

MULTIPLE MEDITERRANEAN REALITIES

MITTELMEERSTUDIEN

Herausgegeben von

Mihran Dabag, Dieter Haller, Nikolas Jaspert
und Achim Lichtenberger

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Achim Lichtenberger, Constance von Rüden
(Eds.)

MULTIPLE
MEDITERRANEAN
REALITIES

Current Approaches to Spaces, Resources, and
Connectivities

Wilhelm Fink | Ferdinand Schöningh

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CONTENTS

Preface	7
Introduction: Multiple Mediterranean Realities. Spaces, Resources and Connectivities	9
CONSTANCE VON RÜDEN and ACHIM LICHTENBERGER	

Spaces

Prehistoric Cyprus: A ‘Crossroads’ of Interaction?	17
A. BERNARD KNAPP	
Making the Way through the Sea. Experiencing Mediterranean Seascapes in the Second Millennium B.C.E.....	31
CONSTANCE VON RÜDEN	
Opportunity in Scarcity: Environment and Economy on Aegina.....	67
GUDRUN KLEBINDER-GAUß and WALTER GAUß	
Multiple Mediterranean Forces: Guido von Kaschnitz Weinberg’s Mediterranean Art.....	93
ACHIM LICHTENBERGER	
Schizophrenic Urban Reality. The Changing Urban Landscapes of the Mediterranean Region and Developmental Influences.....	105
LORRAINE FARRELLY and ANDREA VERNINI	

Resources

- Mineral Resources and Connectivity in the Mediterranean and
its Hinterland121
THOMAS STÖLLNER
- The Trojan Palladion – Visual Expression of a pan-Mediterranean
Identity in Antiquity?.....149
STEFAN RIEDEL
- Perpetration and Perpetuation: The Persistence of Reciprocal
Stereotypes in the Geo-Politics of Mediterranean Culture169
MICHAEL HERZFELD
- Mittelmeer-Blues. Musik und postkoloniale Melancholie.....185
IAIN CHAMBERS

Connectivities

- Crossing the Sea – The Translation of Relics to and from
North Africa207
STEFAN ALTEKAMP
- Some Thoughts on the Carolingians and the Mediterranean –
Theories, Terminology and Realities223
SEBASTIAN KOLDITZ
- The Return of Ulysses. Varieties of the ‘New Mediterranean’
between Mediterraneanism and Southern Thought.....259
MARTIN BAUMEISTER
- Transnational Mobilities, Digital Media and Cultural Resources.....273
HEIDRUN FRIESE

PREFACE

This collection of essays is the result of an international conference which took place at Ruhr University Bochum from April 26th–28th 2012. It was hosted by the Zentrum für Mittelmeerstudien (Centre for Mediterranean Studies) which is funded by the Federal Ministry of Education and Research. We would very much like to express our gratitude to the Ministry for its financial support. One of the aims of the conference was to foster critical approaches to Mediterranean Studies and thus we invited several scholars of Mediterranean Studies with different disciplinary backgrounds to discuss current problems relating to spaces, resources and connectivities in the Mediterranean.

During the conference we received much logistical support from the members of the Centre for Mediterranean Studies and we would particularly like to single out Eleni Markakidou, Christoph Kremer, Anne Riedel and Stefan Riedel. Editorial work of this volume was considerably supported by Anne Riedel to whom we are very grateful. Further, Matthias Bley, Andreas Eckl and Stefan Riedel contributed to the editing of this volume. We would also like to thank all contributors to the conference and all panel chairs and discussants, of whom we would especially like to mention Johannes Fabian who chaired the final discussion and gave stimulating input to the conference.

Achim Lichtenberger and Constance von Räden

Bochum, October 2014

CONSTANCE VON RÜDEN

Making the Way through the Sea¹ Experiencing Mediterranean Seascapes in the Second Millennium B.C.E.

Introduction

Environmental conditions are widely assumed to justify considering the Mediterranean a spatio-temporal entity. Apart from the similar climatic conditions and vegetation in coastal areas, the sea itself is often seen as a driving mechanism or as an ‘artery of contact’ (van de Mieroop 2005, p.138) which has led to an outstanding high level of connectivity through the ages and to similarities in people’s behavior; an environmental determinism, which implicitly informs many archaeological, historical and anthropological approaches. In attempting to support this ahistorical assumption, researchers often refer to the Eastern Mediterranean of the second Millennium B.C. as the first period of Mediterranean long-distance exchange (for example, Abulafia, 2011; Horden and Purcell, 2000, pp.346-348) to support their idea with the justification of the *longue-durée* and with a certain authority that derives from antiquity. Hence the imagination of the Mediterranean as a spatial entity is even augmented by a temporal one, which removes not only its specific social but also its historical dimension.

At a first glance the archaeological research on the 2nd Millennium BC seems to confirm this idea of the sea as a unifying factor: a huge number of volumes and articles have been written about thalassocracies (for example, Säve-Söderbergh, 1946, p.41; Sasson, 1966; Lindner, 1981; Hägg and Marinatos, 1984; Wiener, 1989; for a critical discussion see Starr, 1955; Knapp, 1993), long-distance exchange (Kemp and Merrillees, 1980, pp.278-279; Lambrou-Phillipson, 1990; Gale, 1991; Cline, 1994; Knapp, 1998; Sherratt and Sherratt, 1991; Bevan, 2007), concepts of an ‘international koiné’ (Kantor, 1947; Smith, 1965; Sherratt, 1994; Feldman 2002; 2006) or even a ‘Mediterranean System’ (van de Mieroop 2005, p.138). But most of the studies have concentrated on the distribution of objects, chronological references, and attempts to reconstruct exchange systems or to identify cross-cultural influences on material cultures. They have focused mostly on the sources of raw materials (for example, Stos-Gale, 1989), the place and time of manufacture of worked

¹ The expression “making the way through...” is borrowed from Ingold’s article “Footprints through the weather-world: walking, breathing, knowing” (Ingold, 2010). It is used by him to emphasize an improvisatory movement – of ‘going along’ or wayfaring – that is open-ended and knows no final destination (Ingold, 2010, p.122).

objects (examples are Kemp and Merrillees, 1980, pp.278-279; Lambrou-Phillipson, 1990; Cline, 1994; Knapp, 1998) or the origin of technical and typological influences in the archaeological record (examples are Kantor, 1947; Smith, 1965; Buchholz, 1974; Crowley, 1989; Brysbaert, 2008). As ‘archaeologies of origins’ they essentially describe networks and flows within the Mediterranean which is of course a central issue understanding how people from different shores came into contact. But at the same time it often neglects the way these exchanged objects were used and thus to understand possible common practices, meanings or life styles within the Mediterranean, an aspect which still offers a huge field for future research.

Written sources from the second half of the 2nd Millennium B.C.E. might provide some further insight into common practices in the region: Cuneiform letters, written in Akkadian as the commonly used language of the time, have been found in palatial archives in Western Asia, Anatolia and Egypt describing trade, royal gift exchange, inter-marriage and diplomacy between the different rulers of the Eastern Mediterranean and beyond (Liverani, 1990). By addressing one another as brothers, fathers or sons the actors seem to have produced a kind of common imaginary kinship.²

“Sa[y] to Nibmuareya, the k[ing of Egypt], my brother: Thus Tuišeratta, the king of [M]ittani, your brother. For me all goes well. For you all go well. For Kelu-Ḫeba may all go well. For your household, for your wives, for your sons, for your magnates, for your warriors, for your horses, for your chariots, and in your country, may all go very well.” (EA17, Moran, 1987, p.41)

One might consider this development to be the emergence of a common Eastern Mediterranean elite identity during the Late Bronze Age, an identity which was also materially expressed in several ways. To display a certain kind of togetherness these elites decorated their palaces with similar wall paintings (Niemeier and Niemeier, 1998; Niemeier and Niemeier, 2002; Bietak, Marinatos and Palyvou, 2007; Feldman, 2007; Brysbaert, 2008; Taraqqi, 2008; Cline, Yasur-Landau and Goshen, 2011; Kamlah and Sader, 2010; von Rügen, 2011) and consumed hybrid luxury goods, often labeled as ‘international style’ or ‘international koiné’ objects (Kantor, 1947; Smith, 1965; Feldman, 2006). Both aspects, the design of their palaces as well as the use of these ‘international koiné’ luxury goods, can be seen as evidence of a similar kind of conspicuous consumption (Veblen, 1912) performing a high status vis-à-vis their peers, the rulers of the different political entities of the Eastern Mediterranean, as well as the local population; a similar, possibly transcultural praxis within the palatial environments of the various elites that possibly resulted in an affiliation to a transmediterranean elite identity.

But these are not the central questions of this paper. Rather, I will discuss whether the observed development during the second Millennium can be ascribed to the sea as communication medium and if we can trace any difference

² For a detailed discussion about the different denomination of kinship s. Franke, 1983.

between the networks within the Eastern Mediterranean and the networks of non-marine regions, for example, along valleys or rivers such as in Mesopotamia or the Danube region? In other words: What makes the Middle Sea so special? Does the affordance (Gibson, 1979, p.16) of the all-connecting sea really have a specific impact on people's life style and behavior and do the coastal populations necessarily feel the need to explore the sea and make contact with people beyond it? Peregrine Horden and Nicholas Purcell consider instability of subsistence agriculture in the 'micro-regions' of the Mediterranean as a driving mechanism for an exchange by sea (Horden and Purcell, 2000, pp.342-400). Such instability can be found in most pre-industrialized societies, but does this threat essentially result in an affinity with the sea?

To approach some of these questions I shall explore the way in which people in different Mediterranean regions related to the medium 'sea' during the second Millennium B.C.E.; I shall attempt to trace their experiences with the sea, how they generated knowledge by their entanglement with this medium, how the sea may be embodied through the practice of everyday life and how this entanglement was materialized in the archaeological record (Rainbird, 2007, p.46).

Seascapes in the Light of Transport and Wayfaring

Tim Ingold's research on the perception of landscapes results in a very interesting observation: the distinction between wayfaring and transport (Ingold, 2011). For him a wayfarer is "a being who, [...], negotiates or improvises a passage as he goes along – in his movement his concern is to seek a way through". Transport by contrast is a form of moving which "[...] carries the passenger across a pre-prepared, planar surface. [...] The passenger's concern is literally to get from A to B, ideally in as short time as possible. What happens along the way is of no consequence, and is banished from memory or conscious awareness" (Ingold, 2010, p.120). An experience very close to this latter concept is maybe that of today's underground trains – you enter it at a certain point of the city and you surface at another place in as short a time as possible, almost with no awareness of the trip. But even today pure transport is an ideal which is never completely achievable in practice. It is an ideal of a perfect infrastructure which is desired in our modern capitalistic world; a result of our aspiration to waste as little time and energy as possible in order to maximize profit.

Certainly this concept of transport is deeply anachronistic for Bronze Age voyaging, but nonetheless it has crucially influenced our perspective on exchange. As described above, archaeological research concentrates mainly on the idea of transport of goods and its technical needs such as shipbuilding. This functionalist approach has often focused on the outcome and the use of exchange, surely influenced by the economic theories of 80s and 90s. In these rather modernist approaches, only the beginning and the end of a journey is of interest, everything which is in between is more or less a loss of time and resources. It is doubtful that

this is the reality for any human and surely we cannot approach people's experience with the sea during the Bronze Age with such a concept – a period when possible dangers, unexpected events and consequently time schedules were much less controllable than today. Even if journeys by sea might have reduced travel time (Carver, 1990) and allowed bigger volumes of goods to be transported, the question arises if the duration and efficiency of the journey was always the crucial factor in the Bronze Age? In his study about navigation on Puluwat Atoll in Micronesia Thomas Gladwin describes how the inhabitants of the islands continued voyaging by canoe and experimenting with new construction techniques even when more functional or convenient ferry boats had been introduced. Obviously there was more to travelling by canoe than mere functional considerations: it had a “psychological worth of its own” for these societies (Gladwin, 1970, p.35).

Therefore we should try to understand the relation of humans with the sea more in the sense of Ingold's wayfarer. In his reflections about the human relationship to landscape, he considers walking or in his words “making the way through” the landscape and the weather-world as “a process of thinking and knowing”. This knowledge is formed “along the paths of movement in the course of everyday activities” (Ingold, 2010, p.121). Based on Merleau-Ponty's phenomenology (Merleau-Ponty, 1945) Ingold considers earth and sky not as components of an external environment with which the socialized or encultured body interacts, but as regions of the bodily existence without which knowledge and memory would not be possible - an approach that not only dissolves the body-mind dichotomy, but also includes the body-environment relationship. Even though Ingold does not explicitly refer to the sea or the medium water, his considerations hold true for seascapes too. Through daily activities and experiences with this medium the knowledge of the practitioner grows, and this knowledge in turn shapes the way she or he relates to the sea, the way she or he perceives it.

So when David Abulafia states that his “‘Mediterranean’ is resolutely the surface of the sea itself, its shores and its islands, particularly the port cities that provided the main departure and arrival points for those crossing it” (Abulafia, 2011, xvii), then this is the perspective of a non-mariner or a person inexperienced with the sea. Only for them does the sea appear to be simply a flat, monotonous surface. When an experienced navigator such as, for example, a Puluwatan, “speaks of the ocean the words he uses refer not to an amorphous expanse of water but rather to the assemblage of seaways that constitute the ocean he knows and understands” (Gladwin, 1970, p.34). Therefore Rainbird rightly suggests that in the same way as landscapes have to be understood as visionscapes, soundscapes, touchscapes and smellscapes, the sea is a textured space and therefore knowable (Rainbird, 2007, p.47). Through human experiences, through the body's sensory entanglement the sea becomes part of the wayfarer's knowledge and personal lifeworld (Schütz, 1974; Habermas 1981, p.192). The sensitivity to cues in the environment such as, for example, specific winds, reefs, waves or currents, increases with experience and with this knowledge the wayfarer becomes aware of the meaning and possible consequences of specific phenomena and acquires the abil-

ity to respond to these challenges in an appropriate way (Ingold, 2010, p.134, p.136).

Hence by the process of ‘knowledge growing’ the seascape ceases to be an undifferentiated mass, but is enriched by visual, haptic, audible and olfactory sea-marks. Saul Riesenberg describes in his study about the navigators of the Atoll Puluwat the mnemonic devices and systems of classification for geography and star courses as a kind of navigational system. These descriptions³ give us a precious insight about how the sea might be perceived by those living with and in it. For them there are not only distinct coastal features like islands, cliffs, peaks or a river mouth, but also underwater elements such as, for example, reefs, sandbanks and specific sea beds (Riesenberg, 1976, p.92, p.97, p.99). By the precise description of their shape, their specific vegetation or inhabitants such as, for example, seaweeds, shells or clams (Riesenberg, 1976, p.112, pp.114-115, p.119, p.122) it is evident that their observations are not restricted to the sea’s surface, but rather penetrate it. For their awareness a whole world exists below the surface, a world which does not exist for the inexperienced person. Besides it is not only the relatively stable ocean bead which is of importance, but also the seemingly unstable water surface, the currents and waves. A wave can indicate a distinct position in the sea, for example, the end of the wind shadow of an island, and in some cases waves are even named. The same holds true for places with special water qualities or locations where the currents collect floating objects (Riesenberg, 1976, p.107, p.111, p.113, p.116, p.126). Even more astonishing for non-mariners is the use of animals as orientation. Individual fishes, shoals or birds have very distinct habitats and can often be observed in the same area. Schools of bonitos, turtles or parrot fishes are known examples (Riesenberg, 1976, p.106, p.116) and in some cases also individual animals like sword fishes, sharks or whales are identified as sea-marks. Like the above-mentioned locations and waves, they too can bear personal names such as, for instance, a very big whale with the name *Máfipefip*, a large swordfish with the name *Eherewór*, and *Apilú*, a frigate bird in in the Puluwat Atoll (Riesenberg, 1976, p.98, p.103, pp.117-118, p.122). The importance of these animals for a mariner of the Pacific is best shown by a narrative entitled ‘Sea life’, whose specific aim is to pass this know ledge of the ocean on to the next generation (Gladwin, 1970, pp.204-207).

Moreover the sea is not only visually perceived. The coral head *Fayitárep* whose name can be translated as the “coral of the Sound of Surf” (Riesenberg, 1976, p.100) shows the audible dimension of seamarks, while other aspects are perceptible mainly through our haptic sense. A specific wind compass known in the Pacific uses the latter sense for navigation (Lewis, 1972, pp.73-76): the direction of waves and swells can be sensed by the up and down movement of a boat and Gladwin points to the fact that Puluwatans “steer by the feel of the waves

³ While Riesenberg describes only 11 systems of classification, Peter Ochs reports later more than 70–80 groupings about which he has been told by only one informant (Riesenberg, 1976, p.91, Note 2).

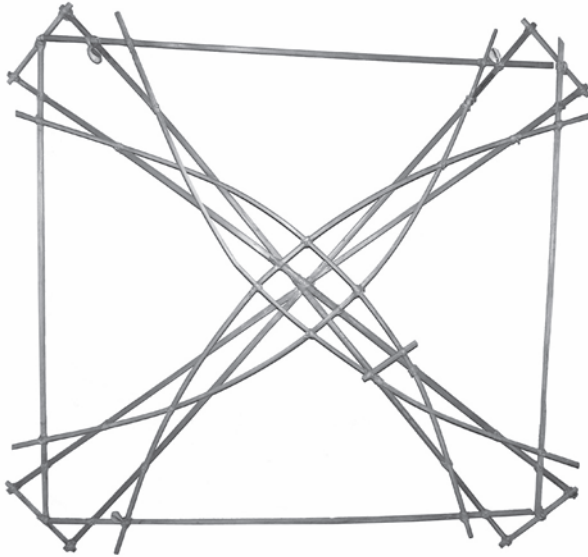


Fig.1: Stick chart with the representation of a reef
(photo courtesy of the Völkerkundemuseum der J.
& E. von Portheim-Stiftung Heidelberg).

under the canoe, not visually” (Gladwin, 1970, p.171; Lewis 1972, p.127). Not all the seamarks are “real” phenomena in our modern western sense; some of them seem to us to be located in the realm of myth. A two-headed whale or *Ranúkuwel*, the whale with two tails, a spirit who lives in a flame, a man in a canoe made out of ferns, or vanishing islands are examples of this (Riesenberg, 1976, p.101, pp.104-105, pp.108-109, p.112, p.121), but nonetheless they also have to be regarded as a part of the inhabitants’ reality of the seascape.

Furthermore Ingold remarks that a wayfarer is less a surveyor than a narrator. She or he does not classify every experience, but rather relates every impression to the occurrences that paved the way for it. The wayfarer’s knowledge is not classificatory, as we are familiar with it in scientific approaches, but storied, ‘not synoptic but open-ended and exploratory’ (Ingold, 2010, p.128; 2011) – therefore the landscape becomes a story for those living in it (Ingold, 1993, pp.162-163). The same holds true for seascapes, an observation which is in line with the narrative maps of seafarers. In the above-described systems of the Puluwat Atoll the narrator often imagines himself in a canoe, following a path from place to place (Riesenberg, 1976, p.91). This individual wayfarer of the sea, the narrator of the navigational systems, draws his or her tale from the sea, a tale which also has meaning for other practiced mariners with whom she or he shares similar experiences

and a similar lifeworld. Hence these individual experiences and knowledges are shared within their societies, they are passed on from generation to generation either through storytelling, through dancing (Lewis, 1972) or through song (Riesenberg, 1976, p.92; Rainbird, 2007, p.46) or by a materialized representation of this information such as, for example, the stick charts that we know from the Marshall Islands (fig.1) (Davenport, 1964). Therefore seascapes can also become part of communal narrations, myths and rituals and associated with collective memories (Tilley, 1999, p.177). By all these stories, by their collective production and consumption the individual sea experience of the wayfarer becomes part of the group's lifeworld and the perception of the sea acquires a social and historic dimension; a dimension, which in turn has an impact on how the sea is experienced and expressed both materially and literally. With these insights into the sea-realities of practitioners, the question arises if such a complex awareness and narration might also be traceable in the archaeological and literal record of the Second Millennium B.C.E.

Relating to the Sea – Literally and Materially Produced Realities

To shed light on people's experiences and knowledge of Bronze Age seascapes, I want to trace sea-related practices and their implied knowledge as well as the way they represent the sea in the written and materially produced realities. I have chosen three regions: Egypt, the northern Levant and Crete, broadly during the middle of the 2nd millennium B.C. E. but of course I do not consider them as strict cultural and social units. Furthermore it is not my aim to draw a complete picture of sea-related activities and images in these regions and to compare them one by one - an impossible task within the frame of this article. Rather I want to highlight by comparison the diverse possibilities of relating to this medium and the integration of different knowledges in the respective local lifeworlds and to encourage further research in this direction.

All three regions possess an extensive coast line and were involved in the vibrant exchange system of the Eastern Mediterranean during the second Millennium B.C.E. At least since the beginning of the Millennium big sea-going sailing ships were available to all of them (Casson, 1995, fig.39) and long journeys across the open sea, navigation at night and sailing at an angle to the wind were possible (Berg, 2007).

Egypt and the Nile Delta

In Egypt relations with other Mediterranean regions had existed the latest since the Early Dynastic Period, but for the Old Kingdom we have the first evidence that Lebanese cedar wood was imported by ship from the city of Byblos in the central Levant. What is not made explicit in this source is whether these ships

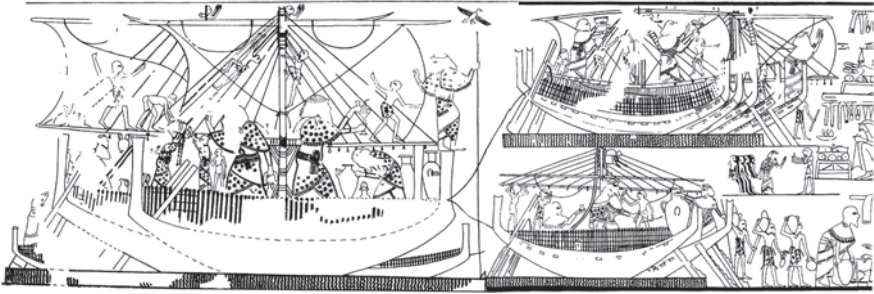


Fig.2: Depiction of a sea-going ship with Syrian crew in the tomb of Kenamun (after Aruz et al., 2008, fig.98).

were navigated by people from the Levant or from Egypt (Wilkinson, 2000, pp.141-142). The depiction of a sea-going vessel in the sun temple of Sahura (5th Dynasty) might shed some light on that question. The crew members are depicted in an 'Asiatic way' with beards, which suggests that this is a 'Byblos ship' (Vinson, 2009, p.3). The term 'Byblos Ship' (*kbnt*) is known to us through a 6th Dynasty inscription which tells us about the return of the corpse of an Egyptian overseer of the construction of 'Byblos boats' in Western Asia (Strudwick, 2005, p.335). Hence voyages across the Mediterranean were indubitably undertaken, but there is no evidence of the participation of 'Egyptians' as practitioners, that is, as sailors or navigators. The same lack of evidence holds true for the Middle Kingdom, even though travel on the Middle Sea was surely prevalent (Watrous, 1998). More information is available about 'Egyptian' navigation on the Red Sea. The Tale of the Shipwrecked Sailor dating to the Middle Kingdom (Baines, 1990) and the archaeological findings in Marsa Gawasis (Sayed, 1977) reflect Egyptian efforts to find easy access to the mines of the Sinai by sea.

There is more evidence for the New Kingdom. But despite the rich sources from this period and Torgny Säve-Söderbergh's intensive search and desire for an Egyptian navy or even Egyptian supremacy over the sea during the 18th Dynasty (Säve-Söderbergh, 1946, p.42), the data is scarce and often not very compelling. Among the most interesting sources are the dockyard annals of Thutmose III, which mention sea-going ships in the river harbor Perunefer. The vessels are called *sk.tj*, Byblos (*kpn*) or Keftiu/Cretan (*Kftjw*) ships and we can assume that their names reflect their origin in these regions (Glanville, 1931, p.116; 1932, p.36) and not in Egypt. This assumption is supported by the fact that one of the very few depictions of sea-going vessels⁴ in the Theban tomb of Kenamun, the 'Superintendent of Perunefer', has a 'Syrian' crew (fig.2). Is this 'dominance' of non-'Egyptian' sea-going ships in the written or iconographic record only due to

⁴ See also the depictions of the expedition to Punt on the Red Sea (for example, Duemichen, 1868, pl.1).

the scarce preservation? Does it only reflect Kenamun's desire to emphasize the 'international' character of his responsibilities in Perunefer or does it simply represent a reality of daily life in the harbor town? From texts we know that Perunefer, whether we identify it with Tell el Dab^{ca} or locate it in the area of Memphis, was a multicultural place. The population also included many people from Western Asia, and 'Asiatic' cults flourished (see, for example, Bietak, 2009; 2011, pp.22-23). At least we should take into consideration that the Western Asian presence might not only be attributable to the Hyksos' heritage, but also to the multicultural character of the harbor town and its possible attraction for skilled navigators and sailors from the Levant – no matter whether they were hired by the city states of Western Asia or by the Pharaoh. A preponderance of Western Asian navigators and seamen within the 'Egyptian' sphere might explain why Säve-Söderbergh searched in vain for official titles for marine personnel of the 18th Dynasty (Säve-Söderbergh, 1946, pp.93-94).⁵ This assumption might even be supported by the much later 'Tale of Wenamun' (Third Intermediate Period) which describes Wenamun's sea voyage to Byblos and Cyprus with a non-'Egyptian' crew (Lichtheim, 1976, pp.224-230). Of course we cannot view the tale as a historical report, and this detail might simply reflect the loss of Egyptian power over the sea after the Late Bronze Age, though it might also mirror a customary practice of hiring foreign crews. Furthermore the Mediterranean is referred to in this text as the 'great sea of Syria' (using the Semitic term *yam*, Lichtheim, 1976, pp.224-230); this is possibly not only a geographical denomination, but also an indication that the Mediterranean was regarded as an integral part of the 'Syrian' rather than the 'Egyptian' sphere. This is not to say that Egyptians were not able to build and navigate sea-going vessels during this period. We know from the Punt reliefs (Duemichen, 1868, pl.1) that they were capable of doing so, at least for voyages in the Red Sea, and a letter of Ramses II shows that distinct knowledge about ship building existed at the very end of the Late Bronze Age (Edel, 1994, pp.186-187).⁶

Despite Egypt's intensive Mediterranean exchange during the Second Millennium there is hardly any evidence for 'Egyptian' navigators or sailors in the Mediterranean in the written and iconographical sources. This lack of evidence is surprising, especially because we encounter several references to people from Western Asia practicing these skills. Either they were rarely practiced by Egyptians or those Egyptian practitioners were not considered to be of sufficient interest to warrant depicting or reporting about them.⁷

⁵ Vandersleyen even argues that they do not exist at all (Vandersleyen, 2008, p.125).

⁶ In this letter the Pharaoh refers to a ship he has sent to the Hittite king, so that the carpenters of the latter can copy it and produce a drawing. However, Ramses II might not have been primarily interested in the spread of information about ship building, but in using the famous skills of the Hittite carpenters for his own interests.

⁷ Furthermore the Horus Way, the land connection from Egypt via Sinai to the Levant, was still the usual route for trade and military campaigns to the Levant.

This was evidently not the only facet of the Mediterranean that was disregarded. For example, there is no explicit description of the animals native to this body of water. This is particularly surprising because fishing is a very prominent topic in Egyptian iconography though depictions of this activity are restricted to Nile or marsh scenes. In these contexts the fish were drawn in such detail that we can identify most of the species (Brewer and Friedman, 1989). The inhabitants' knowledge of these species might mirror the interest and importance of these resource-rich regions for the population. The Nile had an abundance of fish, and Nile perch and fresh-water shells were even exported to the Southern Levant and Cyprus (Reese, Mienis and Woodward, 1986). The fact that these animals are depicted in detail in their natural habitat reflects the practitioner's knowledge of underwater fauna, and obviously these riverscapes were an integral part of people's lifeworld. Similar illustrations, but of Red Sea species, can be seen below the depictions of Hatshepsut's Punt ships in Deir al- Bahari. Here, too, the animals are mostly identifiable with fish living today in the Red Sea (Doenitz, 1868, pp.46-47, pl.20-24) and therefore reflect a very good knowledge of the local sea life, while similar representations of the Mediterranean are unknown. Even though it is difficult to argue on this lack of evidence, it seems that the Egyptian convention of depicting, or one can almost say listing in detail, what is below the water surface is restricted to the Nile and the Red Sea. Again the question rises if it was simply not of interest to depict the Mediterranean Sea in such a detailed way or if this body of water and its dwellers were less known?

The few available archaeozoological data seem to confirm the subordinate role of the Mediterranean Sea as a food resource, at least in the nearby Nile Delta. One of the rare examples of a sea fish is a mullet found in a storage jar in the palatial district of F/I in Tell el Dab^ca on the Pelusiac branch of the Nile. But obviously only those sea fish which can adjust to brackish water and were therefore able to swim upstream have been detected in the archaeological record (Boessneck and von den Driesch, 1992, pp.42-43; von den Driesch, 1986). Hence they could have been fished in the brackish water of the Nile Delta and cannot be used as evidence for fishing activities in the Middle Sea. Also, there is little evidence of collecting in the littoral zone. A small number of murex shells (*Murex brandaris*) and some other marine shells (a few are pierced and used as jewelry, as for example some *Cerastodermae*) are known from the site of Tell el Dab^ca (Boessneck and von den Driesch, 1992, p.44). Furthermore, there is evidence of sea shells and corals in a workshop of F/II, probably used as raw material⁸, and crushed shells have also been detected as filler for the wall paintings of the palatial district of the Thutmosite period (Brysbaert, 2007, p.155). In limited amounts shells obviously entered different craft productions in the Nile Delta, but it is often hard to say whether they were imported from the Red Sea or the Mediterra-

⁸ Beneath corals, *Tridacna*, partly burned and some *Pinna* shells, which might hint at a sea silk production, also some cuttlebone from H/VI Karl Kunst, personal communication.

nean.⁹ Nonetheless some collecting activity in the littoral zone can be assumed, though unfortunately archaeozoological evidence from sites directly on the coast and therefore immediate evidence of activities in the littoral zone of the Mediterranean is very limited. Due to the alluvial deposits in the delta the ancient coast line and therefore coastal sites are difficult to trace. An exception might be the very small Late Bronze Age site of Marsa Matruh which is about three hundred kilometers west of modern Alexandria, hence west of the delta. Different species from the littoral zone and open-water fish like mackerel as well as marine invertebrates like *Monodonta* and *Patella*, the latter probably collected for food, have been documented. This evidence speaks for active interaction with the sea in terms of collecting in the littoral zone as well as coastal and even open-water fishing by the few inhabitants (Reese and Rose, 2002, pp.89-92, pp.97-101). But because of its remote location the site cannot be considered representative of the Nile valley.

After looking at sea voyaging, fishing and collecting as possible sea-related practices and hence possible experiences for the inhabitants of ancient Egypt, we finally come to the topic of how the Mediterranean itself was described in the different sources. In recent research there has been intensive discussion about the term *Wadj-Wer*, 'the great green' (*w3d-wr*), and which regions were named by this appellation (see, for example, Kitchen, 2000; Vandersleyen, 1999; 2008; Quack, 2002). The traditional identification of *Wadj-Wer* as primarily the Mediterranean Sea has been challenged by Vandersleyen¹⁰, who proposes that the term should be used exclusively for places within Egypt. Among others he lists, for example, the Nile itself, the delta, the Fayoum oasis and generally the flood of the Nile, but he excludes the Mediterranean (Vandersleyen, 1999; 2008). Even if we do not follow his rather radical exclusion of the Mediterranean (for a discussion see Kitchen, 2000; Quack, 2002), his study has again drawn attention to the multiple meanings and contexts of the term and that it clearly also covers different lakes and marshes. It seems that there is no distinctive term, no specific characterization for the sea; we are merely confronted by a broad amalgam of several water-related areas. From the Hyksos period onwards the Semitic term *yam* enters the written sources of Egypt (Vandersleyen, 1999, pp.127-128) and converges with indigene narratives. This is consistent with the introduction of different Asiatic cults and gods as well as influences of Western Asian mythological narratives (Kaiser, 1959, pp.78-91; Stadelman, 1967), beneath the cult of Baal Zaphon. Manfred Bietak hints at the fact that the cult of Seth/Baal Zaphon continued in Tell el Dab^ca from the Hyksos period until Ramesside times, fulfilling his role as the god of seafaring and sailing, a role which could not be assumed by any Egyptian god (Bietak, 2011, pp.23-24). His introduction into the harbor

⁹ Kunst, 2009, Karl Kunst personal communication.

¹⁰ He considers the same for the term *Yam*, the Western Asian word for the sea, since the Second Millennium also used in Egypt. Vandersleyen sees it as an equivalent to *Wadj-Wer* (Vandersleyen, 1999, pp.87-128).

town of Tell el Dab^ca probably due to a lack of an indigenous deity with these characteristics could be compared to the introduction of the Levantine term *yam* in the light of the rather unspecific or broad meaning of the Egyptian term *Wadj-Wer*.

There is only sparse evidence in the archaeozoological, iconographical and written records that the inhabitants of ancient Egypt were actively involved in practices in and with the Mediterranean Sea such as, for example, navigating, sailing, fishing or collecting. This stands in stark contrast to the iconographical representation of riverscapes and marshes which show the inhabitants' intimate knowledge of the river and fresh water fish. It gives the impression that the Mediterranean was a largely neglected sphere and that the knowledge acquired through everyday experience with this medium were relatively limited. If this indeed was the reality for most 'Egyptians', the rather blurred use of the term *Wadj-Wer* as an appellation for the Mediterranean is not very surprising.

Ugarit and Northern Syria

From Egyptian texts and iconography we have already gleaned information about the active role of Levantine sailors and merchants voyaging in the Mediterranean Sea. But the written sources from Late Bronze Age Ugarit give us an even deeper insight into these practices on the Northern Levantine coast. Two administrative texts listed 75 ships categorized into several types (for example, *anyt-mlk*, *any-aly*, *anyt yam*). Linder proposes that they are based on a multi-purpose vessel that was transformed by modifications in construction and composition of the crew into merchant ships, troopers and warships (Linder, 1981, p.40).¹¹ The vessels were crewed by skilled seafarers, described as captains, commanders and sailors (*malahhe* or *mare malahhe*), and by unskilled crew members such as rowers and warriors (Linder, 1981, p.40). In contrast to the Egyptian sources there is no reason to believe that these people were not recruited from the city state of Ugarit, and the clear distinction between the different occupations reflects the administration's awareness and knowledge of the skills involved as well as first-hand experience of them.

It is also of interest that shipwrights were mentioned in the Ugaritic text (Linder, 1981, pp.40-41). Hence technical knowledge of ship construction and specialized craftspeople were available in the city. The skill of boat and ship building involves not only technical knowledge, but also a deep understanding of sailing practice; the ship builder needs to be intimately familiar with the strength of currents and winds and to know how these elements interrelated with the materiality of the ship. These aspects, the knowledge these craftspeople share with sailors, create a bond between the practice of sailing and ship building (Kirby and Hinkkanen, 2000, pp.99-100; Rainbird, 2007, p.63). The execution of the latter

¹¹ UT 319, UT 2085.

in the harbor, on land, brings parts of the sailor's lifeworld to the sphere of the city, one possible way the broader community of Ugarit might have encountered this craft and the sea.

On the subject of fishing there is only indirect evidence in a text that lists two thousand sardines and fifteen squid, the latter called "arrow-with-two-beautiful eyes" (Dietrich, Loretz and Sanmartín, 1995, No.4.247, pp.23-27), both species can be fished in the littoral zone, for example, by using nets cast from a boat. By practicing this method of fishing a certain interaction with marine life is almost inescapable. Such an experience might be reflected in the Baal Cycle, a series of mythological stories about the god Baal. Here the appetite of a dolphin is used to describe the hunger of Mot, god of the nether world.

"My craving is the lion's in the desert,
The appetite of the dolphin of the sea,
Buffalo (that) rushes to the pond, [...]"

(Pope, 1981, p.167).

To use a dolphin as a metaphor for appetite implies knowledge about the hunting technique of dolphins. This might be an unusual choice of description for a non-mariner, but not for a person who is familiar with the sea. Dolphins usually hunt in a group, encircling a shoal of fish before picking their prey at an enormous speed and swallowing them whole – a behavior which might be interpreted particularly greedy or hungry. Such a scene is easily observed by fishermen practicing net fishing from their boats. Both dolphins and fishermen are eager for the same prey and casual encounters are known to be common. The text passage therefore gives the impression that the personal experiences of fishermen have entered the myth, the communal narrative of the society. Obviously it was sufficiently present and relevant as a part of people's life world, as an integral part of the communal knowledge for the metaphor to be understandable to the community at large. This is not the only instance where fishing at sea plays a role in the mythical sphere of Ugarit. It is mentioned a second time in the same mythological context, when the goddess Asherat sends fishermen out to sea to catch fresh fish for expected guests (Smith and Pitard, 2009, p.78, 1.4 II); apparently fresh fish was a much appreciated food. Even though the Ugaritic lists of offerings mentioned fish less often than meat (Dietrich, Loretz and Sanmartín, 1995, No.1.1906, pp.21-23), it nonetheless had a significant role in rituals. On a cylinder seal from Alalakh, just a few kilometers north of Ugarit, an offering table with a fish is depicted in front of a seated god (Collon, 1975, p.105).

But fishing and fish are not restricted to the spheres of myth, rituals and gods; rather they were an essential aspect of daily life. This is evidenced by several findings of fishing equipment. For example, the fishing weights in the shape of a miniature anchor found at the Acropolis of Ugarit (Frost, 1991, p.365) can be interpreted as a fisherman's votive, maybe offered in the hope of a safe journey or a good catch. Another very interesting observation has been made by Honor Frost.

Relating to old descriptions and photographs by Claude Schaeffer she presents the find context of more fishing equipment. It was detected together with three different kinds of shells (beneath a triton, *Cymatiidae Charonia Sequenze Linné*, and a tun, *Tonna Galea Linné*) as an obviously intentional deposition in the so-called *maison funéraire* (Frost, 1991, pl.IX). Hence not only fishing equipment as a probable symbol for this practice was deposited in the city center, but also objects originating from the sea. Clearly somebody has chosen to bring them from depths of the ocean into the human ritual sphere. It will remain unclear to us whether these shells have an apotropaic quality or whether they might symbolize specific places such as, for example, important fishing grounds, but it is surely not too far-fetched to consider these rituals as an attempt to control the sea and secure fishing fortune with the help of the gods.

From a practitioner's perspective fishing by boat and trade by sea are not entirely different activities. Despite their different aims, the experiences of fishermen and traders in seeking their way through the sea are in many regards comparable and in some cases even interwoven. Fishing was often conducted on trade ships to secure a supply of food on board; this aspect is evidenced by the fishing equipment discovered on the Late Bronze Age shipwreck of Ulu Burun (Yalçın, Pulak and Slotka, 2005, pp.628-629, cat.-nos.184, 185). Whether one is travelling on a trade ship or a fishing boat the wayfarer has to be aware of the clouds, the wind and weather (Ingold, 2005), different sea beds, the movement of birds and fish as well as different currents. The boat and the sail are extensions of the body (Rainbird, 2007, p.53) through which one feels the rising and falling of the waves, the currents, wind and weather (Ingold, 2010). Such were surely sensual experiences of the sailors of Ugarit. Additionally we can assume an animal-human interaction which is even reflected in the dolphin metaphor, which entered the literally produced realities of the inhabitants of the city.

In Minet el Beidha, the harbor of Ugarit immediately on the Syrian coast, countless fragments of crushed murex shells have been excavated (Schaeffer, 1929, p.290, p.293, p.296; 1938, p.38). This finding implies an intensive collecting practice in the littoral zone around Ugarit; an activity which is also substantiated by a text listing two hundred purple snails (Dietrich, Loretz and Sanmartín, 1995, No.4.247, pp.23-27). Murex can be used, for example, as food, as bait or as filler for wall paintings and pottery, but the immense mass of crushed shells in Minet el Beidha speaks for the very complex process of dye extraction. Its use as a color is also referred to in a mythological text from Ugarit, where the goddess Anat employed it as a cosmetic.

“She beautified herself with mure[x]
[Whose] extract from the sea [is a thousand fields]”

(Smith and Pitard, 2009, p.71, 1.3 III, 1-2)

Huge amounts of murex are needed for dyeing textiles. They are usually caught in traps, a practice which implies a very good knowledge of their habitats and be-

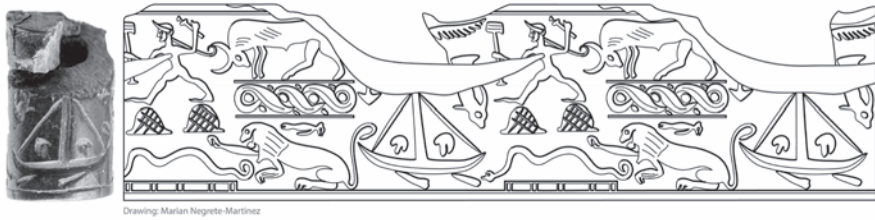


Fig.3: Cylinder seal with the depiction of Baal and the sea from Tell el Dab^ca (courtesy of Prof. Dr. Manfred Bietak).

havior (Karali, 1999, p.43). The sheer amount found here points to a very regular activity and therefore a habitual interaction with the coastal zone of the sea. One can hardly imagine that such an intensive coastal activity does not go hand in hand with an intimate knowledge of especially rocky coastlines and their animal and plant life, resulting in a much broader collecting activity on the shore, for example, for other kinds of shells, salt or sea urchins, which did not enter the archaeological record.

The sea is also a mythical entity in Ugarit. It is extensively described as Yam in the above mentioned 'Baal Cycle' and later even introduced into the Egyptian myths. As a god Yam is the personified sea and river and in the 'Baal Cycle' his role as the raging and untamed sea is emphasized (Smith and Pitard, 2009, p.247). In order to become king, the weather god Baal has to subdue Yam who despotically ruled over the gods and is hence described as a threat. Against this background it is very interesting to note that in Ugarit it is not Yam who is wooed by sacrifices and prayers to ensure a safe sea journey. And in the lists of gods, too, he is one of the last and rarely receives offerings at all (Cornelius and Niehr, 2004, p.52). If an Ugaritian wants to exert influence over the sea Yam, she or he has to do so through the virtually omnipresent god Baal. According to the myths his role is to control and subdue Yam. A locally cut cylinder seal of the Hyksos period in Tel el Dab^ca (13th Dynasty) illustrates this constellation very nicely (fig.3): Baal is shown with each foot resting on a mountain and faces to the left (Bietak, 2011, p.22, fig.6). His right arm is raised and he holds a club in his hand as if threatening the sea, which is depicted with a ship on the left-hand side on a slightly lower level. A very famous Baal stele found at the acropolis of Ugarit shows a similar iconographical composition. Again Baal is portrayed with a club and is directly placed above two wavy lines: one probably represents the mountains, Baal's home, the other the subdued sea Yam (Cornelius and Niehr, 2004, p.46, fig.71). Here, too, Baal controls the sea, a medium which seems to be regarded as dangerous and often hostile and which should not be trusted despite its manifold resources. Specifically the latter perspective is referred to in an incantation text, which describes how Yam should be tied to the mountains, the sphere of Baal, so that he is unable to rise again (de Moor, 1996, pp.155-157). Taming

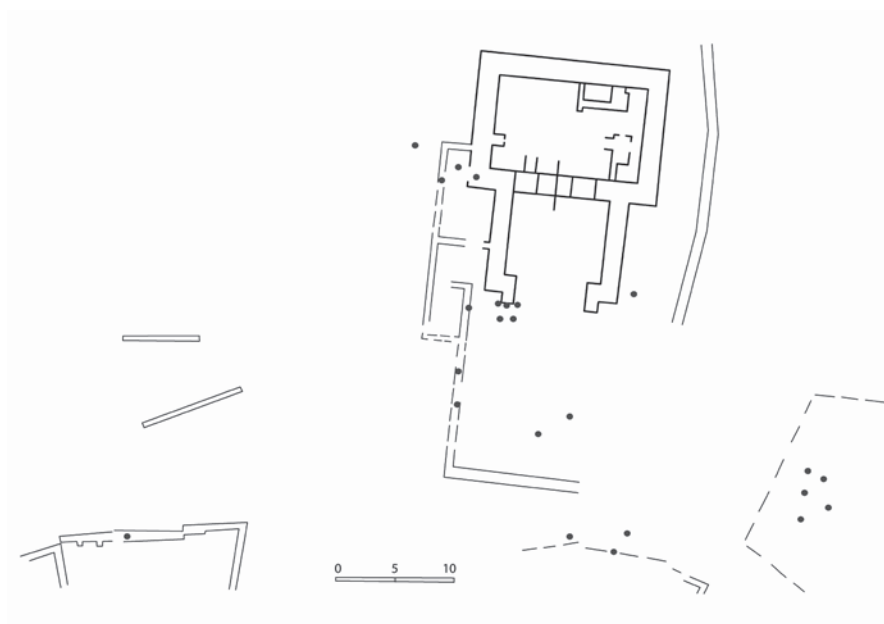


Fig.4: Plan of the Baal-temenos in Ugarit with the find spots of anchors marked in grey, after Frost (1991, fig.1b).

and controlling the sea means therefore to bring it into Baal's sphere. We could speculate whether this control might also be expressed by bringing sea-related objects into Baal's sphere. Does a fisher who deposits his or her equipment and extravagant shells within Ugarit, the city of Baal, seek to control Yam with the power of Baal? The deposition of shells in Ugarit stands in clear contrast to the above-mentioned rather functional use of shells as bait, food or raw material for different crafts in Tell el Dab^a or Marsa Matruh.

Such an assumption is in line with the custom of offering anchors to Baal. Anchors have been found throughout the city, but they have been mainly erected within the district of Baal's temple on the acropolis or incorporated in the latter's temenos wall (fig.4) (Frost, 1991, pp.375-80). Similar practices can be observed at the obelisk temple at Byblos (Dunand, 1950, nos.13035, 13036; Frost 1991, p.359), at the temple of Kition on Cyprus (Karageorghis and Demas, 1985, plan II) and even in a shrine in Mersa Gawasis on the Red Sea (Galili, Sharvit and Artzy, 1994, p.94). The anchors found in Ugarit have no marks of wear and also their often tremendous weight suggests they were not actually used at sea (weight: 125-600kg) (Frost 1991, p.357, p.59, p.362), but nonetheless their relation to practices and perils at sea cannot be denied. As Frost writes, "anchors save ships in danger of being dashed to pieces" (Frost, 1991, p.367) and it is in the context of these existential experiences that the origin of their symbolism in this ritual

might have lain. Did the sailors ‘anchor’ at the temple, to be materially connected to the harbor? To be anchored in Ugarit in case of storms or unsuspected currents? We can imagine that they produced an additional anchor as an offering before they set sail, before they ventured into the uncanny medium of the sea. This idea would also be consistent with the temple’s function as a seamark. The 20m high, almost tower-shaped temple could have been sighted by arriving ships long before the white rocks of the harbor at Minet el Beida (Frost, 1991, p.355). This material connection to the security of the coast can be also observed in other contexts. Frost hints at the fact that anchors were also placed at the head or bottom of wells (Frost, 1991, p.362) and, hence indicating that fresh water was one of the most urgent supplies for sea voyages. Obviously the Levantine sailors wished to symbolically bind their ships to the coast, particularly to the protective sphere of Baal who controls not only the sea, but as the storm god also the weather; both media are of immense importance to sailors and fishers. Despite the manifold uses of the medium sea and the diverse available knowledge considering currents, winds and animals, the Mediterranean and its personification as Yam is regarded more as an external hostile entity, as the “other”, which has to be controlled. Sailors do not appease Yam himself with their offerings; they rarely incorporate him in their own ritual sphere.¹² Their way of relating to the sea was largely guided by the attempt to control, to subordinate it with the help of Baal; anchors, fishing equipment and shells were brought to Baal’s city or even his temple rather as Yam was tied to Baal’s mountain in the above-mentioned incarnation text. It is interesting that there is no depiction of the god Yam and the rare representation of the sea shows it from the outside, as a surface; an aspect which is in clear contrast to what we can observe on Crete.

Crete

In contrast to the Northern Levant and the Nile valley, Crete does not offer many readable written sources from the second Millennium B.C.E. Only at the very end of the Late Bronze Age do the Linear B tablets shed some light on life on the island. Nonetheless the archaeological record describes the inhabitants’ relation to the sea in such manifold ways that a comprehensive treatment of the topic is impossible within the frame of this article. Hence I will restrict the last section to some examples which might be of significance for a comparison with the regions treated above.

‘Minoan’ iconography supplies us with several hints about the different ways humans traveled on the sea. The various sea-going vessels displayed on seals of the

¹² The same attitude becomes evident in a mythical text. The two marine monsters *tunnanu* and *anharu* should not be simply avoided or appeased with offerings. Instead the fishermen should catch and therefore control them (de Moor, 1987, p.306, p.308).



Fig. 5: Depiction of a sailing ship on a Minoan seal, CMS VIII, 106 (courtesy of Corpus Minoischer Siegel).



Fig. 6: Depiction of a canoe-like boat on a Minoan seal, CMS II, 3 252 (courtesy of Corpus Minoischer Siegel).

2nd Millennium B.C.E. range from large sailing ships (fig. 5) (for example, CMS VIII 106, or CMS II, 2 100) to canoe-like boats (fig. 6) (for example, CMS II, 3 252). Rather as Lindner proposes for Ugarit, one may assume that Cretan sailing ships might have served as multi-purpose vessels with which the Cretans were actively involved in long-distance voyages in the Eastern Mediterranean. The iconographical compositions in which the smaller boats are often embedded on gold signet rings hint at a ritual context (for example, CMS II, 3 252), but similar boats are assumed to have been in use for daily transport or fishing in the littoral zone. The latter activity is also traceable in the zooarchaeological record. The few available studies on fish bones show that at least littoral species were quite commonly fished. Fish vertebrae have been found in plain barrel-shaped pots in the *South-West Basement* of the palace of Knossos (Evans, 1921, p. 555) as well as inside pots from various contexts in Kommos (Powell, 1996, pp. 57-58) while the remains of cuttlefish have been detected both in Kommos and Pyrgos (Powell, 1996, p. 47). More difficult to trace are fishing activities on the open sea, a more complex and dangerous task than fishing in the littoral zone and which required special knowledge. Up to now the actual role of seafood in the diet of the coastal population sadly remains obscure. Isotope data are only available from the cemetery in Armenoi (LM III) in the Cretan heartland and it is not surprising that in this region seafood formed only a very small part of the diet (Reynard and Hedges, 2008).

As in Ugarit, collecting in shallow waters and on the rocky shore was the usual practice. Murex shells have been found at several sites such as, for example, in Mallia, Palaikastro, Knossos and on the island of Kouphonisi, and their condition and number often speak for the extraction of purple dye (Reese, 1987; 1980, p. 80; Papadakis, 1983, pp. 58-65). This interpretation is supported by the references to purple dye and cloth in the Knossian Linear B texts of the later periods (Palaima,

1992, list (7) p.474). As in the case of Ugarit, huge amounts of murex had to be collected for this purpose, necessitating the use of traps and a good knowledge of the animal's habitats and food preferences (Powell, 1996, p.94). But these are not the only shells to be documented in the archaeological record. Large numbers originated from the Middle Minoan II/III *kouloures* in Knossos and can probably be considered as food refuse (Evans, 1935, pp.104-105). Further findings originate from Mallia (Karali, 1999, p.15), Tylissos, Phaistos, Palaikastro, Pseira, Mochlos and Kommos (Powell, 1996, pp.46-47; Karali, 1999, p.16). Species such as *patellae* were probably used as bait for fishing (Reese, 1987), while the *cardium* might simply have been eaten as it is nowadays. Thus it is very surprising that some of the latter, very common species were also deposited at the peak sanctuary of Mount Yuchtas and the well-known Temple Repository of the palace of Knossos (Evans, 1921, p.517, fig.378), an aspect to which I will return in the later part of this section.

This intimate knowledge of the coastal area and its animal and plant life probably was not restricted to the gathering of clams. We have evidence for the collection of crabs in Knossos, while sea urchins have been found in Chania, in the Unexplored Mansion in Knossos and in Kommos (Powell, 1996, p.47). The way in which the latter might have been collected can be seen by the preservation of such a vessel filled with sea urchins from the site of Akrotiri in the Cyclades (Marinatos, 1972, pl.86). Furthermore while one was making his or her way through the rocky sea shore, sea salt might also have been gathered on the rocky shore either to season food or to preserve perishable food.

Triton and conch shells have been excavated in settlements, tombs and sanctuaries of the palatial and postpalatial period (Evans, 1921, p.221, pp.580-581; Reese, 1990; Karali, 1999, pp.22-24). These species are usually at home in deeper waters (Karali, 1999, p.22) and it can be assumed that such large shells are rarely washed up unbroken on the shore where they could be easily collected. This would support the thesis that they were also brought to the surface by diving, a practice well-known until recently from Cretan sponge divers (Papadakis, 1983, pp.58-65). If we consider this as a possibility, it would open another field of human experience on Crete. In the introduction I tried to contrast an inexperienced person's perception of the sea with that of a navigator from Puluwat Atoll. While the former generally regards the sea as a flat surface, the latter is not only aware of the sea routes, wind and currents, but also the seabed, reefs and animals - the space below the surface. This space is experienced by a diver even more intensively and with more dimensions. As she or he makes her or his way through this medium a diver is not restricted to the visual aspects of this world seen from above, but actually feels the water and is able to touch the rocks and plants on the sea floor. Entering the medium, the diver cannot breathe - an essential difference to the world above the surface. Moreover, he or she experiences a virtual absence of gravity, feels the pressure increase while diving deeper and gains, in contrast to the medium air, the ability to move three-dimensionally. This very specific encounter with the sea might have an impact on the practition-

er's personal perception of the sea. But one might ask if this personal experience entered the communal knowledge and if this might be reflected in the community's materially produced realities of the sea?

There has been extensive discussion about the 'right' or 'wrong' representation of sea creatures in 'Minoan' iconography and whether they are based on people's observations of and experiences with these animals (for example, Berg, 2011, pp.121-127 with bibliography). This is particularly true of the representation of the octopus and nautilus on the 'Palace Style' and 'Marine Style' pottery which brings us finally to a very important aspect -- the relation between representations in art and material production and the way people perceived their environment. Of course artistic expression cannot be considered a one to one translation of people's perceived surroundings, but as we have already seen in the above referred example it is surely not completely disconnected from their life world. Therefore John Berger is very probably right to ask the 'naïve question' about what all painting from the Palaeolithic period until today has in common:

"Every painted image announces: *I have seen this*, or, when the making of the image was incorporated into a tribal ritual: *We have seen this*. The *this* refers to the sight represented." (Berger, 2001, 14)

He considers painting first as "an affirmation of the visible which surrounds us". But he also emphasizes the characteristic of the visible to appear and disappear and suggests that the latter perhaps gives the impulse to paint. In his view it is the "surety (the permanence) which painting strives to find" (Berger, 2001, p.14) through an "encounter between painter and model - even if the model is a mountain or a shelf of empty medicine bottles" (Berger, 2001, p.15). This very broad and maybe too obvious relation between painter and model is often buried under modern art theory, but nonetheless it is a very intriguing aspect for our present challenge of understanding the relation between 'Minoan' iconography and the life world of the inhabitants of Crete, even though we will hardly grasp its exact nature.

A closer look at the Cretan 'Marine Style' pottery allows us to observe some results of this encounter between the painter or the society producing the pots and the model, the seascapes and its dwellers. The depiction of different shells and sea urchins (Müller, 1997) is easily set into relations with the above above-described collecting activities which we can trace in the archaeozoological and archaeobotanic remains of several excavations. They reflect not only the awareness of these animals by the inhabitants of Crete, but also their importance, even though its exact nature remains largely unknown to us. The same holds true for the representations of crabs in relief pottery or on seals and seal impressions (Evans, 1921, pp.521-522, fig.380; CMS VII 030b [MM II]; CMS II, 8 154 [MM III-SMI]).

More intriguing are the possible reflections of fishing activities on seal iconography. For example, the depiction of men and women holding fish cannot simply be dismissed as the scheme of a *Potnia* or *Potnios Theron* (CMS II, 3 327 [LM I]; CMS VI 333 [LM I]; CMS V 181 [LM II]); there must be a reason for the

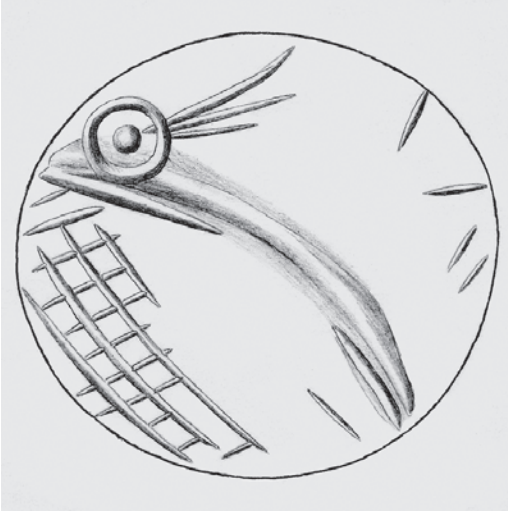


Fig.7: Depiction of a flying fish and a net, CMS III, 322 (courtesy of Corpus Minoischer Siegel).

choice of this animal in place of the more common goat or lion. Especially the depiction of a man or woman carrying a bundle of fish in one hand (CMS VII 088; CMS X 144; CMS VI 324 [LMI]) or in another case even an octopus and a fish (CMS VI 183 [MM III-SMI]) might have been inspired by the way people handled freshly caught fish on secular occasions. But a far deeper insight can be gained from the combination of two motifs on 'Minoan' seals: a net-like motif and several fishes. This composition might be an iconographical abbreviation for the depiction¹³ of fishing with a net. The fact that it shows mainly flying fish is highly interesting (fig.7) (see, for instance, CMS I 457; CMS III 322; CMS III 335, 337; CMS V 486 [all LMI]). This species is generally seen on the open sea and rarely in the littoral zone, a fact which might serve as evidence of net-fishing in the open sea - even though we cannot know if this was a one-off observation which was reproduced again and again or if it was something experienced regularly by fishers. Similar experiences might possibly underlie the images of dolphins and tuna (CMS II, 8 160 [SMI]), both of which are usually at home in the open sea, or the combination of a dolphin and a cuttlefish (CMS X 247 [SMI]). While it is difficult to trace fishing of open-water species in the archaeozoological record, the iconography hints to the existence of this activity. Fishing in the open sea is a highly complex and dangerous task requiring far more knowledge than fishing in the littoral zone. This is not only due to the necessary exploration of the more perilous open sea, but also to the seasonal variations in the occurrence of fish like tuna. The depiction of flying fish on seals as well as the examples made of faience found in the context of the Temple Repository of Knossos (Evans, 1921, p.521) might be directly associated with this dangerous and skillful practice and might have even served as a symbol for this activity. The same holds for

¹³ For similar phenomena in later periods see Siftar (in preparation).

the depiction of nautili in several media. In the discussion of ‘rightness’ or ‘wrongness’ of the ‘Minoan’ animal images the nautilus figures prominently (Berg, 2011, pp.121-127); the fact that it is depicted upside down has puzzled most archaeologists. Usually the nautilus lives in the open sea (Berg, 2011, pp.125-126) and can rarely be observed alive. From time to time fishers find them in their nets mostly not as living animals but as dead by catch which possibly explains their unexpected depiction. It is under similar circumstances that nautilus shells might have entered the ‘Minoan’ material world – either as a mnemonic device for the experience of fishing in the open sea or possibly for a specific location, maybe a fishing ground.

With the help of John Berger’s reflection on painting we are able to analyze ‘Minoan’ images on the simple and maybe naïve level of “the inhabitants of Crete have seen this” and might therefore relate personal or communal experiences and knowledge with it. But Tim Ingold’s thoughts about the implications of craft-work might lead us a bit further. He points to the fact that we should not examine craft in the modern sense of art and therefore not as a reflection on a symbolic level. It should not be understood as a specific human capacity to disengage consciously from lived experience. Ingold rightly considers this approach to be a retrojection onto the entire field of pre-modern and non-Western societies, of notions of humanity and animality, of culture and nature, and of art as representation, that have their sources in Western modernity (Ingold, 2000, p.111).

“The activities of hunters and gatherers that lead to the production of what we in the west call “art” should, I argue, be understood as ways not of representing the world of immediate experience on a higher, more “symbolic” plane, but of probing more deeply into it and of discovering the significance that lies therein.” (Ingold, 2000, p.112).

And furthermore he explains that:

“their purpose is not to represent but to reveal, to penetrate beneath the surface of things so as to reach deeper levels of knowledge and understanding. It is at these levels where meaning is to be found. There is no division, here, between “ecology” and “art”, as though hunting were merely a matter of organic provisioning and carving and painting gave vent to the free play of the symbolic imagination. The division, along with the dualism of nature and culture on which it rests, is of modern provenance, and it lies behind the conventional notion of the work of art as proof of a uniquely human capacity for the creative thought and expression.” (Ingold, 2000, p.130).

It might be worthwhile to consider the earlier mentioned treatment and deposition of shells in tombs, settlements and sanctuaries from this perspective. Whether or not these shells were an important source of nourishment, they were obviously considered to be special. The deposits are reminiscent to some extent of the above-mentioned findings of shells and fishing equipment in Ugarit, but it would go too far to ascribe a similar meaning to both practices. While the myth of Baal and Yam allows us to glimpse at least one aspect of the community’s perception



Fig.8: Different shells from the Temple Repository in Knossos (Evans, 1921, p.519, fig.378).

and ambivalence towards the sea and its dwellers, we can hardly understand what the inhabitants of Crete had in mind when they offered the shells in their sanctuaries. But the practices executed with them might help us to understand the way they were incorporated into the human life world on land.

The shells were not simply transported through the Cretan landscape to find their destination in one of the deposits. They were handled, seen and touched along the way and through this already merged with the human life world even though they retained their 'natural appearance'. Besides, some examples have been painted on their outside as for instance several *Cerastodermae* of the Temple Repository of Knossos (fig.8). The process of painting transformed them clearly into something new and made the human-nature entanglement very obvious. It reflects not only an intimate examination of the object but even its incorporation into the life world of the painter. Evans describes their find context as strewn on the floors and altar ledges of the shrine (Evans, 1921, p.517, fig.377, fig.378) enveloping ritual objects and embedding the rituals conducted in this context. But this is not the only way in which shells entered the crafts of the island. For instance, the application of clay shells (mostly whorl shells, cockles, murex and tritons) on Middle Minoan relief pottery from Knossos and Mallia (Evans, 1921, pp.521-522,

fig.380; Detournay, Poursat and Vandenabeele, 1980, pp.124-130, fig.176-180) is a highly interesting example. In some cases the application is not simply a three-dimensionally executed shell motif; it is a one-to-one reproduction of an original shell which served as male mould (Evans, 1921, p.522; Poursat, 1981, p.965). The collected shell became an integral part of the production, of the creative process of a human-environment entanglement. It underwent an intimate treatment which might also reflect the people's quest for a deeper understanding of the element sea.¹⁴ Thus, the producer embodied the shape in his own knowledge; he or she explores each individual whorl of the shell. This goes beyond a human-object interaction or a human-environment interaction, based on the Cartesian dichotomy between nature and culture, body and mind that was prominently criticized by Ingold. It should be considered more as a tight entanglement, maybe even a unity through his or her senses. This dissolves the dichotomy between painter and model supposed by Berger, an aspect which is not restricted to the manufacturing process but is also involved in consumption. Due to their three-dimensionality the shells not only offer a visual but also a haptic encounter in the course of using and touching it. Through these processes not only does the human merge with the object; there is also a merging of the terrestrial and maritime realities of human life worlds. Similar aspects might be observed in the production and consumption of nautili and tritons made of stone and faience such as, for example, the well-known examples from Mallia and Agia Triada (Warren, 1969, pl.497-501). Hence the Cretan coastal zone is not simply a sphere of human experiences resulting in an intimate knowledge of its seascapes, the dwellers and their habitats. Elements of this area were extracted, reshaped and reproduced and, through this intimate handling explored and incorporated.

In a very similar way images help us to understand the way the inhabitants of Crete approached the sea and aspired to a deeper understanding of the medium. Rather like the navigators of Puluwat Atoll the producers of 'Minoan' iconography seem to pay attention to what happens below the water's surface. For example, the depictions of fish below a boat on a gold signet ring (CMS VI 280 [LMI]) and below sailing ships on a three-sided prism and on a seal from Platanos (CMS VS 1A 330a [MMII-III]; CMS II, 1 287b [FM III-MMII]) indicate this awareness of the underwater world. Even more intriguing are the depictions on seals of shoals of fish or of a whole seascape with a fish and an octopus (fig.9) (for example CMS IV 232 [LM I], CMS XIII 077, CMS II, 8 157, all MM III-[LMI]) or the way in which octopuses are depicted in their natural environment, within rocks or sandbanks, on the 'Palatial' pottery of the island (Müller, 1996). It is not only that the people's knowledge of the animal's habitat and behavior shines through what we often consider the artistic filter, the stylistic rendering of the motif; the way these animals are depicted in their natural surroundings or within a specific seascape might point to specific locations or type of locations in

¹⁴ The same holds true for a later jug from Poros (Mountjoy, 1985, p.231) whose shell decoration is even applied on the handle and thus in the place where the user grasps the vessel.

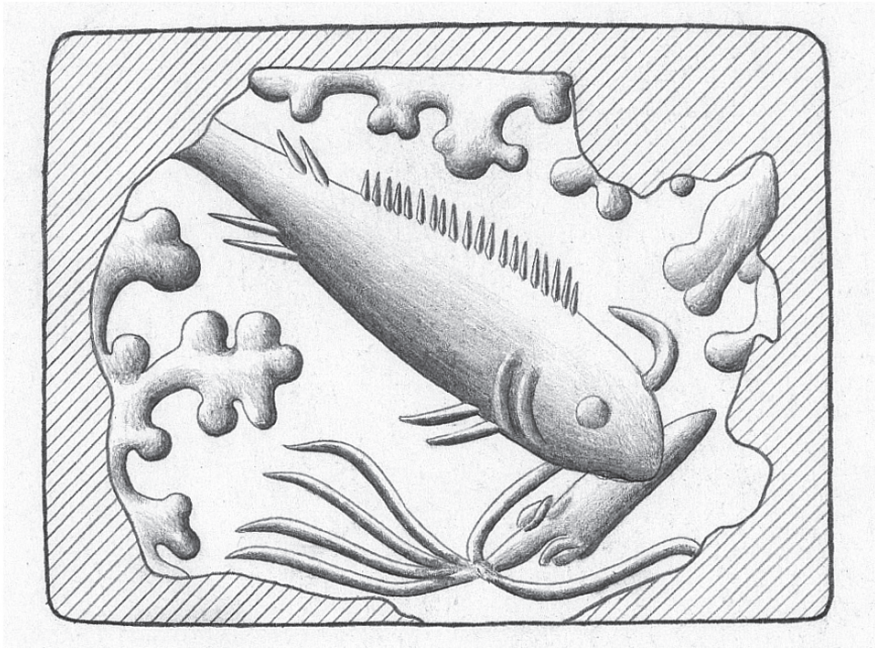


Fig.9: Depiction of a seascape on a Minoan seal, CMS II, 8 157 (courtesy of Corpus Minoischer Siegel).

which these animals can be found. These images reflect not only an intimate knowledge of the under-water world, but also a specific way of approaching the sea and by this of becoming more knowledgeable. The way in which seascapes are depicted demonstrates quite clearly that the Cretan wayfarer does not perceive the sea as a plain surface, but explores it as a three-dimensional experience, consisting in an awareness of its marine life and the composition and layout of the seabed.¹⁵ If this perspective on the sea is mainly triggered by the experience of sophisticated navigators, by a habitual entanglement through collecting activities or even as the result of a sensual experience by submerging into the medium water is difficult to evaluate, but it seems to reflect a certain attitude and interest related to human experiences.

This way of approaching the sea becomes even more evident in the later, post-palatial periods of Crete, such as, for example, in the seascape painted on the floor of a shrine in Agia Triada (fig.10) (Militello, 1998, pl.11B, p.13).¹⁶ A person who is allowed to enter this room would literally step into the sea, a medium

¹⁵ Nicholson mentions in his study of Shetland fishermen that they even named their fishing grounds by referencing the seabed (Nicholson, 1983, p.105).

¹⁶ Hirsch assumed that the so-called Dolphin fresco from Knossos was also a floor painting.

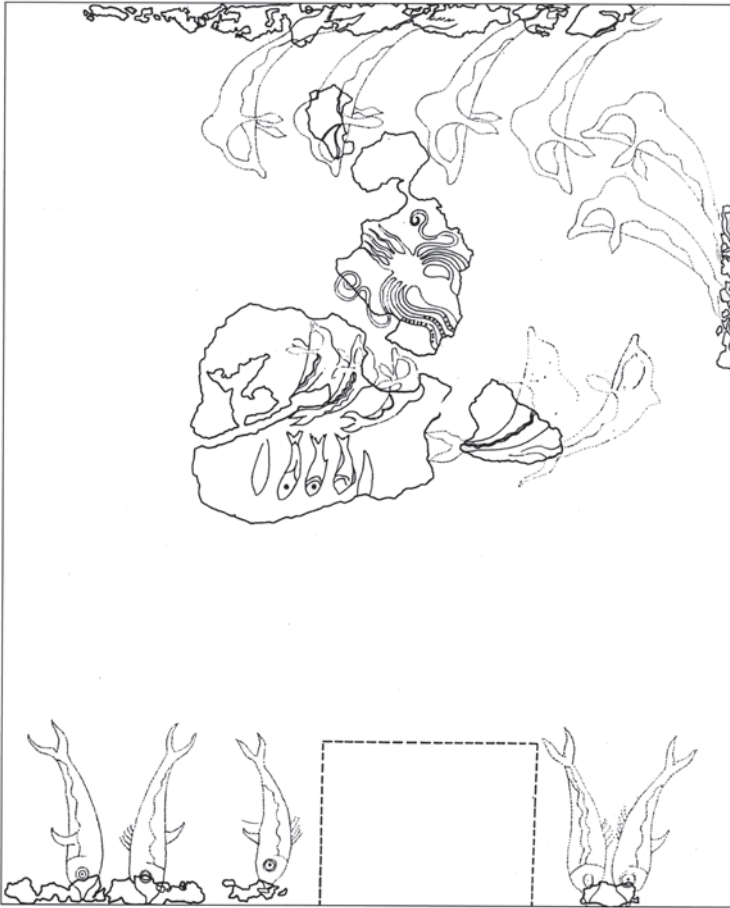


Fig.10: The depiction of a seascape on shrine floor at Agia Triada (after Militello, 1998, pl.13).

associated with the intensive bodily experiences of a mariner, collector or possibly diver. Obviously it was this way of approaching, of experiencing the sea which has been 'transferred' to the ritual sphere of the settlement to be evoked by each repetition of the ritual practice. While before that time single objects had been brought to the terrestrial world, objects which could be easily handled and controlled, a whole seascape is now integrated into the architectural setting of a shrine. Rather as the navigator, collector or diver entered the medium sea, the worshipper would have entered the shrine and been completely enveloped by the seascape of the floor. Thus the worshipper commemorates or even re-experiences activities at sea and becomes an integral part of the pictorial program - the wor-

shipper fulfills the role of the human actor of the land- and seascape in 'Minoan' wall and floor paintings.¹⁷ This attitude to the sea is probably the most important difference vis-à-vis the more 'external', and perhaps controlling approach of the Ugaritians.

Conclusion

The archaeologist's focus on trade and interaction between the Eastern Mediterranean palatial elites of the second millennium covers only a very small segment of the human-sea relationship. It is the segment which focuses on the ideal of transport and therefore bears the risk of reducing the sea to a flat, homogenous surface, to an infrastructure which facilitates communication and trade for those very small groups of the respective societies.

If we broaden our view it becomes obvious that there is no universal phenomenology of the sea. The sea has a social dimension, culturally and historically constructed, and therefore a whole spectrum of local phenomenologies results. Although the Mediterranean seems to link the different regions geographically and offers a certain affordance, the sea is not an ahistorical constant; there are multiple attitudes to the sea within every society, but also in its broader social dimension it differs from society to society (Rainbird, 2007, p.56, p.57). While in Egypt the sea is treated with a certain reserve and the focus clearly lies on the river Nile or the Red Sea, in Ugarit it is seen mainly as a threatening force which has to be subdued by the city god Baal and is preferably seen from the outside, the shore. Without falling into the trap of environmental determinism and the assumption that Crete as an island must be considered a sea-oriented entity, the inhabitants of Crete seem to have an entirely different and maybe also more intimate approach to the sea. Instead of seeing it from the outside, their perspective appears to submerge into the sea, below the water's surface, aware of what lives in the water and how different seascapes might look. Different practices, the production and consumption of sea-related objects are testimony to an intimate knowledge of this sphere. By incorporating them through a sensual entanglement they even merge with the medium sea and its dwellers. There are probably many more sea-realities within the regions and societies under discussion, but the differences we have found between them will hopefully exemplify the manifold approaches, attitudes and interest in the sea that were ingrained in the societies of the Eastern Mediterranean in the 2nd Millennium B.C.E.

¹⁷ It would also be interesting to relate this evocation to the sarcophagi of this later period, painted with octopuses and seascape.

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Bibliography

- Abulafia, D., 2011. *The Great Sea: A Human History of the Mediterranean*. London: Lane.
- Aruz, J., Benzel, K. and Evans, J.M., eds., 2008. *Beyond Babylon. Art, Trade, and Diplomacy in the Second Millennium B.C.* New York: Yale University Press.
- Baines, J., 1990. Interpreting the Story of the Shipwrecked Sailor. *Journal of Egyptian Archaeology* 76, pp.55-72.
- Berg, I., 2007. Aegean Bronze Age Seascapes – a Case Study in Maritime Movement, Contact and Interaction. In: Antoniadou, S. and Pace, A., eds., 2007. *Mediterranean Crossroads*. Oxford: Oxbow Books, pp.388-415.
- 2011. Towards a Conceptualisation of the Sea: Artefacts, Iconography and Meaning. In: Vavouranakis, G., ed., 2011. *The seascape in Aegean Prehistory*. Monographs of the Danish Institute at Athens 4. Athens: Danish Institute at Athens, pp.119-137.
- Berger, J., 2001. Step towards a Small Theory of the Visible. In: Berger, J., *Shape of a Pocket*. London, Berlin, New York: Bloomsbury, pp.9-22.
- Bevan, A., 2007. *Stone Vessels and Values in the Bronze Age Eastern Mediterranean*. Cambridge: Cambridge University Press.
- Bietak, M., 2009. Perunefer: The Principle New Kingdom Naval Base. *Egyptian Archaeology* 34, pp.15-17.
- 2011. The Aftermath of the Hyksos in Avaris. In: Sela-Sheffy, R. and Toury, G., eds., *Culture Contact and the Making of Cultures. Papers in Homage to Itamar Even-Zohar*. Tel Aviv: Unit of Culture Research, pp.19-66.
- Bietak, M., Marinatos, N. and Palyvou, C., eds., 2007. *Taureador Scenes in Tell el-Dabʿa (Avaris) and Knossos*. Österreichische Akademie der Wissenschaften. Denkschriften der Gesamtakademie 43. Vienna: Verlag der Österreichischen Akademie der Wissenschaften.
- Boessneck, J. and von den Driesch, A., 1992. *Tiere und historische Umwelt im Nordost-Delta im 2. Jahrtausend v. Chr. anhand der Knochenfunde der Ausgrabungen 1975–1986*. Vienna: Verlag der Österreichischen Akademie der Wissenschaften.
- Brewer, D.J. and Friedman, R.F., 1989. *Fish and Fishing in Ancient Egypt. The Natural History of Egypt*. vol.2. Warminster: Aris & Phillips.
- Brysaert, A., 2007. A Technological Approach to the Painted Plaster of Tell el-Dabʿa, Egypt: Microscopy and Scientific Analysis. In: Bietak, M., Marinatos, N. and Palyvou, C., eds., 2007. *Taureador Scenes in Tell el Dabca (Avaris) and Knossos*. Österreichische Akademie der Wissenschaften. Denkschriften der Gesamtakademie 43. Vienna: Verlag der Österreichischen Akademie der Wissenschaften, pp.151-162.
- 2008. *The Power of Technology in the Bronze Age Eastern Mediterranean: The Case of the Painted Plaster*. London: Equinox.
- Buchholz, H.-G., 1974. Ägäische Funde und Einflüsse in den Randgebieten des Mittelmeers. Forschungsbericht über Ausgrabungen und Neufunde 1960–1970. *Archäologischer Anzeiger* 1974, pp.325-462.
- Carver, M., 1990. Pre-Viking Traffic in the North Sea. In: McGrail, S., ed., 1990. *Maritime Celts, Frisians and Saxons*. CBA Research Report 71. York: Council for British Archaeology, pp.117-125.
- Casson, L., 1995. *Ships and Seamanship in the Ancient World*. Baltimore: John Hopkins University.
- Cline, E.H., 1994. *Sailing the Wine-dark Sea: International Trade and the Late Bronze Age Aegean*. Oxford: Tempus Reparatum.

- Cline, E.H., Yasur-Landau, A. and Goshen, N., 2011. New Fragments of Aegean-Style Painted Plaster from Tel Kabri, Israel. *American Journal of Archaeology* 15 (2), pp.245-261.
- Collon, D., 1975. *The Seal Impressions from Tell Atchana/Alalakh*. Alter Orient und Altes Testament 27. Neukirchen-Vluyn: Neukirchener Verlag.
- 1982. *The Alalakh Cylinder Seals. A New Catalogue of the Actual Seals Excavated by Sir Leonard Woolley at Tell Atchana, and from Neighbouring Sites on the Syrian-Turkish Border*. British Archaeological Reports International Series 132. Oxford: Archaeopress.
- Cornelius, I. and Niehr, H., 2004. *Götter und Kulte in Ugarit. Kultur und Religion einer nordsyrischen Königsstadt in der Spätbronzezeit*. Mainz: Philipp von Zabern.
- Crowley, J.L., 1989. *The Aegean and the East: An Investigation into the Transference of Artistic Motifs between the Aegean, Egypt, and the Near East in the Bronze Age*. SIMA Pocketbook 51. Jonsered: P. Aström's Förlag.
- Davenport, W.H., 1964. Marshall Islands Cartography. Expedition 6 (4), pp.10-13.
- Detournay, B., Poursat, J.-C. and Vandenabeele, F., 1980. *Vases de pierre et de métal, vannerie, figurines et reliefs d'applique, éléments de parure et de décoration, armes, sceaux et empreintes*. Paris: Geuthner.
- Dietrich, M., Loretz, O. and Sanmartín, J., 1995. *The Cuneiform Alphabetic Texts: From Ugarit, Ras Ibn Hani and Other Places (KTU)*. Münster: Ugarit-Verlag.
- Doenitz, D., 1868. Einige Bemerkungen ueber die auf Tafel XX.-XXIV abgebildeten Fische des Rothen Meeres. In: Duemichen, J., ed., 1868. *Die Flotte einer aegyptischen Koenigin aus dem XVII. Jahrhundert vor unserer Zeitrechnung und altaegyptisches Militair im festlichen Aufzuge auf einem Monumente aus derselben Zeit abgebildet*. Leipzig: J.C. Hinrichs, pp.46-47.
- von den Driesch, A., 1986. *Fische im alten Ägypten – Eine osteologische Untersuchung*. Documenta natural 34. Munich: Kanzler.
- Duemichen, J., ed., 1868. *Die Flotte einer aegyptischen Koenigin aus dem XVII. Jahrhundert vor unserer Zeitrechnung und altaegyptisches Militair im festlichen Aufzuge auf einem Monumente aus derselben Zeit abgebildet*. Leipzig: J.C. Hinrichs.
- Dunand, M., 1950. *Fouilles de Byblos, 1933–1938*: Atlas, Paris: Geuthner.
- Edel, E., ed., 1994. *Die ägyptisch-hethitische Korrespondenz aus Boghazköi in babylonischer und hethitischer Sprache*. Opladen: Westdeutscher Verlag.
- Evans, A., 1921. *Palace of Minos I. A Comparative Account of the Successive Stages of the Early Cretan Civilization as Illustrated by the Discoveries at Knossos*. London: Macmillan and Co.
- 1935. *The Palace of Minos. Emergence of outer Western Enceinte, with new Illustrations, Artistic and Religious, of the Middle Minoan Phase; Chryselephantine „Lady of Sports“, „Snake Room“ and full Story of the Cult Late Minoan Ceramic Evolution and „Palace Style“*. London: Macmillan.
- Feldman, M.H., 2002. Luxurious Forms: Redefining a Mediterranean “International Style”, 1400–1200 B.C.E. *Art Bulletin* 84, pp.6-29.
- 2006. *Diplomacy by Design: Luxury Arts and an “International Style” in the Ancient Near East, 1400–1200 BCE*. Chicago, London: University of Chicago Press.
- 2007. Frescoes, Exotica, and the Reinvention of the Northern Levantine Kingdoms during the Second Millennium B.C.E. In: Heinz, M. and Feldman, M.H., eds., 2007. *Representations of Political Power: Case Studies from Times of Change and Dissolving Order in the Ancient Near East*. Winona Lake, Ind.: Eisenbrauns, pp.39-65.
- Franke, D., 1983. *Altaegyptische Verwandtschaftsbezeichnungen im Mittleren Reich*. Hamburg: Borg.

- Frost, H., 1991. Anchors Sacred and Profane. In: Yon, M., ed., 1991. *Art et industrie de la pierre. Ras-Shamra-Ugarit*. vol.6. Paris: Editions Recherche sur les civilisations, pp.355-410.
- Gale, N.H., ed., 1991. *Bronze Age Trade in the Mediterranean*. Papers Presented at the Conference held at Rewley House, Oxford, in December 1989. Studies in Mediterranean Archaeology 90. Jonsered: P. Åströms Förlag.
- Galili, E., Sharvit, J. and Artzy, M., 1994. Reconsidering Byblian and Egyptian Stone Anchors Using Numeral Methods: New Finds from the Israeli Coast. *The International Journal of Nautical Archaeology* 23 (2), pp.93-107.
- Gibson, J., 1979. *The Ecological Approach to Visual Perception*. Boston Houghton Mifflin. Boston, Mass.: Houghton Mifflin Comp.
- Gladwin, T., 1970. *East is a Big Bird: Navigation and Logic on Puluwat Atoll*. Cambridge, Mass.: Harvard University Press.
- Glanville, S.R.K., 1931. Record of the Royal Dockyard of the Time of Tuthmosis III: Papyrus British Museum 10056 (Part 1). *Zeitschrift für Ägyptische Sprache und Altertumskunde* 66, pp.105-121.
- 1932. Record of the Royal Dockyard of the Time of Tuthmosis III: Papyrus British Museum 10056 (Part 2). *Zeitschrift für Ägyptische Sprache und Altertumskunde* 68, pp.7-41.
- Habermas, J., 1981. *Theorie des kommunikativen Handelns*. vol.2: *Zur Kritik der funktionalistischen Vernunft*. Frankfurt a. M.: Suhrkamp.
- Hägg, R. and Marinatos, N., eds., 1984. *The Minoan Thalassocracy: Myth and Reality, Proceedings of the Third International Symposium at the Swedish Institute in Athens, 31 May–5 June, 1982*. Stockholm: Svenska Institutet in Athen.
- Horde, P. and Purcell, N., 2008. *The Corrupting Sea: A Study of Mediterranean History*. Oxford: Wiley-Blackwell.
- Ingold, T., 1993. The Temporality of the Landscape, *World Archaeology* 25 (2), pp. 152-174.
- 2000. *The Perception of the Environment. Essays on Livelihood, Perception and Skill*. London: Routledge.
- 2005. The Eye of the Storm: Visual Perception of the Weather. *Visual Studies* 20, pp.97-104.
- 2010. Footprints through the Weather-world: Walking, Breathing, Knowing. *Journal of the Royal Anthropological Institute* 2010, pp.115-132.
- 2011. Stories against Classification: Transport, Wayfaring and the Integration of Knowledge. In: *Being Alive. Essays on Movement and Description*. London, New York: Routledge, pp.156-164.
- Kaiser, O., 1959. *Die mythische Bedeutung des Meeres in Ägypten, Ugarit und Israel. Beihefte zur Zeitschrift für die alttestamentliche Wissenschaft* 78. Berlin: de Gruyter.
- Kamlah, J. and Sader, H., 2010. Deutsch-libanesische Ausgrabungen auf Tell el-Burak südlich von Sidon. Vorbericht nach Abschluss der siebten Kampagne 2010. *Zeitschrift des Deutschen Palästina-Vereins* 126, 2, pp.93-115.
- Kantor, H.J., 1947. The Aegean and the Orient in the Second Millennium B.C. *American Journal of Archaeology* 51, 1947, pp.1-103.
- Karageorghis, V. and Demas, M., 1985. *Excavations at Kition V. The Prephoenician Levels. Area I and II. Part I*. Nicosia: Department of Antiquities.
- Karali, L., 1999. *Shells in Aegean Prehistory*. Oxford: Archaeopress.
- Kemp, B.J. and Merrillees, R.S., 1980. *Minoan Pottery in Second Millennium Egypt*. Mainz: Philipp von Zabern.
- Kirby, D. and Hinkkanen, M. 2000. *The Baltic and the North Sea*. London: Routledge.

- Kitchen, K.A., 2000. Compte rendu de Vandersleyen, Quadje our. Un autre aspect de la vallée du Nile, *Discussion in Egyptology* 46, pp.123-138.
- Knapp, A.B., 1993. Thalassocracies in Bronze Age Eastern Mediterranean Trade: Making and Breaking a Myth. *World Archaeology* 24, pp.332-346.
- 1998. Mediterranean Bronze Age Trade: Distance, Power and Place. In: Cline, E.H. and Harris-Cline, D., eds., 1998. *The Aegean and the Orient in the Second Millennium. Proceedings of the 50th Anniversary Symposium, Cincinnati, 18–20 April 1997*. Liège: Université de Liège, pp.193-207.
- Kunst, K.G., 2009. Fishes, Ringstands, Nudes and Hippos. A Preliminary Report on the Hyksos Palace Pit Complex L 81. *Egypt and the Levant* 19, pp.19-90.
- Lambrou-Phillipson, C., 1990. *Hellenorientalia. The Near Eastern Presence in the Bronze Age Aegean ca. 3000–1100 B.C. Interconnections Eased on the Material Record and the Written Evidence*. Gothenburg, Sweden: P. Åströms Förlag.
- Lauer, P.K., 1976. Sailing with the Amphlett Islanders. In: Finney, B.R., ed., 1976. *Pacific Navigation and Voyaging*. Wellington: The Polynesian Society Incorporated, pp.71-90.
- Lewis, D., 1972. *We, the Navigators*. Honolulu: University Press of Hawaii.
- 1976. A Return Voyage between Puluwat and Saipan Using Micronesian Navigational Techniques. In: Finney, B.R., ed., 1976. *Pacific Navigation and Voyaging*. Wellington: The Polynesian Society Incorporated, pp.15-28.
- Lichtheim, M., 1976. *Ancient Egyptian Literature: A Book of Readings*. vol.2: *The New Kingdom*. Berkeley, London: University of California Press.
- Linder, E., 1981. A Canaanite Thalassocracy. In: Young, G.D., ed., 1981. *Ugarit in Retrospect: Fifty Years of Ugarit and Ugaritic. Proceedings of the Symposium Held at the University of Wisconsin at Madison, Febr. 26, 1979*. Winona Lake, Ind.: Eisenbrauns, pp.31-42.
- Liverani, M., 1990. *Prestige and Interest: International Relations in the Near East ca. 1600–1100 B.C. History of Ancient Near East* 1. Padua: Sargon.
- Marinatos, S., 1972. Excavations at Thera V (1971 Season). Athens: Vivliothiki tis en Athines Arheologyikis Eterias 64.
- Merleau-Ponty, M. 1945. *Phénoménologie de la perception*. Paris: Gallimard.
- van de Mieroop, M., 2005. The Eastern Mediterranean in Early Antiquity. In: Harris, W.V., ed., 2005. *Rethinking the Mediterranean*. Oxford, New York: Oxford University Press, pp.118-140.
- Militello, P., 1998. *Haghia Triada I. Gli Affreschi*. Monografie della Scuola Archaeologica di Atene e delle Missioni Italiane in Oriente 9. Padua: Bottega D'Erasmus.
- de Moor, J.C., 1987. *An Anthology of Religious Texts from Ugarit*. Leiden: Brill.
- 1998. In the Beginning was Fish. Fish in the Ancient Near East. In: Walker, H., ed., 1998. *Fish: Food from the Waters. Proceedings of the Oxford Symposium on Food and Cookery, 1997*. Totnes: Prospect Books, pp.85-93.
- 1996. Fishes in KTU 4.427:23-29. *Ugarit-Forschungen* 28, pp.155-157.
- Moran, W.L., 1987. *Amarna Studies*. Winona Lake, Ind.: Eisenbrauns.
- Mountjoy, P.A., 1985. Ritual Associations for LM IB Marine Style Vases. In: Darque, P. and Poursat, J.-Cl., eds., 1985. *L'iconographie minoenne. Actes de la table ronde d'Athènes (21–22 avril 1983)*. *Bulletin de Correspondance Hellénique Supplément XI*, Athens: Ecole française d'Athènes, pp.231-242.
- Müller, W., 1997. *Kretische Gefäße mit Meeresdekor. Entwicklung und Stellung in der feinen Keramik von Spätminoisch IB auf Kreta*. Berlin: Gebrüder Mann Verlag.
- Nicholson, J.R., 1983. *Traditional Life in Shetland*. London: Robert Hale Ltd.

- Niemeier, W.-D. and Niemeier, B., 1998. Aegean Frescoes in Syria-Palestine: Alalakh and Tel Kabri. In: Sherratt, S., ed., 1983. *The Wall Paintings of Thera. Proceedings of the First International Symposium. 30th August–4th September 1997*. Athens: Thera Foundation, pp.763-802.
- 2002. The Frescoes in the Middle Bronze Age Palace. In: Kempinski, A., ed., 2002. *Tel Kabri. The 1986–1993 Excavation Seasons*. Tel Aviv: Crypt Publishing, pp.254-298.
- Palaima, T.G., 1991. Maritime Matters in the Linear B Tablets. In: Laffineur, R. and Basch, L., eds., 1991. *Thalassa. L'Égée Préhistorique et la Mer*. Aegaeum 7. Liège: Université de Liège, pp.273-310.
- 1992. The Knossos Oxen Dossier: The Use of Oxen in Mycenaean Crete. Part I: General Background and Scribe 107. In: Olivier, J.-P., ed., *Mykenaika*. Bulletin de correspondance hellénique, Supplément 25. Athens: Ecole française d'Athènes. pp.463-474
- Papadakis, N.P., 1983. *Sitia: Fatherland of Myson and Kornaros; A Historical, Archaeological and Cultural Guide*. Sitia: District Council.
- Pope, M., 1981. The Cult of the Dead at Ugarit. In: Young, G.D., ed., 1981. *Ugarit in Retrospect. Fifty Years of Ugarit and Ugaritic*. Winona Lake, Ind.: Eisenbrauns, pp.159-182.
- Poursat, J.-C. 1981. Malia, Quartier Mu. *Bulletin de correspondance hellénique* 105, pp.964-965.
- Powell, J., 1996. *Fishing in the Prehistoric Aegean. Studies in Mediterranean Archaeology and Literature*. Pocketbook 137. Jonsered: Paul Åström Förlag.
- Quack, J. F., 2002. Zur Frage des Meeres in ägyptischen Texten. *Orientalistische Literaturzeitung* 97, pp.453-463.
- Rainbird, P., 2007. *The Archaeology of Islands. Topics in Contemporary Archaeology*. Cambridge: Cambridge University Press.
- Reese, D.S., 1980. Industrial Exploitation of Murex Shells: Purple-dye and Lime Production at Sidi Khrebish, Benghazi (Berenice). *The Society for Libyan Studies 11th Annual Report (1979–80)*, pp.79-93.
- 1987. Palaikastro Shells and Bronze Age Purple Dye Production in the Mediterranean Basin. *The Annual of the British School of Archaeology at Athens* 82, pp.201-206.
- 1990. Triton Shells from Eastern Mediterranean Sanctuaries and Graves. *Journal of Prehistoric Religion* 3-4, pp.7-14.
- Reese, D.S., Mienis, H.K. and Woodward, F.R., 1986. On the Trade of Shell and Fish from the Nile River. *Bulletin of the American Schools of Oriental Research* 164, pp.79-84.
- Reese, D.S. and Rose, M.J., 2002. Organic Remains from the Island and Adjacent Areas. In: White, D., ed., 2002. *Marsa Matruh II. The Objects*. Philadelphia: The Institute for Aegean Prehistoric Academic Press, pp.73-108.
- Reynard, L.M. and Hedges, R.E.M., 2008. Stable Hydrogen Isotopes of Bone Collagen in Palaeodietary and Palaeoenvironmental Reconstruction, *Journal of Archaeological Science* 35, pp.1934-1942.
- Riesenberg, S.H., 1976. The Organisation of Navigational Knowledge on Puluwat. In: Finney, B.R., ed., 1976. *Pacific Navigation and Voyaging*. Wellington: The Polynesian Society Incorporated, pp.71-90.
- von Rügen, C., 2011. *Die Wandmalereien aus Tall Mišrife/Qaṭna im Kontext einer über-regionalen Kommunikation*. Qaṭna-Studien 2. Wiesbaden: Harrasowitz.
- Sasson, J.M., 1966. Canaanite Maritime Involvement in the Second Millennium B.C. *Journal of the American Oriental Society* 86, pp.126-138.
- Säve-Söderbergh, T., 1946. *The Navy of the Eighteenth Dynasty*. Uppsala: Uppsala University.

- Sayed, A.M.A.H., 1977. Discovery of the Site of the 12th Dynasty Port at Wadi Gawasis on the Red Sea Shore. *Revue d'Égyptologie* 29, pp.138-178.
- Schaeffer, C.F.-A., 1938. Les Fouilles de Ras Shamra-Ugarit: Neuvième campagne (printemps 1937). Rapport sommaire. *Syria*, T. 19, Fasc. 4, pp.313-334.
- Schaeffer, C.F.-A. and Dussaud, R., 1929. Les Fouilles de Minet-el-Beida et de Ras Shamra (campagne du printemps 1929) Rapport sommaire. *Syria*, T. 10, Fasc. 4, pp.285-303.
- Schütz, A., 1974. *Der sinnhafte Aufbau der sozialen Welt. Eine Einleitung in die verstehende Soziologie*. Frankfurt a. M.: Suhrkamp.
- Sherratt, S., 1994. Comment on Ora Negbi, The "Libyan Landscape" from Thera: A Review of Aegean Enterprises Overseas in the Late Minoan IA Period. *Journal of Mediterranean Archaeology* 7 (1), pp.237-40.
- Sherratt, A. and Sherratt, S., 1991. From Luxuries to Commodities: The Nature of Mediterranean Bronze Age Trading Systems. In: Gale, N.H., ed., 1991. *Bronze Age Trade in the Mediterranean*. Janseder: Paul Åström Förlag, pp. 351-386.
- Siftar, L., n.d. Das Phänomen der Unvollständigkeit in der griechischen Kunst.
- Smith, M.S. and Pitard, W.T., 1994. *The Ugaritic Baal Cycle. Introduction with Text, Translation and Commentary of KTU/CAT 1.3-1.4. vol.2*. Leiden: Brill.
- Smith, W.S., 1965. *Interconnections in the Ancient Near East: A Study of the Relationship between the Arts of Egypt, the Aegean, and Western Asia*. New Haven, London: Yale University Press.
- Stadelmann, R., 1967. *Syrisch-Palästinische Gottheiten in Ägypten*. Probleme in der Ägyptologie 5. Leiden: Brill.
- Starr, C.G. 1955. The Myth of the Minoan Thalassocracy. *Historia: Zeitschrift für Alte Geschichte* 3 (3), pp.282-291.
- Stos-Gale, Z.A., 1989. *Lead Isotope Studies of Metals and the Metal Trade in the Bronze Age Mediterranean*. Oxford: University Committee for Archaeology.
- Strudwick, N.C., 2005. *Texts from the Pyramid Age*. Atlanta: Society of Biblical Literature.
- Taraqji, A.F., 2008. Nouvelles découvertes sur les relations avec l'Égypte à Tel Sakka et à Keswé, dans la région de Damas. *Bulletin de la Société française d'égyptologie* 144, pp.27-43.
- Tilley, Ch., 1999. *Metaphor and Material Culture*. Oxford: Blackwell Publishing.
- Vandersleyen, C., 1999. *Ouadje our. Un autre aspect de la vallée du Nil*. Brussels: Connaissance de L'Égypte ancienne.
- 2008. *Le delta et la vallée du Nil. Le sens de ouadj our*. Brussels: Édition Safran.
- Veblen, T., 1912. *The Theory of the Leisure Class: An Economic Study of Institutions*. New York: Macmillan & Co.
- Vinson, S., 2009. Seafaring. In: Wendrich, W., Dieleman, J., Froot, E. and Baines, J., eds., 2009. *Encyclopedia of Egyptology*. Los Angeles: University of California, [online]. Available at: <http://digital2.library.ucla.edu/viewItem.do?ark=21198/zz001nfbdf> [Accessed 17 September 2014].
- Warren, P., 1969. *Minoan Stone Vases*. Cambridge: Cambridge University Press.
- Watrous, L.V., 1998. Egypt and Crete in the Early Middle Bronze Age: A Case of Trade and Cultural Diffusion. In: Cline, E. and Harris-Cline, D., eds., 1998. *The Aegean and the Orient in the second millennium. Proceedings of the 50th anniversary symposium Cincinnati, 18–20 April 1997*. Aegaeum 18. Liège: Université de Liège, Histoire de l'Art et Archéologie de la Grèce Antique, pp.19-28.
- Wiener, M.H., 1990. The Isles of Crete? The Minoan Thalassocracy Revisited. In: Hardy, D.A., ed., 1990. *Thera and the Aegean World* 3. vol.1: Archaeology. Proceedings of the

- Third International Congress Held in Santorini, Greece. London: Thera Foundation, pp.128-160.
- Wilkinson, T., 2000. *Royal Annals of Ancient Egypt: The Palermo Stone and its Associated Fragments*. London, New York: Kegan Paul International.
- Yalçın, Ü., Pulak, C. and Slotta, R., 2005. *Das Schiff von Uluburun. Welthandel vor 3000 Jahren*. Veröffentlichungen aus dem Deutschen Bergbau-Museum 138. Bochum: Deutsches Bergbau-Museum.