</sup> Wedde 2000, 327-8, nos. 672-6; Davis 2001, 30, fig. 4 (the material comes from area M, Room 2 (NE bastion) and is under final publication by L. Morgan).

<sup>212</sup> E.g. see Televantou 1994, 147 for inter-linking the *ikria* paintings in Akrotiri and Mycenae.

<sup>213</sup> M. Shaw 2001.

<sup>214</sup> C. Boulotis, pers. comm. July 2007. Of course, the numerous coats of plaster with identical decoration are already well-known from the monumental hearths at the *megara* of Mycenae and Pylos.

<sup>215</sup> Lang 1969, col. pl. O.



A change in the context where figural fresco decoration occurs between earlier and later LBA Aegean art seems to indicate radical shifts in elite strategies and Aegean political structure and may correspond to other evidence for similar change. More specifically, the demise of the Neopalatial ‘villas’ (whatever their precise function was) in post-LM I Crete and the restriction of figural plaster decoration to ‘palatial’ contexts in Crete and Mainland alike are general trends, although it must be noted that nothing like the Cretan ‘villa’ system ever existed in the Helladic world. However, these are indications that cannot really *explain* the drop in popularity of maritime iconographic and the lack of interest in sponsoring the formation of new relevant symbolic imagery. If fluctuations in the preference of a specific imagery has anything to do with what may be called the ‘profit potential’ of the manipulation of its symbolic value for the elite’s own benefit, then we may tentatively pose the question thus: ‘Why did LBA III elites cease to consider maritime imagery as resourceful as other categories of imagery?’

Quantifying the actual indirect evidence of contact between the Aegean and worlds beyond the sea may lead to the interesting observation that the bulk of actual or suspected imports belong to LBA IIIA–B.<sup>216</sup> Sturt Manning and Linda Hulin recently suggested that the patterns of Aegean ‘exports’ in the eastern Mediterranean and those of foreign ‘imports’ in the Aegean “indicate an entirely new trading reality” for the LBA III period.<sup>217</sup> The increase in both ‘imports’ and ‘exports’ observed in the LBA III (most explicit if one considers Aegean decorated pottery in the Levant and its ‘explosion’ in LH IIIA2) could indicate, apart from its broad correlation with the establishment of most Mainland administrations and a weakening (not necessarily a ‘destruction’) of the Knossian administration, a differing evaluation of exotica between the earlier and later LBA phases. To this evidence one could add the short duration of Keftiu ‘tributes’ painted in elite Theban tombs at the very dawn of this Aegean ‘international outburst’ and Hittite references (however debated) to *Ahhijawan* activities, mostly falling within LBA II–IIIB and adding to the impression that the role of at least *some* Aegean polities within the eastern Medi-

terranean commercial and political nexus had considerably changed from the early LBA.

Manning and Hulin make a crucial point when arguing for an engagement of the Aegean in the “periphery of the eastern Mediterranean interaction sphere”<sup>218</sup> *not before* the LBA III. It is extremely tempting to consider along with them that “the well-known Nilotic [*sic*] wall-painting in the West House at Akrotiri (...) derives its local justification and value from the very *lack of general Aegean familiarity with Egypt and the Levant*,”<sup>219</sup> a condition that was to radically change in the next few centuries. It would be intriguing to suggest that the ‘grand opening’ of Aegean polities to the broader Mediterranean world at the beginning of LBA III led to a *de*-evaluation of the *exotic* (either as ‘imported’ artefacts or images indicative of esoteric knowledge of distant worlds) that could no longer be ‘monopolised’ and manipulated by a restricted amount of individuals, who may have used their personal involvement in the acquisition of such goods to legitimate their political power.<sup>220</sup>

The pioneering ethnographic work of Mary Helms has underscored the importance of artefacts of distant provenience as power resources.<sup>221</sup> However, what would happen if familiarity with the world beyond the sea increased? How would that shatter the extant power relations and the status of those who used to demonstrate a *monopoly* of the valued esoteric knowledge implied by the acquisition and conspicuous consumption of such items? More importantly, is it possible to determine whether ‘palatial’ administrations contributed to these novel conditions and/ or predict how they would have responded to them? It is here suggested that these are the key questions to address when

<sup>216</sup> Compare the sum-up tables in Cline 1994, 13–5, Tables 2–3 and 4–6.

<sup>217</sup> Manning & Hulin 2005, 279.

<sup>218</sup> Manning & Hulin 2005, 285.

<sup>219</sup> Manning & Hulin 2005, 285 (my *italics*).

<sup>220</sup> Van de Noort (2003, 413) recently suggested from EBA British evidence that a counter-analogy can be observed in the increase of maritime trade and the deposition of *exotica* in rich burials, a situation that may be paralleled to the LBA Aegean.

<sup>221</sup> Helms 1988 (see also Broodbank 1993; Broodbank 2000 for an employment of some of her ideas to the Aegean EBA).

considering the shift away from maritime subjects potentially observed in the interests of LBA III ‘imagery-formative’ Aegean elites.

What then can we make out of a growing number of ship representations (mostly with military connotations) that appear again in LH IIIC pictorial pottery? At least a part of the truth would be that the collapse of the Aegean administrations combined with well-documented upheavals leading to and following the disintegration of the Hittite empire and the various Syrian principalities created new conditions for interregional exchange. Primarily because the success of a maritime journey depends on organization, specific technical knowledge and specialised personnel on a higher degree than terrestrial movement, I would accept that a disintegration of established socio-economic structure (and the fall of the LBA III administrations may reasonably have been one) must have affected navigation more severely than overland communication. Although we may still only offer speculations about the extent of ‘palatial’ control upon maritime trade and the possible role extra-palatial factors may have had, it should be accepted as a working hypothesis that the critical conditions that led to the collapse of the literate administrations at the close of the 13<sup>th</sup>/beginning of the 12<sup>th</sup> century BC affected both at a considerable scale. In noting the hazardous character of travel in the conditions of Postpalatial insecurity, Dickinson argues convincingly for the role of gift exchange in the establishment of personal relationships that would ensure the safe and successful undertaking of the journeys.<sup>222</sup> Along this line of argument, most precious *exotica* in PBA contexts are better described as items involved in gift exchange rather than commercial trade and, instead of being actually ‘imported’ goods, they rather *imply* the regions involved in exchange patterns of the commodities actually traded. In a maritime context, increase in piracy has often been assumed for the PBA as resulting from and constantly reproducing the instability following ‘palatial’ collapse, but the evidence is inconclusive.<sup>223</sup> More important seems to be a renewal of interest in decorated weaponry deposited in burials (as in the Thessalian site of Hexalophos), which recalls the elaborate offensive weapons of the Early LBA Peloponnesian elite funerary assemblages (e.g.

Mycenae, Routsis, Dendra).<sup>224</sup> It is certainly fairly straightforward to interpret the military overtones of many LH IIIC ship imagery as an overall reflection of the turbulent times when these representations were produced.

It is important to stress that the increase of iconographic popularity in certain themes should not be taken as a direct reflection of real life developments. Thus the creation of the long warship (“vaisseau longue” as opposed to “vaisseau rond” used for transportation) at the close of the LBA, as postulated by L. Basch,<sup>225</sup> may be an overestimation of what kind of developments iconography may safely allude to. A renewed interest in war iconography should perhaps point that military activities had been considered a rewarding source of power, one that was worth manipulating in this way. The actual risk invested at Postpalatial sea-voyaging and the dangers encountered in such undertakings were partly compensated by the formation of an imagery depicting or implying the violent and adventurous character of maritime activities. Is it perhaps too far-fetched to suggest that this sort of iconography ‘advertised’ the ‘heroic’ *ethos* of local elites with

<sup>222</sup> Dickinson 2006, 202; of course, this could also apply to the supposedly ‘secure’ conditions of the ‘palatial’ phases.

<sup>223</sup> Dickinson (2006, 64–5) conveniently reviews relevant evidence from settlement pattern change: The Postpalatial flourishing of certain coastal or near-coastal sites (e.g. Tiryns, Volos, Palaikastro *Kastri*) speaks against the interpretation of ‘flee from the coast’ as a result of raiding and to interpret flourishing sites as pirate-bases is not supported by other evidence. It is nearly impossible (and for this reason, futile) to speculate on whether luxurious items in coastal sites could have been pirate loots instead of less violently acquired goods. It seems that, even here, quite local developmental trajectories have to be accepted, but no pan-Aegean maritime threat is evident.

<sup>224</sup> Dickinson (2006, 155) also emphasises the contrast between the decorated Type F and G weapons and the plain Naue Type II swords (although he notes the possibility of decorated sheaths for the latter). He (Dickinson pers. comm.) kindly reminded me of the remarkable ‘warrior’ burial excavated in 2007 at Kouvaras Phyteion near Amphilochia, which, however, seems to be the exception that proves the rule: gold wire has been wrapped around the hilt of a Naue II weapon, perhaps, one dares suggest, as a *secondary* attempt to provide some clumsy elaboration. For a clear photo of this unpublished find see <http://www.epoxi.gr/News08/news8103.3.htm> (6 July 2009).

<sup>225</sup> Basch 1997, 17.

an eye at the commoners' attachment to them as protectors of the community, as stabilising factors against 'bad times' of uneasiness? It seems that this reasoning is a much fruitful way of linking the popularity of 'warship' iconography with the turbulent climate of the PBA Aegean.

## Concluding thoughts

Throughout the chronological range spanned in this chapter, two significant episodes seem to affect control over power resources in the southern Aegean. The rise of the Linear B administrations in Crete and the Mainland occurred in vastly different contexts and must have shattered distinctly structured networks of power relations in each case; nevertheless, administrative terminology and certain iconographic traits employed in 'palatial' contexts during LBA III show that this event brought the conjunction of regional polities, despite their different backgrounds. In these 'palatial' contexts, we are given the opportunity to juxtapose iconographic and textual evidence, which overlap only occasionally, as in the case of Pylian military employment of naval enterprises. In addition to it being a reflection of the selectivity of 'palatial' economic interests, the much-stressed paucity of Linear B references to long distance overseas trade must be seen as the result of these administrations' insufficient technical means to exercise a significant control over maritime traffic.

Whether Aegean 'palaces' deliberately diverted their interests elsewhere or were forced to withdraw from the enterprise must remain debated; it is nevertheless likely that this situation led accordingly to a shift in iconographic preferences, seen in the discontinuity of certain earlier LBA traditions. Our fragmentary data may not be properly quantifiable and inferences about the popularity and rarity of themes might simply not stand. However, it would be thought-provoking to suggest that the political situation created from this seeming inability and/or disinterest – even eventual disinterest *because* of initial inability (which is closer to the *Realpolitik* of the matter) – may be expectedly reflected upon imagery, whose main material media became, as in the case of figural plaster decoration, nearly exclusively 'pa-

latial' in LBA III. It can therefore be argued that the rare occurrence of such imagery in 'palatial' contexts is a meaningful one and that it reflects a shift towards thematic realms which the literate administrative elites considered more worth-exploiting.

Despite such lack of evidence for tight 'palatial' control over raw material *influx* into the Aegean,<sup>226</sup> 'palaces' can still be argued to have dominated the *further* (i.e. post-arrival) processing of exotic materials and the production of prestige items, ready to enter patterns of circulation among elite groups, which were not necessarily 'palace'-based. Metals are the most conspicuous case; the possible identification of *ka-ko* as pure copper (χαλκός) or alloyed bronze notwithstanding, the 'palatial' bronze-industry, mostly known from Pylian evidence, demanded tin which *had* to be shipped to the Aegean,<sup>227</sup> whatever its precise physical provenance.<sup>228</sup> Shipping records do not exist, yet it is quite clear that the 'palace' tightly supervised the further processing of metals and the production of bronze items through the *ta-ra-si-ja* system.<sup>229</sup> Analysis of a massive amount

<sup>226</sup> We must keep in mind that even the exceptional **MY L (<X) 508** does not touch on this matter, since it records a transaction between two *Aegean* polities.

<sup>227</sup> It seems quite important to add a debatable, yet just possible, mention of tin on a Knossian document: *ika-te-ro* on **KN Og 5515** could be κάσ(σ)τερος, syncopated form for κασσίτερος, an accepted Mesopotamian loanword (*kassi-tira*) for 'tin' (Killen *apud* Sherratt 2001, 219 n. 11). However, it is not safe to assume that this sign-sequence is complete (it could be *u-a-na-ika-te-ro*).

<sup>228</sup> Most references to the material *ka-ko* are from **PY Jn** series, which has received an analytical general survey by Smith 1992–3. We do have occurrences of the derived adjective (*ka-ke-ja-pi*, *ka-ki-jo*) in the context of chariot manufacture at Knossos (**KN Sd; So**). The term of bronze-smith (Nom.Sing. *ka-ke-u* χαλκεύς, Nom.Pl. *ka-ke-we* χαλκῆρες) also appears in the **Jn** series, in other diverse contexts indicating a recipient (in Dat. Sing. *ka-ke-we/ka-ke-wi*; Dat. Pl. *ka-ke-u-si*) and also alongside other official titles and appellatives in **Nn 831.11** (Aura Jorro 1985, 307–8, s.v. *ka-ke-u*; 308–9, s.v. *ka-ko*, 307, 308, s.vv. *ka-ke-ja-pi* and *ka-ki-jo*).

<sup>229</sup> *ta-ra-si-ja* \*τάλανσία and the negatively-prefixed *a-ta-ra-si-jo* appear frequently in the **PY Jn** records, but also applied in other areas of 'palatial' economic activities, such as the textile industry at Knossos (**Lc(1), Le**). This system involved the meticulous recording of raw materials supplied to specialised craftsmen so as to facilitate control over the amount of finished product to be delivered back. Later Greek *τάλανσία* is used as

of archaeological evidence by Voutsaki has suggested that such control was arguably exercised by the 'palaces' during the LBA IIIB period, but was rather discontinued after their collapse at the close of this period, thus allowing peripheral agents to enter the circuit of valued items more prominently.<sup>230</sup>

The fall of these institutions did not simply herald an overall return to the previous situation, but rather created new regional patterns and institutions, which in turn affected significantly the production and consumption of imagery-bearing artefacts. Although the rise of warrior ship iconography was not invented in Postpalatial times, it now appears in a medium that rose to fill the vacuum left by the demise of fresco-painting, namely pictorial pottery. In an Aegean without 'palaces', however shallow-rooted and superficial these may have been, production and dissemination of imagery could at last

be set anew; even if the level of craftsmanship maintained by the 'palace' system did not continue in all its aspects, one thing did persist, perhaps because was never fully 'palatial': the import of *exotica*, either raw materials or finished artefacts from worlds beyond the sea. This persistence made sure that at least the image of a ship, Bronze Age man's only way to 'domesticate' the wild inhuman seascape, would not only live on, but would gain new levels of significance.

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a term for wool-processing into threads, probably echoing its textile associations seen in the Knossian use of the term. The most recent general treatment of this system is by Killen 2001.

<sup>230</sup> Voutsaki 2001 (using evidence from the Argolid, Thessaly and the Dodecanese).

# Appendix

## Linear B documents cited in the text

Due to space limitations, it has not been possible to include full transcriptions of all Linear B documents discussed in the text. The interested reader may look them up in the latest published editions of Linear B texts.<sup>1</sup> Therefore, this Appendix includes only notifications of reclassifications, epigraphic notes or improved readings which are not included in the aforementioned sources. Joins which did not affect the text have been omitted. Transcriptions of full texts or specific lines are given only in cases of *significant* changes, with references provided in relevant footnotes. Notes made by the author are preceded by †.

### *Texts from Knossos*

**KN Bk 799+8306** (104) Area of Bull Relief (North Entrance Passage)

Previously classified as **B(5)**. Suggested classification **Bk** in forthcoming edition of Knossos tablets.

**KN Fh 5432+5461+fr.** (141)<sup>2</sup> Unknown (Room of Column Bases?).

]pte-si / [•]-u-pi-ri-[•]-i OLE s 1

↓ *verso* ]de-ma-si OLE 2

Possibly [ku]-pte-si / na-u-pi-ri-jo-i

**KN F(2) 852+8071+9919+fr.** ( — ) Area of Bull Relief (North Entrance Passage)

.1 da-wo / a-ma , e-pi-ke-re GRA 10300[

.2 OLIV+A 70 OLIV+TI 20 PYC+O 12[

Cut at left. .1 10900[ possible reading. .2 numeral 12 confirmed<sup>3</sup>.

**KN Od 667+5898+8292+fr.** ( — )<sup>4</sup> West Magazine XV.

.A 'ku-pi-ri-ja' LANA 1 M 2 P 4[

.B ] [ • • ]-ku , ke-[•]-ja M 2 P 1[

*latus inferius* ] sa-mu[ ] 1 qo-ja-te P 1[

.B [pa-ṛa]-ku possible reading; probably ke-ṛe[•]-ja, but ke-ṛe-ṣi-ja has been suggested.<sup>5</sup>

**KN Og 5515+5518+5539** ( — ) Unknown

]ka-te-ro L 4 M[

†Probably ]-ka-te-ro; therefore, wa-na]-ka-te-ro a most plausible reconstruction.

<sup>1</sup> Killen & Olivier 1989 (**KN**); Bennett & Olivier 1973 (**PY**); Pini 1997 (**PY** sealings); Palaima 1988 (**PY** scribes and find-places), Melena & Olivier 1991 (**MY**); Aravantinos *et al.* 2005 (**TH**, the latest transcription of the Theban texts even more updated than the *corpus* published in 2002). Drafts of the forthcoming editions of Knossos and Pylos tablets were consulted courtesy of Professor J. Melena, whom the author thanks once more for his outstanding generosity.

<sup>2</sup> Reconstruction here follows Killen & Olivier *apud* Bennett *et al.* 1989, 215–6.

<sup>3</sup> Melena *apud* Godart *et al.* 1990–1, 375.

<sup>4</sup> Transcription follows reconstruction by Melena *apud* Bennett *et al.* 1989, 204–5.

<sup>5</sup> Melena *apud* Bennett *et al.* 1989, 204.

**KN U 7700+8284+*frr.*** (—)<sup>6</sup> Unknown  
 ][ • • • ]-re-ta ★259 1[  
 ] x 1 *e-re-ta* not impossible.

The *po-ti-ro* set by Hand 125 from North Entrance Passage is classified as **V(5)**<sup>7</sup>; reclassified as series **Vf** in forthcoming edition of Knossos tablets. There were improved readings in the following texts of this set:

**KN Vf 1583+7747+7887+9782+*frr.*** (125)<sup>8</sup> Unknown  
 .A 'po-ti-ro' , si-mi-te-u 1 a-ra-ko-qe 1  
 .B ]ti-ja /

**KN Vf 9006** (125)<sup>9</sup> Unknown  
 .A ]pe-re-ta 1 [  
 .B ] *vac.* [  
 .A Traces at right, possibly *ka*].

**KN Vf 9320** (125)<sup>10</sup> Unknown  
 ka-di-ti-ja[

**KN Vf 9355** (125)<sup>11</sup> Unknown  
 .A ]ti 1 a-[  
 .B ]*vac.*[  
 .1 Over [[ ]].

### *Texts from Ano Englianos (Pylos)*

**PY An 724** (H 23)<sup>12</sup> Rooms 7 + 8 (AC)

**PY Cn 328** (S131 H 1)<sup>13</sup> Room 8 (AC)

**PY Jn 320** (S310 H 2)<sup>14</sup> Room 8 (AC)

**PY Jn 601** (S310 H 2)<sup>15</sup> Room 8 (AC)

<sup>6</sup> Transcription here follows reconstruction and reading by Godart and Olivier *apud* Bennett *et al.* 1989, 230-1.

<sup>7</sup> Killen & Olivier 1989, 340-7.

<sup>8</sup> Transcription follows reconstruction by Melena *apud* Godart *et al.* 1990-1, 377 and *apud* Godart *et al.* 1992-3, 57; Melena 1999, 370.

<sup>9</sup> Transcription follows reconstruction by Melena *apud* Godart *et al.* 1990-1, 385.

<sup>10</sup> Annotation *sup. mut.* in Killen & Olivier 1989, 347 has been proved invalid (Melena *apud* Godart *et al.* 1990-1, 391).

<sup>11</sup> Tablet **9355** previously classified as quasi-joined to **X 9227** (Kopaka & Olivier *apud* Bennett *et al.* 1989, 239); now joined to **9845** and possibly quasi-joined to **Vf 7577** as suggested by Melena 1999, 373.

<sup>12</sup> Bennett 1992, 116; Note suggestions about reconstructions in numerals by Del Frio 2002-3.

<sup>13</sup> See reconstruction by Melena 1992-3a, 76.

<sup>14</sup> Transcription follows extensive reconstruction by Melena 1992-3a, 75.

<sup>15</sup> Bennett 1992, 114; Melena 1992-3b, 316; 1994-5a, 98.

**PY Jn 881** (S310 H 2)<sup>16</sup> Room 2 (Inner Propylon)

**PY Na 262** (S106 H 1)<sup>17</sup> Room 8 (AC)

**PY Nn 831** (S106 H 1)<sup>18</sup> Room 8 + ‘Chasm’ (AC)

.3 a-mo-ke-re-[ ] SA 1

†.3 *a-mo-ke-re*[-u] not impossible, but *a-mo-ke-re*[-we] \*Ἀρμοκλέφης more plausible, cf. the Dative ]*mo-ke-re-we-i* in **PY Fn 324**.<sup>19</sup>

**PY Un 443** (H 6)<sup>20</sup> Room 8 (AC)

**PY Un 1322** (Cii)<sup>21</sup> Room 92 (Northeast Building)

**PY Wr 1415** (Ciii)<sup>22</sup> SW Area 27 (outside SW wall of Southwestern Building<sup>23</sup>)

**PY Wr 1326** (S1272 Ciii)<sup>24</sup> Room 98 (Northeast Building)

**PY Xa 990** (—)<sup>25</sup> Unknown

*Texts from Thebes (Boeotia)*<sup>26</sup>

**TH Ug 4** (301) Odos Pelopidou 28 [Pavlogiannopoulou plot] (‘Armoury’)

a-ka-to-wa-o / a-u-to-te-qa-jo Q[

†Proposed here to be *a-u-to* ]*te-qa-jo*, with insignificant distance between the two lexemes, a reconstruction that would accommodate alternative interpretation of the type (see text).

<sup>16</sup> Melena 1992–3b, 320.

<sup>17</sup> Quasi-join between **PY Na 284** and **Na 262** published by Melena 1994–5b, 275.

<sup>18</sup> Bennett 1992, 118.

<sup>19</sup> See Melena 1992–3a, 75–6 for a new reconstruction of **PY Fn 324**.

<sup>20</sup> Melena 1992–3b, 315.

<sup>21</sup> See reconstruction of initial lines .1–.2 by Melena 1992–3b, 323.

<sup>22</sup> Suggested reclassification as **Wp** (along with **1327**) in forthcoming edition of Pylos documents (not unanimously agreed).

<sup>23</sup> See Palaima 1988, 163, fig. 22.

<sup>24</sup> The seal impressed on this inscribed nodule has produced 10 impressions in total, of which two are on inscribed documents, the other being on **PY Wr 1330.α** by a *different* Stylus from a different Class. All ten sealings are classified under nr. 40 in Pini 1997, 24–6, Taf. 19–20: 40A–J; it shows an octopus with its tentacles ‘waving’ upwards. A similar motif (but with the direction of the tentacles waving downwards) does not appear on inscribed sealings (Pini 1997, 24 [nr. 40A], Taf. 19: 40A).

<sup>25</sup> Classified as **Xn** in Bennett & Olivier 1973, 276; reclassified as **Xa** in forthcoming edition of Pylos tablets.

<sup>26</sup> In several **TH Fq** tablets, reading *ju* (the ‘son’ acrophony, see footnote 93) instead of FAR ‘flour,’ is strongly suggested by Palaima 2006a. This is quite reasonable in cases where all the individual entries in many page-shaped inventories are eventually summed up as \*121 (HORD ‘barley’ or ‘wheat’).

# Bibliography

- Alexiou, S. 1973  
 'Νέα παράστασις πλοίου ἐπὶ μινωϊκῆς  
 λάρνακος' in *Πεπραγμένα του Γ' Διεθνούς Κρητολογικῆς Συνεδρίου, Ρέθυμνον 18-23 Σεπτεμβρίου 1971* (τόμος Α), Αθήνα, 3-12.
- Appadurai, A. 1981  
 'The past is a scarce resource', *Man* (N.S.) 16, 201-19.
- Aravantinos, V.L. 1987  
 'Mycenaean place names from Thebes: The new evidence', in *Studies in Mycenaean and Classical Greek Presented to John Chadwick* (Minos 20-22), J.T. Killen, J.L. Melena & J.-P. Olivier (eds.), Salamanca, 33-40.
- Aravantinos, V.L., M. Del Frio, L. Godart, & A. Sacconi 2005  
*Thèbes. Fouilles de la Cadmée IV. Les textes des Thèbes (1-433): Translittération et tableaux des scribes* (Biblioteca di Pasifae 4), Pisa.
- Aura Jorro, F. 1985  
*Diccionario Micénico* (bajo la dirección de F. R. Adrados) Volumen I (Diccionario Griego – Español: Anejo I), Madrid.
- Aura Jorro, F. 1993  
*Diccionario Micénico* (bajo la dirección de F. R. Adrados) Volumen II (Diccionario Griego – Español: Anejo II), Madrid.
- Ballard, C., R. Bradley, L. Nordenborg Myhre & M. Wilson 2003  
 'The ship as symbol in the prehistory of Scandinavia and Southeast Asia', *WorldArch* 35.3, 385-403.
- Bartoněk, A. 1988  
 'The name of Thebes in the documents of the Mycenaean era', *Minos* 23, 39-46.
- Basch, L. 1997  
 'Un représentation de navire de type égéen dans l'oasis de Dakhleh (Égypte) vers 1200 av. J.-C.', in *Res maritimae. Cyprus and the eastern Mediterranean from Prehistory to Late Antiquity. Proceedings of the second international conference 'Cities on the Sea', Nicosia, Cyprus, October 18-22 1994*, S. Swiny, R.L. Hohlfelder & H. Wylde Swiny (eds.), (CAARI Monograph Series 1), Atlanta, 17-30.
- Bendall, L.M. 2007  
*Economics of religion in the Mycenaean world: Resources dedicated to religion in the Mycenaean palace economy* (Oxford University School of Archaeology Monograph 67), Oxford.
- Bennet, J. 1988  
 'Approaches to the problem of combining Linear B textual data and archaeological data in the Late Bronze Aegean', in *Problems in Greek Prehistory. Papers presented at the centenary conference of the British School at Athens, Manchester, April 1986*, E.B. French & K.A. Wardle (eds.), Bristol, 509-18.
- Bennett, E.L. 1992  
 'A selection of Pylos tablet texts', in *Mykenaiika. Actes du IXe Colloque sur les Textes Mycéniens et Égéens, Athènes, 2-6 Octobre 1990*, J.-P. Olivier (ed.), (BCH Supplément 25), Paris, 103-27.
- Bennett, E.L. & J.-P. Olivier 1973  
*The Pylos tablets transcribed, part I: Texts and notes* (Incunabula Graeca 51), Roma.
- Bennett, E.L., J.M. Driessen, L. Godart, J.T. Killen, C. Kopaka, J.L. Melena, J.-P. Olivier & M. Perna 1989  
 '436 raccords et quasi-raccords et fragments inédits dans KT5', *Minos* 24, 199-242.
- Blegen, C.W. 1949  
 'Hyria', in *Commemorative studies in honor of Theodore Leslie Shear* (Hesperia Supplement 8), Princeton, 39-42.
- Boulotis, C. 1989  
 'La déesse minoenne à la ram-gouvernail', in *Proceedings of the 1st symposium on ship construction in Antiquity, Peiraeus 30/8-1/9/1985*, H. Tzalas (ed.), (Tropis I), Athens, 55-73.
- Boulotis, C. 2000  
 'Η τέχνη των τοιχογραφιών στη μυκηναϊκή Βοιωτία', in *Γ' Διεθνές Συνέδριο Βοιωτικών Μελετών, Θήβα 4-8 Σεπτεμβρίου 1996*, Β.Λ. Αρβαριντίνος (επιστ. επιμ.), (Επετηρίς της Εταιρείας Βοιωτικών Μελετών Γα), Αθήνα, 1095-149.
- Boulotis, C. 2005  
 'Πτυχές θρησκευτικής έκφρασης στο Αρχαϊκόν', *Άλς* 3, 21-75.
- Breacoulaci, H. 2004  
 'The Pylos Regional Archaeological Project: 14th season preliminary report to the 7th Ephoreia of Prehistoric and Classical Antiquity, Olympia, on the results of Museum study,



- September 2003 – October 2004’ (section 2: ‘Restoration and re-study of the Mycenaean wall paintings’), *The Pylos Regional Archaeological Project*, Cincinnati. [http://classics.uc.edu/PRAP/reports/HARP2004.html#body.1\\_div0.2](http://classics.uc.edu/PRAP/reports/HARP2004.html#body.1_div0.2) (6 July 2009).
- Brecoulaci, H. 2005  
‘The Pylos Regional Archaeological Project: 15th season preliminary report to the 7th Ephoreia of Prehistoric and Classical Antiquity, Olympia, on the results of Museum study, September 2004 – October 2005’ (section 5: ‘Conservation and re-study project of Mycenaean wall paintings’), *The Pylos Regional Archaeological Project*, Cincinnati. [http://classics.uc.edu/PRAP/reports/HARP2005.html#body.1\\_div0.5](http://classics.uc.edu/PRAP/reports/HARP2005.html#body.1_div0.5) (6 July 2009).
- Broodbank, C. 1993  
‘Ulysses without sails: Trade, distance, knowledge and power in the early Cyclades’, *WorldArch* 24.3, 315–31.
- Broodbank, C. 2000  
*An island archaeology of the early Cyclades*, Cambridge.
- Chadwick, J. 1976  
‘Mycenaean *e-re-ta*: A problem’, in *Studies in Greek, Italic and Indo-European linguistics offered to Leonard R. Palmer on the occasion of his seventieth birthday, June 5, 1976*, A. Morpurgo-Davies & W. Meid (eds.), Innsbruck, 43–5.
- Chadwick, J. 1978  
‘A Cretan fleet?’ in *Antichità Cretesi. Studi in onore di Doro Levi a cura di Istituto di Archeologia (Catania)*, tomo II (Chronache di Archeologia 13), Catania, 199–201.
- Chadwick, J. 1987  
‘The Muster of the Pylian fleet’, in *Tractata Mycenaea. Proceedings of the 8th international colloquium on Mycenaean studies, Ohrid 1985*, P.H. Ilievski & L. Crepajac (eds.), Skopje, 75–84.
- Chadwick, J. 1988  
‘The women of Pylos’, in *Texts, tablets and scribes: Studies in Mycenaean epigraphy and economy offered to Emmett L. Bennett Jr.*, J.-P. Olivier & T.G. Palaima (eds.), (Suplementos a *Minos* 10), Salamanca, 43–95.
- Cline, E.H. 1994  
*Sailing the wine-dark sea. International trade and the Late Bronze Age Aegean* (BAR International Series 591), Oxford.
- Cooney, G. 2003  
‘Introduction: Seeing land from the sea’, *WorldArch* 35.3, 323–8.
- Cosmopoulos, M.B. 2010  
‘Iklaina archaeological project 2009 Season. Internet report’, *Iklaina Archaeological Project*, St. Louis. <http://www.umsl.edu/~cosmopoulosm/IKLAINA04/docs/2009report.pdf> (6 July 2009).
- Crouwel, J. 1999  
‘Fighting in land and sea in late Mycenaean times’, in *POLEMOS. Le contexte guerrier en Égée à l’âge du Bronze. Actes de la 7e rencontre égéenne internationale, Université de Liège, 14–17 avril 1998*, R. Laffineur (ed.), (Aegaeum 19), Liège & Austin, 455–63.
- Crouwel, J. & C.E. Morris 1995  
‘Pictorial pottery of Late Minoan II – IIIA2 Early from Knossos’, *BSA* 90, 157–82.
- Cullen, T. 2005  
‘A profile of Aegean prehistorians 1984–2003’, in *Prehistorians round the pond: Reflections on Aegean Prehistory as a discipline. Papers presented at a workshop held in the Kelsey museum of archaeology, University of Michigan, March 14–16 2003*, J.F. Cherry, D. Margomenou & L.E. Talalay (eds.), (Kelsey Museum Publication 2), Michigan, 43–72.
- Dakoronia, P. 1991  
‘Warships on sherds in LH IIIC kraters from Kynos’, in *Proceedings of the 2nd symposium on ship construction in Antiquity, Delphi 27–29/8/1987*, H. Tzalas (ed.), (Tropis II), Athens, 117–22.
- Dakoronia, P. 1995  
‘Warships on sherds in LH IIIC kraters from Kynos?’, in *Proceedings of the 3rd symposium on ship construction in Antiquity, Athens 24–27/8/1989*, H. Tzalas (ed.), (Tropis III), Athens, 147–8.
- Dakoronia, P. 1996  
‘The Kynos ... fleet’, in *Proceedings of the 4th symposium on ship construction in Antiquity, Athens 28–31/8/1991*, H. Tzalas (ed.), (Tropis IV), Athens, 159–71.
- Dakoronia, P. 1999  
‘Representations of sea battle on Mycenaean sherds from Kynos’, in *Proceedings of the 5th symposium on ship construction in Antiquity, Nauplion 26–28/8/1993*, H. Tzalas (ed.), (Tropis V), Athens, 119–28.
- Dakoronia, P. 2002a  
‘New finds from Kynos’, in *Proceedings of the 7th international symposium on ship construction in Antiquity, Pylos 26–29/8/1999*, H. Tzalas (ed.), (Tropis VII), Athens, 279–82.
- Dakoronia, P. 2002b  
‘Further finds from Kynos’ in *Proceedings of the 7th international symposium on ship construction in Antiquity, Pylos 26–29/8/1999*, H. Tzalas (ed.), (Tropis VII), Athens, 283–90.

- Dakoronia, P. 2006  
 'Mycenaean pictorial style at Kynos, east Lokris', in *Pictorial pursuits. Figurative painting on Mycenaean and Geometric pottery. Papers from two seminars at the Swedish Institute at Athens in 1999 and 2001*, E. Rystedt & B. Wells (eds.), (SkrAth 4o 53), Stockholm, 23-30.
- Davaras, C. 1980  
 'Une ancre minoenne sacrée?' *BCH* 104, 61-7.
- Davaras, C. 2003  
 'The Mochlos ship cup', in *Mochlos IC. Period III. The Neopalatial settlement on the coast: The Artisans' Quarter and the farmhouse at Chalinomouri. The small finds*, J.S. Soles & C. Davaras (eds.), (Prehistory Monographs 9), Philadelphia, 3-15.
- Davis, J.L. 2001  
 'Review of Aegean Prehistory I: The Islands of the Aegean', (with I. Tzonou-Herbst and A. Wolpert 'Addendum 1992-1999'), in *Aegean Prehistory: A review*, T. Cullen (ed.), (AJA Supplement 1), Boston, 19-94.
- Davis, J.L. & J. Bennet 1999  
 'Making Mycenaeans: Warfare, territorial expansion and representations of the other in the Pylian kingdom', in *POLEMOS. Le contexte guerrier en Égée à l'âge du Bronze. Actes de la 7e rencontre égéenne internationale, Université de Liège, 14-17 avril 1998*, R. Laffineur (ed.), (Aegaeum 19), Liège & Austin, 105-20.
- Deger-Jalkotzy, S. & I.S. Lemos (eds.) 2006  
*Ancient Greece from the Mycenaean palaces to the age of Homer* (Edinburgh Leventis Studies 3), Edinburgh.
- De Fidio, P. 1998-9  
 'On the routes of Aegean Bronze Age wool and weights', in *A-N4-QO-TA. Studies presented to John T. Killen, J. Bennet & J.M. Driessen* (eds.), (Minos 33-4), Salamanca, 39-63.
- Del Frio, M. 2002-3  
 'La tablette An 724 de Pylos', *Minos* 37-8, 143-71.
- Del Frio, M. 2005  
 'L'expression *ka-ko na-wi-jo* de la tablette Jn 829 à Pylos', in *EMPORIA. Aegeans in the Central and Eastern Mediterranean. Proceedings of the 10th international Aegean conference held at the Italian School of Archaeology in Athens, 14-18 April 2004*, R. Laffineur & E. Greco (eds.), (Aegaeum 25), Liège & Austin, 793-803.
- Dickinson, O.T.P.K. 1994  
*The Aegean Bronze Age*, Cambridge.
- Dickinson, O.T.P.K. 2006  
*The Aegean from Bronze Age to Iron Age. Continuity and change between the twelfth and eighth centuries BC*, London.
- Driessen, J.M. 2000  
*The scribes of the Room of the Chariot Tablets at Knossos. Interdisciplinary approach to the study of a Linear B deposit* (Suplementos a Minos 15), Salamanca.
- Duhoux, Y. 2002-3  
 'Dieux ou humains? Qui sont *ma-ka*, *o-po-re-i* et *ko-wa* dans les tablettes Linéaire B de Thèbes', *Minos* 37-8, 173-253.
- Duhoux, Y. 2007  
 'Le nom du 'fils' en linéaire B', in *ΣΤΕΦΑΝΟΣ ΑΡΙΣΤΕΙΟΣ. Archäologischen Forschungen zwischen Nil und Istros. Festschrift für Stefan Hiller zum 65. Geburtstag*, F. Lang, C. Reinholdt & J. Weilhartner (eds.), Wien, 95-103.
- Earle, T. 1990  
 'Style and iconography as legitimization in complex chiefdoms', in *The uses of style in archaeology*, M. Conkey & C. Hastorf (eds.), Cambridge, 73-81.
- Evans, A.J. 1928  
*The palace of Minos* (Volume II), London.
- Evans, A.J. 1935  
*The palace of Minos* (Volume IV), London.
- Fortes, J.F. 2000  
 'Micénico *ku-pa-ro* = PYC/ CYP y los determinativos O, KU, PA y QA', *Faventia* 22.2, 7-12.
- Gallou, C. 2002  
 'ΕΣ ΗΛΥΣΙΟΝ ΠΕΔΙΟΝ ΚΑΙ ΠΕΙΡΑΤΑ ΓΑΙΗΣ: The Mycenaean sea journey to the Underworld', in *Seas of antiquity. Proceedings of the Liverpool interdisciplinary symposium in Antiquity 20 May 2000*, M. Georgiadis & G. Muskett (eds.), Liverpool, 18-33.
- Godart, L., J.T. Killen, C. Kopaka, J.L. Melena & J.-P. Olivier 1990-1  
 '501 raccords et quasi-raccords dans les tablettes de Cnossos post-KT 5', *Minos* 25-6, 373-411.
- Godart, L., C. Kopaka, J.L. Melena & J.-P. Olivier 1992-3  
 '175 raccords de fragments dans les tablettes de Cnossos', *Minos* 27-8, 55-70.
- Goren, Y., S. Bunimovitz, I. Finkelstein & N. Na'aman 2003  
 'The location of Alashiya: New evidence from petrographic investigation of Alashiyan tablets from El-Amarna and Ugarit', *AJA* 107, 233-55.

- Gray, D. 1974  
'Seewesen', in *Archaeologia Homerica: Die Denkmäler und das frühgriechische Epos*, F. Matz & H.-G. Buchholz (eds.), (im Auftrage des D.A.I., Band I, Kapitel G), Göttingen.
- Guest-Papamanoli, A. 1996  
'Hunting and trapping in prehistoric Crete: A proposal for ethnoarchaeological research', in *Pleistocene and holocene fauna of Crete and its first settlers*, D.S. Reese (ed.), (Monographs in World Archaeology 28), Philadelphia, 337-49.
- Helms, M.W. 1988  
Ulysses' sail. An ethnographic Odyssey of power, knowledge and geographical distance, Princeton.
- Hiller, S. 1975  
'*ra-mi-ni-ja*: Mykenische – kleinasiatische Beziehungen und die Linear B-Texte', *Živa Antika* 25, 388-412.
- Hiller, S. 1995  
'Der SM II-Palaststil: Ausdruck politischer Ideologie?', 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*, R. Laffineur & W.-D. Niemeier (eds.), (Aegaeum 12), Liège & Austin, 562-73.
- Hiller, S. 2006  
'The rise of the pictorial style and the art of Amarna', in *Pictorial pursuits. Figurative painting on Mycenaean and Geometric pottery. Papers from two seminars at the Swedish Institute at Athens in 1999 and 2001*, E. Rystedt & B. Wells (eds.), (SkrAth 4o 53), Stockholm, 63-72.
- Hirsch, E.S. 1977  
*Painted decoration on the floors of Bronze Age structures on Crete and the Greek mainland* (SIMA 53), Göteborg.
- Hirsch, E.S. 1980  
'Another look at Minoan and Mycenaean interrelationship in floor decoration', *AJA* 84, 453-62.
- Hocker, F. & T.G. Palaima 1990-1  
'Late Bronze Age Aegean ships and the Pylos tablets Vn 46 and Vn 879', *Minos* 25-6, 297-317.
- Hood, M.S.F. 2005  
'Dating the Knossos frescoes', in *Aegean wall painting. A tribute to Mark Cameron* (BSA Studies 13) L. Morgan (ed.), London, 45-82.
- Hope Simpson, R. & D.K. Hagel 2006  
*Mycenaean fortifications, highways, dams and canals* (SIMA 133), Sävedalen.
- Iakovidis, S. E. 1998  
*Γλας II. Η ανασκαφή 1981-1991* (Βιβλιοθήκη της εν Αθήναις Αρχαιολογικής Εταιρείας 173), Αθήνα.
- Immerwahr, S. 1985  
'Some pictorial fragments from Iolkos in the Volos Museum', *ArchEph*, 85-94.
- Immerwahr, S.A. 1990  
*Aegean painting in the Bronze Age*, University Park, Pennsylvania.
- Kalogeropoulos, K. 1998  
*Die Frühmykenische Grabfunde von Analepsis (Südöstliches Arkadien) mit einem Beitrag zu den Palatialen Amphoren des griechischen Festlandes* (Bibliothek der Archäologischen Gesellschaft zu Athen Bd. 175), Athen.
- Karali, L. 1996  
'Marine invertebrates and Minoan art', in *Pleistocene and holocene fauna of Crete and its first settlers*, D.S. Reese (ed.), (Monographs in World Archaeology 28), Philadelphia, 413-22.
- Killen, J.T. 1983  
'PY An 1', *Minos* 18, 71-9.
- Killen, J.T. 1985  
'The Linear B tablets and the Mycenaean economy', in *Linear B: A 1984 survey*, A. Morpurgo-Davies & Y. Duhoux (eds.), (BCILL 26), Louvain-La-Neuve, 241-98.
- Killen, J.T. 1995  
'Some further thoughts on "Collectors"', 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*, R. Laffineur & W.-D. Niemeier (eds.), (Aegaeum 12), Liège & Austin, 213-26.
- Killen, J.T. 2001  
'Some thoughts on *ta-ra-si-ja*', in *Economy and politics in the Mycenaean palace states. Proceedings of a conference held in 1-3 July 1999 at the Faculty of Classics, Cambridge*, S. Voutsaki & J. Killen (eds.), (Proceedings of the Cambridge Philological Society, Supplement 27), Cambridge, 161-80.
- Killen, J.T. 2007  
'Mycenaean *e-re-e-u*', in *ΣΤΕΦΑΝΟΣ ΑΠΙΣΤΕΙΟΣ. Archäologischen Forschungen zwischen Nil und Istros. Festschrift für Stefan Hiller zum 65. Geburtstag*, F. Lang, C. Reinholdt & J. Weilhartner (eds.), Wien, 159-68.
- Killen, J.T. & J.-P. Olivier 1966  
'388 raccords de fragments dans les tablettes de Cnossos', in *Proceedings of the Cambridge colloquium on Mycenaean studies 1965*, L.R. Palmer & J. Chadwick (eds.), Cambridge, 47-92.

- Killen, J.T. & J.-P. Olivier 1989  
*The Knossos tablets*, Fifth Edition (Supplementos a Minos 11), Salamanca.
- Kipp, R. & E. Schortman 1989  
‘The political impact of trade in chiefdoms’, *AmerAnt* 91, 370–85.
- Knapp, A.B. 1993  
‘Thalassocracies in Bronze Age eastern Mediterranean trade: Making and breaking a myth’, *WorldArch* 24.3, 332–47.
- Koehl, R.B. 1986  
‘A marinescape floor from the palace at Knossos’, *AJA* 90, 407–17.
- Koehl, R. B. 2006  
*Aegean Bronze Age rhyta* (Prehistory Monographs 19), Philadelphia.
- Korres, G.S. 1989  
‘Νέαι παρατηρήσεις επί της παραστάσεως πλοίου της ΥΕ ΠΠΓ:1/2 πυξίδος εκ Τροαγάνως Πύλου’, in *Proceedings of the 1st symposium on ship construction in Antiquity, Peiraeus 30/8-1/9/1985*, H. Tzalas (ed.), (Tropis I), Athens, 177–202.
- Krzyszkowska, O. 2005  
*The Aegean seals: An introduction* (BICS Supplement 85), London.
- Landenius Enegren, H. 2008  
*The people of Knossos: Prosopographical studies in the Knossos Linear B archives* (Boreas 30), Uppsala.
- Landström, B. 1970  
*Ships of the Pharaohs: 4000 years of Egyptian shipbuilding*, London.
- Lang, M.L. 1969  
*The palace of Nestor at Pylos in western Messenia II: The frescoes*, Cincinnati.
- Lang, F. 2002  
‘Sitzmöbel auf minoisch-mykenischen Schiffen? Spekulationen über verborgene Dinge’, in *Temenos. Festgabe für Florens Felten und Stefan Hiller. Dargebracht von Schülerinnen und Schülern des Instituts für Klassische Archäologie an der Paris Lodron-Universität Salzburg*, B. Asamer, P. Höhlinger, C. Reinholdt, R. Smetana & W. Wohlmayr (eds.), Wien, 21–6.
- La Rosa, V. 1997  
‘Haghia Triada à l’époque mycénienne: L’utopie d’une ville capitale’, in *La Crète mycénienne. Actes de la table ronde internationale organisée par l’École Française d’Athènes, 26-28 Mars 1991*, J. M. Driessen & A. Farnoux (eds.), (BCH Supplément 30), Paris, 249–68.
- Laviosa, C. 1972  
‘La marina micenea’, *ASAtene* 47–8 (n.s.31–2), 7–40.
- Lindenlauf, A. 2003  
‘The sea as a place of no return in ancient Greece’, *WorldArch* 35.3, 416–33.
- Long, C.R. 1974  
The Ayia Triadha sarcophagus: A study of Late Minoan and Mycenaean funerary practices and beliefs (SIMA 41), Göteborg.
- Manning, S.W. & L. Hulin 2005  
‘Maritime commerce and geographies of mobility in the Late Bronze Age in the eastern Mediterranean: Problematisations’, in *The archaeology of Mediterranean Prehistory*, E. Blake & A.B. Knapp (eds.), Oxford, 270–302.
- Marcus, E.S. 2006  
‘Venice on the Nile? On the maritime character of Tell Dab’a/Avaris’, in *Timelines. Studies in honour of Manfred Bietak*, E. Czerny, I. Hein, H. Hunger, D. Melman & A. Schwab (eds.), (Orientalia Lovaniensia Analecta 149), Louvain, volume II, 187–90.
- 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* (BCH Supplément 30), J. M. Driessen & A. Farnoux (eds.), Paris, 281–92.
- Marinatos, S.N. 1931  
‘Αι θαλασσογραφικαὶ παραστάσεις της Κρητομυκηναϊκῆς εποχῆς’, *ArchEph* 1930, 108–26.
- Marinatos, S.N. 1933  
‘La marine créto-mycénienne’, *BCH* 57, 170–235.
- Matthäus, H. 1980  
*Die Bronzegefäße der kretisch-mykenischen Kultur* (Prähistorische Bronzefunde II.1), München.
- Melena, J.L. 1992–3a  
‘167 joins of fragments in the Linear B tablets from Pylos’, *Minos* 27–8, 71–82.
- Melena, J.L. 1992–3b  
‘244 joins and quasi-joins of fragments in the Linear B tablets from Pylos’, *Minos* 27–8, 307–24.
- Melena, J.L. 1994–5a  
‘28 joins and quasi-joins of fragments in the Linear B tablets from Pylos’, *Minos* 29–30, 95–100.
- Melena, J.L. 1994–5b  
‘133 joins and quasi-joins of fragments in the Linear B tablets from Pylos’, *Minos* 29–30, 271–88.
- Melena, J.L. 1999  
‘Some thoughts on the origin of the Knossos fragments found in 1984 at the Heraklion Museum’, in *Florent Studia Mycenaea*.

- Akten des X. Internationalen Mykenologischen Colloquiums in Salzburg vom 1.-5. Mai 1995, S. Deger-Jalkotzy, S. Hiller & O. Panagl (eds.), (Veröffentlichungen der mykenischen Kommission Bd. 18), Wien, 363 – 87.
- Melena, J.L. & J.-P. Olivier 1991 *TITHEMY. The tablets and nodules in Linear B from Tiryns, Thebes and Mycenae* (Supplementos a Minos 12), Salamanca.
- Merousis, N.I. 2000a *Οι εικονογραφικοί κύκλοι των ΥΜ ΙΙΙ λαρνάκων: Οι διαστάσεις της εικονογραφίας στα πλαίσια των ταφικών πρακτικών*, Thessaloniki.
- Merousis, N.I. 2000b 'Η εικονογραφία στα πλαίσια των ταφικών πρακτικών: Οι ενδείξεις από τις διακοσμημένες λάρναιες της ΥΜ ΙΙΙ Κρήτης και της μυκηναϊκής Τανάγρας', in Γ' Διεθνές Συνέδριο Βοιωτικών Μελετών, Θήβα 4-8 Σεπτεμβρίου 1996, Β.Α. Αραβαντινός (επιστ. επιμ.), (Επετηρίς της Εταιρείας Βοιωτικών Μελετών Γα), Αθήνα, 264-85.
- Milani, C. 1998 'Il bronzo per il tempio: Note alla tavoletta micenea in Pilo Jn 829', *Aevum* 72.1, 30-5.
- Militello, P. 1999 'Οι μυκηναϊκές τοιχογραφίες της Αγίας Τριάδας', in *Πρακτικά του Α' διεθνούς διεπιστημονικού συμποσίου «Η περιφέρεια του μυκηναϊκού κόσμου»*, Λαμία 25-29 Σεπτεμβρίου 1994, Αθήνα, 345-52.
- Morgan, L. 1985 'Idea, idiom and iconography', in *L' iconographie minoenne: Actes de la table ronde d'Athènes*, 21-22 avril 1983, P. Darcque & J.-Cl. Poursat (eds.), (BCH Supplément 11), Paris, 5-19.
- Morgan, L. 1988 *The miniature wall-paintings of Thera: A study in Aegean culture and iconography*, Cambridge.
- Mountjoy, P.A. 1984 'The Marine Style pottery of LM IB/ LH IIA: Towards a corpus', *BSA* 79, 161-219.
- Mountjoy, P.A. 2005 'Mycenaean connections with the Near East in LH IIIC: Ships and Sea Peoples', in *EMPORIA. Aegeans in the central and eastern Mediterranean. Proceedings of the 10th international Aegean conference held at the Italian School of Archaeology in Athens, 14-18 April 2004*, R. Laffineur & E. Greco (eds.), (Aegaeum 25), Liège & Austin, 423-7.
- Muskett, G. 2002 'Kolonna in the Middle Bronze Age: The role of the sea', in *Seas of Antiquity. Proceedings of the Liverpool interdisciplinary symposium in Antiquity 20 May 2000*, M. Georgiadis & G. Muskett (eds.), Liverpool, 6-17.
- Nakassis, D. 2006 *The individual and the Mycenaean state: Agency and prosopography in the Linear B Texts from Pylos*, Ph.D. dissertation, University of Texas at Austin.
- Niemeier, W.-D. 1985 *Die Palaststilkeramik von Knossos. Stil, Chronologie und historischer Kontext* (Archäologische Forschungen Bd.13), Berlin.
- Niemeier, W.-D. 1996 'On the origin of the Mycenaean painted palace floors' in *Atti e memorie del secondo congresso internazionale di Micenologia, Roma-Napoli, 14-20 Ottobre 1991*, E. De Miro, L. Godart & A. Sacconi (eds.), (Incunabula Graeca 98.3), Roma, 1249-53.
- Nikoloudis, S. 2008 'The role of the ra-wa-ke-ta: Insights from PY Un 718', in *Colloquium Romanum: Atti del XII colloquio internazionale di micenologia, Roma 20 – 25 Febbraio 2006. Sotto l'alto patronato del presidente della repubblica*, A. Sacconi, M. Del Freo, L. Godart & M. Negri (eds.), (Pasiphae 2), Pisa, Tomo II, 587-94.
- Olivier, J.-P. 1996-7 'El comercio micénico desde la documentación epigráfica', *Minos* 31-2, 275-92.
- Palaima, T.G. 1988 *The scribes of Pylos* (Incunabula Graeca 87), Roma.
- Palaima, T.G. 1991 'Maritime matters in the Linear B tablets', in *THALASSA. L'Egée préhistorique et la mer. Actes de la troisième rencontre égéenne internationale de l'Université de Liège, Station de Recherches Sous-Marines et Océanographiques (StaReSO), Calvi, Corse, 23-25 Avril 1990*, R. Laffineur & L. Basch (eds.), (Aegaeum 7), Liège, 273-310.
- Palaima, T.G. 1992 'Mycenaean scribal aesthetics', in *EIKΩN. Aegean Bronze Age iconography: Shaping a methodology. Proceedings of the 4th international Aegean conference, University of Tasmania, Hobart, Australia 6-9 April 1992*, R. Laffineur & J. Crowley (eds.), (Aegaeum 8), 63-76.
- Palaima, T.G. 1995 'The nature of the Mycenaean wanax: Non-Indoeuropean origins and priestly functions', 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) with additions*, P.

- Rehak (ed.), (Aegaeum 11), Liège & Austin, 119-39.
- Palaima, T.G. 2005  
*The triple invention of writing in Cyprus and written sources for Cypriote history. Annual lecture in memory of Constantine Leventis, 6 November 2004, Nicosia.*
- Palaima, T.G. 2006a  
‘\*65 = FAR? or *ju*? and other interpretative conundra in the new Thebes tablets’, in *Die neuen Linear B-Texte aus Theben. Ihr Aufschlusswert für die mykenische Sprache und Kultur. Akten des Internationalen Forschungssymposiums an der Österreichischen Akademie der Wissenschaften, 5.-6. Dezember 2002*, S. Deger-Jalkotzy & O. Panagl (eds.), Wien, 139-48.
- Palaima, T.G. 2006b  
‘*wanaks* and related power terms in Mycenaean and later Greek’, in *Ancient Greece from the Mycenaean palaces to the age of Homer*, S. Deger-Jalkotzy & I.S. Lemos (eds.), (Edinburgh Leventis Studies 3), Edinburgh, 53-71.
- Palaima, T.G. 2007  
‘Ilios, Tros and Tlos. Continuing problems with *to-ro*, *to-ro-o*, *to-ro-ja*, *wi-ro* and *a-si-wi-ja*/ *a-si-wi-jo*’, in ΣΤΕΦΑΝΟΣ ΑΡΙΣΤΕΙΟΣ. *Archäologischen Forschungen zwischen Nil und Istros. Festschrift für Stefan Hiller zum 65. Geburtstag*, F. Lang, C. Reinholdt & J. Weilhartner (eds.), Wien, 197-204.
- Palmer, L.R. 1955  
‘A Mycenaean calendar of offerings (PY Kn 02)’, *Eranos* 53, 1-13.
- Perpillou, J.-L. 1968  
‘La tablette An 724 et la flotte Pylienne’, *Minos* 9, 205-18.
- Petrakis, V.P. 2004  
‘Ship representations on Late Helladic IIIC pictorial pottery: Some notes’, *Inferno. Journal of Art History* 9, 23-9.
- Petrakis, V.P. 2006  
‘ΝΑΥΣ ΚΟΡΩΝΙΣ: Σκέψεις για τη σημειολογία του πλοίου στην εικονιστική κεραμική της Μέσης και Ύστερης Χαλκοκρατίας στην ηπειρωτική Ελλάδα και τα νησιά του Αιγαίου (εκτός Κρήτης)’, *Αρχαιογνωσία* 14, 183-227.
- Petrakis, V.P. 2008  
‘*e-ke-ra<sub>2</sub>-wo* ≠ *wa-na-ka*? The implications of a probable non-identification for Pylian feasting and politics’, in *DAIS: The Aegean feast. Proceedings of the 12th international Aegean conference, University of Melbourne, Centre for Classics and Archaeology, 25-29 March 2008*, L.A. Hitchcock, R. Laffineur & J. Crowley (eds.), (Aegaeum 29), Liège & Austin, 391-400.
- Petrakos, V.Ch. 2010  
*Το Έργον της Αρχαιολογικής Εταιρείας κατά το 2009*, Athens.
- Petruševski, M.D. 1968  
‘Les designations de couleur en grec mycénien’, in *Atti e memorie del primo congresso internazionale di Micenologia, Roma 27/9 – 3/10 1967*, Roma, (Incunabula Graeca 25.2), 680-5.
- Pini, I. (ed.) 1997  
*Die Tonplomben aus dem Nestorpalast von Pylos*, Mainz.
- Piteros, C., J.-P. Olivier & J.L. Melena 1990  
‘Les inscriptions en Lineaire B des nodules de Thebes (1982): La fouille, les documents, les possibilites d’interpretation’, *BCH* 114, 103-84.
- Powell, J. 1992  
‘Archaeological and pictorial evidence for fishing in the Bronze Age: Issues of identity and interpretation’, in *EIKΩN. Aegean Bronze Age iconography: Shaping a methodology. Proceedings of the 4th international Aegean conference, University of Tasmania, Hobart, Australia 6-9 April 1992*, R. Laffineur & J. Crowley (eds.), (Aegaeum 8), Liège, 307-16.
- Protonotariou-Deilaki, E. 1991  
‘Ship representations from prehistoric Argolis (MH period)’, in *Proceedings of the 2nd symposium on ship construction in Antiquity, Delphi 27-29/8/1987*, H. Tzalas (ed.), (Tropis II), Athens, 123-6.
- Rainbird, P. 1999  
‘Islands out of time: Towards a critique of island archaeology’, *JMA* 12, 216-34.
- Rehak, P. & J.G. Younger 2001  
‘Review of Aegean Prehistory VII: Neopalatial, Final Palatial and Postpalatial Crete’, ‘Addendum 1998-1999’, in *Aegean Prehistory: A review*, T. Cullen (ed.), (AJA Supplement 1), Boston, 383-473.
- Romey, K. 2003  
*The Vogelbarke of Medinet Habu*, M.A. dissertation, Texas A&M University.
- Ruipérez, M.S. & J.L. Melena 1996 [1990]  
*Οι Μυκηναίοι Έλληνες* (Translated by M. Panagiotidou and revised by the authors), Αθήνα.
- Sakellarakis, J.A. 1974  
‘La theme du pecheur dans l’art prehistorique de l’Égee’, *AAA* 7, 370-90.
- Shaw, J.W. 2006  
*Kommos: A Minoan harbour town and Greek sanctuary in southern Crete*, New York.
- Shaw, M.C. 1980  
‘Painted *Ikria* at Mycenae?’ *AJA* 84, 167-79.

- Shaw, M.C. 1997  
 'Aegean artists and sponsors: Reflections on their roles in patterns of distribution of themes and representational conventions in the murals', 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*, R. Laffineur & P.P. Betancourt (eds.), (Aegaeum 16), Liège & Austin, 481-504.
- Shaw, M.C. 2001  
 'Images of naval power at the palace of Pylos: The evidence from the frescoes', in *ITHAKI. Festschrift für Jörg Schäfer zum 75. Geburtstag am 25. April 2001*, St. Böhm & K.-V. von Eickstedt (eds.), Würzburg, 37-43.
- Shelmerdine, C.W. 1997  
 'Workshops and record-keeping in the Mycenaean world', 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*, R. Laffineur & P.P. Betancourt (eds.), (Aegaeum 16), Liège & Austin, 387-96.
- Shelmerdine, C.W. 2001  
 'Review of Aegean Prehistory VI: The Palatial Bronze Age of the southern and central Greek mainland', 'Addendum 1997-1999', in *Aegean Prehistory: A review*, T. Cullen (ed.), (AJA Supplement 1), Boston, 329-81.
- Sherratt, A. & S. Sherratt 1991  
 'From luxuries to commodities: The nature of Mediterranean Bronze Age trading systems', in *Bronze Age trade in the Mediterranean. Papers presented at the conference held at Rewley House, Oxford in December 1989* N.H. Gale (ed.), (SIMA 90), Jonsered, 351-86.
- Sherratt, S. 1999  
 'E pur si muove: Pots, markets and values in the second millennium Mediterranean', in *The complex past of pottery. Production, circulation and consumption of Mycenaean and Greek pottery (Sixteenth to early fifth centuries BC)* *Proceedings of the Archon international conference held in Amsterdam, 8-9 November 1996*, J.P. Crielaard, V. Stissi & G.J. Van Winjgaarden (eds.), Amsterdam, 163-211.
- Sherratt, S. 2001  
 'Potempkin palaces and route-based economies', in *Economy and politics in the Mycenaean palace states. Proceedings of a conference held in 1-3 July 1999 at the Faculty of Classics, Cambridge*, S. Voutsaki & J.T. Killen (eds.), (Proceedings of the Cambridge Philological Society, Supplement 27), Cambridge, 214-38.
- Siedentopf, H.B. 1991  
 (unter Mitarbeit von W. Wohlmayr) *Alt-Ägina IV.2: Mattbemalte Keramik der mittleren Bronzezeit*, H. Walter & E. Walter-Karydi (eds.), Mainz.
- Sjöquist, E. 1940  
*Problems of the Late Cypriote Bronze Age*, Stockholm.
- Slenczka, E. 1974  
*Tiryns VII: Figürlich Bemalte Mykenische Keramik aus Tiryns*, Mainz.
- Smith, J.S. 1992-3  
 'The Pylos Jn series', *Minos* 27-8, 167-259.
- Spyropoulos, T.G. 1971  
 'Μυκηναϊκά τοιχογραφήματα εκ Θηβών', *ArchDelt* 26A, 104-19.
- Spyropoulos, Th. G. 1973  
 'Ανασκαφή Μυκηναϊκής Τανάγρας', *Prakt* 1973, 11-21.
- Televantou, C.A. 1994  
*Ακρωτήρι Θήρας. Οι τοιχογραφίες της Λυδικής Οικίας* (Βιβλιοθήκη της εν Αθήναις Αρχαιολογικής Εταιρείας 143), Αθήνα.
- Terrell, J.E. 1999  
 'Comment on Paul Rainbird  
 'Islands out of time: Towards a critique of island archaeology'', *JMA* 12, 240-5.
- Uchitel, A. 2004  
 'Theban Fq series and ancient Near Eastern messenger's stations', *SMEA* 46, 271-9.
- Vandenabeele, F. & J.-P. Olivier 1979  
*Les idéogrammes Archéologiques du Linéaire B* (ÉtCrét 24), Paris.
- Van de Noort, R. 2003  
 'An ancient seascape: The social context of seafaring in the Early Bronze Age', *WorldArch* 35.3, 404-15.
- Van Effenterre, H. 1970  
 'Un navire mycénien (?)', in *Sociétés et compagnies de commerce en Orient et dans l'Océan Indien. Actes du 8e colloque international d'histoire maritime, Beyrouth, 5-10 septembre 1966*, M. Mollat (ed.), Paris, 43-53.
- Vermeule, E.T. & V. Karageorghis 1982  
*Mycenaean pictorial vase painting*, Cambridge, MA.
- Voigtländer, W. 2003  
*Tiryns X: Die Palastkeramik*, Mainz.
- Voutsaki, S. 2001  
 'Economic control, power and prestige in the Mycenaean world: The archaeological evidence', in *Economy and politics in the Mycenaean palace states. Proceedings of a conference held in 1-3 July 1999 at the Faculty of Classics, Cambridge*, S. Voutsaki & J.T. Killen (eds.),

(Proceedings of the Cambridge Philological Society, Supplement 27), Cambridge, 195-213.

Wachsmann, S. 1997  
‘Were the Sea Peoples Mycenaean? The evidence of ship iconography’, in *Res maritimae. Cyprus and the eastern Mediterranean from Prehistory to Late Antiquity. Proceedings of the second international conference ‘Cities on the Sea’, Nicosia, Cyprus, October 18-22 1994*, S. Swiny, R. L. Hohlfelder & H. Wylde Swiny (eds.), (CAARI Monograph Series 1), Atlanta, 339-56.

Wachsmann, S. 1998  
*Seagoing, ships and seamanship in the Bronze Age Levant*, Texas.

Walsh, V.K. & W.A. McDonald 1992  
‘House construction and town layout’, in *Excavations at Nichoria in southwest Greece, II: The Bronze Age occupation*, W.A. McDonald & N.C. Wilkie (eds.), Minneapolis, 455-66.

Ward, C. 2006  
‘Boat-building and its social context in early Egypt: Interpretations from the First Dynasty boat-grave cemetery at Abydos’, *Antiquity* 80, 118-29.

Webb, M.C. 1975  
‘The flag follows trade: An essay on the necessary interaction of military and commercial factors in state formation’, in *Ancient civilisation and trade*, J.A. Sabloff & C.C. Lamberg-Karlovsky (eds.), Albuquerque, 155-210.

Wedde, M. 1999  
‘War at sea: The Mycenaean and Early Iron Age oared galley’, in *POLEMOS. Le contexte guerrier en Égée à l’âge du Bronze. Actes de la 7e rencontre égéenne internationale, Université de Liège, 14-17 avril 1998* (Aegaeum 19), R. Laffineur (ed.), Liège & Austin, 465-76.

Wedde, M. 2000  
*Towards a hermeneutics of Aegean Bronze Age ship imagery* (Peleus 6), Mannheim.

Whitley, J. 2004-5  
‘Lefkandi’, *AR* 51, 50-2.

Wyatt, W.F. 1994-5  
‘Homeric and Mycenaean λαός’, *Minos* 29-30, 159-70.

Younger, J.G. 1988  
*The iconography of Late Minoan and Mycenaean sealstones and finger rings*, Bristol.

Zangger, E. 1998  
‘The port of Nestor’, in *Sandy Pylos. An archaeological history from Nestor to Navarino*, J.L. Davis (ed.), Austin, 69-74.

Zannger, E., M.E. Timpson, S.B. Yazvenko, F. Kuhnke & J. Knauss 1997  
‘The Pylos Regional Archaeological Project, Part II: Landscape evolution and site preservation’, *Hesperia* 66, 549-641.