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RESEARCH

Bronze Age Stone Anchors as Material Metaphors: Applying Conceptual Blending Theory to Investigate Their Symbolic Value

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Abstract
In ancient navigation, the safety of a ship depended in no small measure on the stability of her anchors, and this crucial role at sea was not overlooked in the ritual symbolism of maritime communities. Accordingly, there is a general consensus on the fact that the anchors deposited at Eastern Mediterranean Bronze Age temples were important carriers of meaning for seafaring groups. Nevertheless, little effort has been made to understand the role of anchors in the conceptual world of the ancient seafarers beyond the fact that they were powerful symbols of maritimity. Borrowed and adapted from linguistics, Conceptual Blending Theory (CBT) provides the theoretical framework to use material culture as a source for the investigation of ancient thought processes. In this paper, I apply the perspective of CBT to the anchors found at the Late Cypriot sanctuary of Kition-*Kathari*, with comparisons to those from Byblos and Ugarit, and I examine the cognitive implications of anchors as material metaphors and investigate how they embody the blending of the mental spaces of the sacred, the city, and the sea.

Keywords Votive anchors · Eastern Mediterranean · Bronze Age · Maritimity · Conceptual Blending Theory

Introduction

One of the most salient classes of material culture that stands for Bronze Age seafaring in the Mediterranean is constituted by stone anchors. Despite the ongoing debate concerning their typology, there are over a thousand stone artefacts that fall within the category of anchors (Warburton, 2020, p. 195). These objects, first identified as anchors by Honor Frost in the 1960s (Frost, 1963), are dressed stones, roughly triangular or trapezoidal, with one rope hole at the top and, in the so-called composite

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anchors, two additional stock holes at the bottom corners (Fig. 1). Both McCaslin (1980, pp. 18–20) and Frost (1991, p. 367) hypothesized that the weight anchors (single-hole) would have served to moor a craft on a rocky seabed, while the composite ones, equipped with wooden stock-arms, would have had a better grip on sandy bottoms. The stocks, however, would have gotten easily stuck on rocky crevices making this second type less useful on uneven seafloors (cf. Tóth, 2002, p. 85). While McCaslin's and Frost's theory is sensible, both types of anchors have, in fact, been found in either seafloor context, suggesting a use dictated by opportunism: in the end, in case of emergency, any heavy weight tied to a rope would have been better than nothing. While it is possible that a Late Bronze Age seafaring ship would have carried a complement composed of both types of anchors to perform better on different types of seabeds, this was not necessary the case. For instance, all of the 24 stone anchors found on board the Uluburun shipwreck were of the single-hole type (Pulak, 2008), implying that the choice of anchors a ship carried depended on a variety of factors that are difficult to reconstruct. The type of stones used and their size is widely diverse, from well over a ton to just a few kilograms, corresponding to their employment on board crafts of different sizes, purposes, and travelling on different routes.

Regardless of their diversity, all anchors were, and still are, a fundamental piece of equipment on any ship that keeps the vessel from drifting away at the mercy of waves and currents and stabilizes in bad weather. On ancient Mediterranean

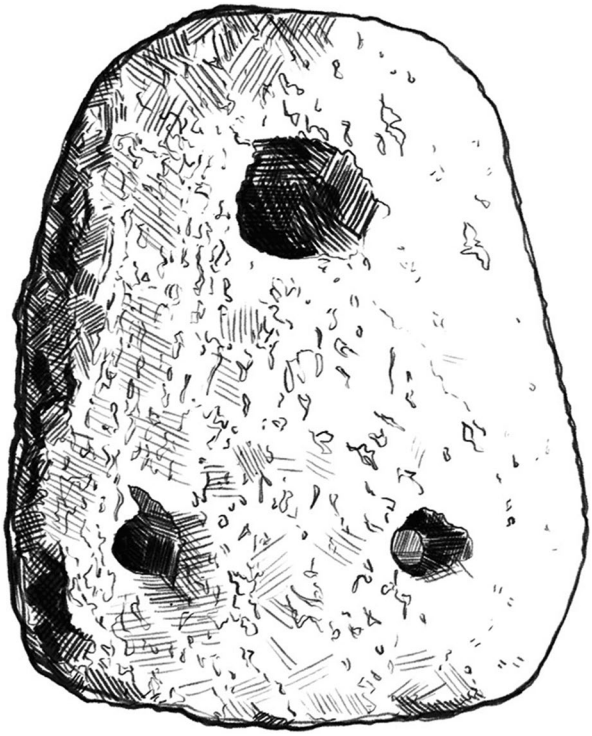

Fig. 1 Composite anchor. Drawing by K. Yamasaki after Wachsmann, 1998, Fig. 12.44, reproduced with permission

seafaring ships, which were unable to sail against the wind, the role of the anchors was even more crucial: the change of wind direction in the course of the day obliged the ships to drop anchor—often on dangerous shallows—and wait for the turn of the wind (Frost, 1982, p. 161, 1985, p. 281; Safadi, 2016, pp. 354–356).

Among seafaring communities, it thus is unsurprising that anchors were equated with navigation also in a symbolic sense. As Frost (1982, p. 161) wrote: 'when a ship is in distress, storm-tossed towards shore, only the hold of her anchors can save her from destruction and her crew from death by drowning. It is therefore small wonder that anchors retain symbolic significance'. And this significance is not limited to the area of navigation, but extends to a multitude of other domains. In the Bible, the anchor is a metaphor of hope (Heb. 6:19), and a quick search on the web shows hundreds of results related to anchor symbolism. In the Bronze Age, their symbolic importance beyond the confines of the ship is well testified by the conspicuous presence of votive anchors at various temples and sanctuaries along the Eastern Mediterranean coast, where they embody the connection between the maritime community and the divine.

This deep symbolic entanglement between maritimity and the divine that is manifested through the anchors has been highlighted by several scholars, particularly by Honor Frost (1969, p. 425; 1991, p. 367), who pioneered research on stone anchors, and, more recently, by Aaron Brody (1998, 2008, 2023) with his work on the ancient Levantine seafarers' religion, and Valeria Tito (2018), who focused on stone anchors within the framework of Mediterranean aniconic cults. However, there has been no concrete attempt to address the conceptual meaning of these objects and how they functioned as material pivots to connect the dimensions of seafaring, maritime community and sacred. To this end, I adapt the theoretical framework offered by cognitive linguistics to the study votive stone anchors.

Cognitive Metaphor Theory (CMT) and Conceptual Blending Theory (CBT), albeit in slightly different ways, offer the tools to map the cognitive processes that underlie this network of relationships. A network that culminates with the anchors being imbued with such communicative power to become the merging point of the dimensions of maritimity, sacredness, and of all their cognitive associations. CMT is based on the identification of a source and a target domain in the mapping of cognitive metaphors: it maintains that a metaphor entails the understanding of a new concept based on the previous knowledge of another concept. Source and target domains are well suited to the analysis of linguistic metaphors, but have some limitations when trying to approach material metaphors, such as votive stone anchors. In fact, CMT does not contemplate the interaction of more than two domains, and does so in a mostly one-directional way (i.e. source target). CBT theory expands on the idea of mapping a concept in function of another but admits the possibility of multi-directional blending of multiple sources. Said sources have their foundation in the human experience, which includes materiality as well as language and cultural knowledge (Fauconnier & Turner, 2003). This makes CBT more easily adaptable to the study of archaeological contexts.

In the following section, I propose an application of CBT to votive stone anchors from sanctuaries in Cyprus and the Levant. I begin with a concise review of the main features of this class of objects, especially in relation to stone anchors from

mundane contexts. Far from being a summary of all the known votive anchors from the Eastern Mediterranean—as there are indeed several examples of *special* stone anchors from the Aegean as well (Shaw, 1995)—this paper is intended to exemplify the application of the principles of CBT to archaeological material. The votive anchors from Kition-*Kathari*, Byblos, and Ugarit will serve as the case studies. I wish to illustrate how these votive objects are used to consolidate the conceptual relationship between the maritime community, the sea, the ship, and the divine.

Votive Stone Anchors

It is evident that an anchor's primary function is at sea, to keep the ship from drifting. The hundreds discovered on the seabed are testimony to the intense maritime traffic along the coasts of the Eastern Mediterranean in the second millennium BCE. While there are certainly more anchors in the sea than on land, this second group is no less interesting. In particular, those anchors found in sacred contexts present distinctive features that make them the ideal subject within a CBT framework. In fact, such votive stone anchors are some of the most significant artefacts that both materially and metaphorically express the connection between the maritime community and the sea. The term *votive* is intended here in opposition to secular or mundane, to indicate objects that were deposited in special places within a framework of religious beliefs, possibly but not necessarily in fulfilment of a vow. Therefore, the focus of this study are the votive stone anchors that were discovered in temples and sanctuaries. The non-votive anchors and the ones found on the seabed will not be included in this paper as they would deserve a separate discussion.[1] Instead, they will only be addressed when necessary to clarify elements about the votive stone anchors. Strong similarities can be detected between anchors embedded in the architecture of sanctuaries and those in tombs. However, the evidence for the use of stone anchors in tombs is limited to about ten anchors, five of which derive from problematic contexts or are now lost (Brody, 1998, pp. 89–92), which makes the votive nature of these objects very difficult to confirm. For these reasons, I prefer to exclude them from the present discussion. Even in sanctuaries, especially in those with centuries of continuous use (*e.g.* at Kition-*Kathari*), we encounter cases where the votive function of an anchor is difficult to prove, and indeed, it may well be that some were used as common building material. Nevertheless, there is abundant evidence that a majority of those found in temples have clear symbolic implications.

Concerning the characteristics of said votive stone anchors, like their secular counterparts, they are roughly triangular or trapezoidal stones, often rather large, equipped with one or more passing holes, which, theoretically, could be used for the rope and the wooden stocks. Quite intuitively, the first defining element distinguishing a votive anchor from a secular one is its context of primary deposition. Votive anchors are found in a variety of locations within sacred precincts and temples,

[1] Failing other contextual evidence, we shall assume, on the basis of parsimony, that anchors found on the seabed were lost or abandoned, rather than deposited as watery votives.

where they can be incorporated in the foundation walls, as well as placed free standing in courtyards and other open spaces. Indeed, the placing of anchors in building deposits well resonates with the long tradition of placing foundation/building deposits in sanctuaries as a mean to assure divine protection.[2]

Connected to the context of deposition is another key feature of votive anchors: as far as it could be observed, all the votive anchors in the temples were deposited new. It was initially supposed that some of these anchors, particularly those used in the stone foundations of the walls and as the base for pillars and columns, could have been deposited after the successful journey of a ship. However, as Frost pointed out, this does not appear to have been the case as none of the anchors discussed here shows signs of ever being used at sea (Frost, 1985, p. 282; 1991).

Related to the previous points, a last aspect to consider is that votive anchors need not have been functional in an actual sea voyage. While the majority of anchors found in temples could have been used on board a ship, this is not always the case. As will become evident in the examples below, the impossibility of using a votive anchor on board the ship does not reduce its functionality within its sacred context. This implies that while morphologically very similar, votive anchors and secular ones are in fact different classes of objects with distinct—although related—properties. It is precisely in the conceptual integration, or blending, between the two domains of sacred and profane that the emergent properties of the votive anchors come into existence.

Byblos

The oldest evidence for the use of votive anchors is attested in various temples at Byblos, where the tradition dates as far back as the early third millennium BCE. In the Sacred Enclosure and in the Temple of Obelisks, thrteen stone anchors were found within the sacred precinct. Among these were three smaller ones that did not exceed 30 cm in height. Given their relatively light weight, they were interpreted as fishing tackle shaped to resemble the large triangular anchors (Frost, 1969, p. 429). In the Field of Offerings, the excavators discovered four pierced stone anchors, along with other maritime votives distributed in various deposits. In the Tower Temple, the earliest phases of which can be dated to the EB II (c. 3000–2800 BCE), the lowest course of the flight of steps leading to the single entrance to the building is constituted of six anchor-shaped stone blocks (Dunand & Lauffray, 2008, pp. 393–394; Frost, 1969, pp. 249–430). The upper end of each block was rounded and presented a wide, regular passing hole as one would expect from typical Middle Bronze Age (MBA, c. 2000–1600 BCE) single-hole anchors. These were only finished on the upper side and showed no trace of use (Frost, 1969, 1970). Additionally, as McCaslin (1980, p. 12) noted, being made of chalk, they could not have been used at sea (Lawrence *et al.*, 2013)—a fact that the ancient seafarers were certainly aware of. Interestingly, the holed, upper portion of the blocks would have been hidden under

[2] For a comprehensive overview on Ancient Near Eastern foundation deposits, see Ellis (1968).

the next step in the sequence, making it impossible to recognize these stones as anchor-shaped once they had been deposited.

Ugarit

In use between the end of the MBA until the destruction of the city (c. late 17th to early twelfth century BCE), the Bronze Age Temple of Baal at Ugarit is often cited as the prototypical seafarers' temple. At Ugarit, the storm god Baal had distinct maritme attributes in his capacity of controlling the weather and as vanquisher of the sea (Brody, 1998, pp. 15–17; 2008, p. 445; Yamasaki, 2023, pp. 78–80). Even the location of his temple on top of the acropolis would have probably served as a landmark for ships approaching the port at Minet el Beidha (Cornelius & Niehr, 2004, p. 65; Frost, 1991, p. 355; Yon, 1990). Alone among the two contemporary temples on the acropolis, only the Temple of Baal presented a concentration of maritime votives. Relevant to our discussion, several stone anchors of weights varying from a few kilograms to half a ton were built into the cella and were also used in the construction of the walls. Two more were found in the courtyard and must have been free standing. Once again, these anchors had never been used and were deposited new (Frost, 1991, 362). Eight small weights were found in the area of the Acropolis, near the Temple of Baal and on the slopes directly below.[3] Of these, five resemble the large anchors, and in one case, the subsidiary hole for the wooden stock-arm is unfinished (Frost, 1991, Pl. VIII.26).

Kition-Kathari

We find the closest resemblance in shape, size, and use to the Ugaritic anchors at the Cypriot sanctuary of Kition-*Kathari*, which was founded in the late 12th/early eleventh century BCE. Similar to Ugarit and Byblos, Bronze Age Kition's economy largely relied on maritime trade, and this dependance was also manifested in devotional practices. Among the most interesting material evidence of the tie between Kition and the sea, we have the 147 stone anchors in the sanctuary complex at Kition-*Kathari* from Temples 1, 2, 4 and 5—this is the most numerous group of anchors recovered from a land site (Wachsmann, 1998, p. 273). Of these, a large part can be assigned to the category of votives. The stone anchors from Kition are not only numerous, but they are among the largest on record, reaching up to 1350 kg weight and 1.6 m height, roughly spanning from the Late Bronze Age to the Phoenician period. They are located in a variety of contexts within the sanctuary and can be either free standing or embedded in the temple architecture such as walls, thresholds, and altars. Similarly, they may be alone, or more frequently grouped in pairs, triplets, and so on up to alignments of six anchors. Unlike at Byblos and Ugarit, where anchors were not initially recognized by the excavators, the anchors

[3] An unspecified number of similar objects was observed but not properly recorded in Minet el Beidha (Frost 1991, 385).

at Kition were noted from the start of the excavation, and their position, size, and shape were recorded together with all of their contextual information. Since they are discussed in great detail in Frost's appendix to the Kition excavation report (Karageorghis & Demas, 1985), I will limit myself to highlight here some of the most notable examples.

The freestanding anchors are those to which a ritual/symbolic function may be more easily attributed. Especially clear is the case with anchors 947 (Room 12, Northern Workshops) and the fragmentary 4199 (Temple 5). Both were found upright and freestanding, with obvious signs of exposure to fire, in close association with burnt animal bones and bucrania, in what appears to be an offering installation.

Several anchors were included into structures, of which at least 13 were used in the thresholds between various rooms in Temple 2 and in the Northern Workshops—it is perhaps significant that both thresholds and anchors can be interpreted in relation to liminality. In one case, two anchors (2610, 2611, Room 16, northern workshops) were found stacked on top of each other, with a third anchor (2609) perpendicular to the other two completing the configuration. It is possible that the rope hole of the top anchor could be used in libations to be held upon entering/leaving this particular room. There are a few instances of thresholds featuring pairs of anchors identical in shape and size that were made of a different type of stone—such as the case with 2612 and 2612A (Temple 2) or 946 and 946A (northern workshops). This strongly implies that the pairs were made at the same place, likely in one of the temple workshops, from material that had been brought from different sources. To support the suggestion of an *in situ* production, we also have incomplete and newly carved, unused anchors out of stones of foreign provenance (Forst, 1985, pp. 290–291). These too were incorporated 'fresh' into the top layer of the stone foundations of the temple.

Alignments of up to 6 anchors in the top course of the wall foundations can be observed in the northern workshops, in Temple 1, and are especially concentrated in Temple 4. As mentioned above, anchors may also be used as column bases (2605–2607, room 16). It cannot be excluded that these last examples were originally deposited as individual votives, and were incorporated in the temple architecture at a later stage. It is still debated whether the number of anchors and their relation to each-other could be meaningful.

Other configurations include the anchors used as altar base in Temple 5 (4977, 4978B/C), which show traces of fire exposure and were probably stand-alone offering installations before being incorporated in the altar. In other cases, there are anchors laid into the floor or in shallow pits, at times individually, other times in groups. In Room 15, four anchors are placed next to each-other into the floor with their rope-holes neatly aligned (944, 944A, 2603, and 2604). Finally, from Temple 1, there are also 6 smaller anchors, variously interpreted as miniature anchors, fishing weights, or diving weights that have an individual mass up to 10 kg.

Interestingly, as was the case at Ugarit and Byblos, none of the votive anchors from Kition shows clear signs of being ever used at sea (Frost, 1985, p. 290). This applies as much to the free standing votives as to those used as construction materials. We also have examples of unfinished anchors. Some were only finished on one side, or had only partially carved out rope holes, indicating, as already suggested by

Frost, replicas rather than actual anchors. The presence of these unfinished specimens and of new anchors made of foreign stones further implies that at least some of the anchors were produced directly in the temple workshops.

Concepts, Cognitive Metaphors, and Blending Theory

Before addressing the issue of the conceptualization of votive anchors, it is necessary to briefly discuss the term *concept* as intended in this paper. Simply defined, concepts are bundles of properties, actions, and knowledge blocks formed within a discourse, which are internalized by the mind and used to understand the world (Schwarz, 2008, pp. 109–115). They are 'ideas or groups of ideas that share specific common features or characteristics' (Solso *et al.*, 2014, p. 3). Within the study of ancient cultures, the study of concepts is possible in as much as concepts are not only connected to the individual experience, but are influenced by cultural background, education, and prevailing discourses—as such, they are 'connected to, and expressed by signs, like images, sounds, rituals' (Schmidt, 2019, p. 122) and material culture.

One important aspect of concept formation—and as such, key to discuss the conceptualization of anchors—revolves around humans' tendency to metaphorical thought in making sense of the world. Metaphorical thinking has been explored in detail within the field of cognitive linguistics. Some of the theoretical frameworks developed in that field, in particular, cognitive metaphor theory and blending theory, can be adjusted to the analysis of material and iconographical evidence.

In *Metaphors we live by* (1980), Lakoff and Johnson maintain that concepts structure how we perceive the world and relate to other people, and that our conceptual system is largely metaphorical: this implies that we understand one concept in function of another (Lakoff & Johnson, 2003, p. 4). In other words, in a conceptual metaphor, we map a *source* domain onto a *target* domain. In turn, the target influences our concept of the source domain (Lakoff & Johnson, 2003, pp. 10–14). These conceptual metaphors depend both on the way our bodies interact with and perceive the world (*e.g.* humans locate the 'self' in the head, where most sensory organs are concentrated, or in the upper part of our bodies (Schäfer *et al.*, 2019); we have frontal, binocular vision; experience is strongly connected with our visual perception since some 90% of the information we receive is visual), as well as on socio-cultural factors (*e.g.* education, beliefs, traditions), that are learned by individuals in the course of their lives as members of specific groups (Lakoff & Johnson, 2003, pp. 18–19).[4] While many of the common metaphors that guide our thought processes can be

[4] For instance, the experience of gravity is at the base of various orientational metaphors structured in terms of GOOD IS UP/BAD IS DOWN: 'they are in peak shape', 'they fell ill', 'they reached the top'. At the same time, the metaphorical expression use of the physical experience of an uphill road may produce different metaphorical outcomes: in English, 'an uphill goal' is structured on GOING UP IS TIRING, implying an arduous task; in Japanese, 'to go uphill' is structured on GOOD IS UP, thus with the meaning that the given condition is improving. In this case, the metaphorical use of uphill, while still based on the same human experience, is culturally specific.

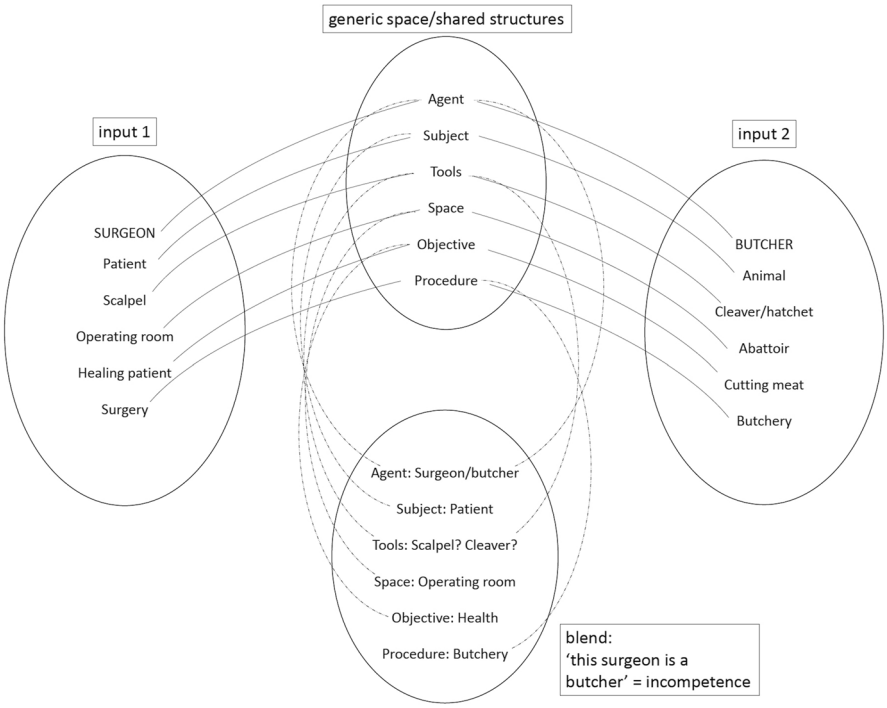

Fig. 2 Surgeon and the butcher diagram. Adapted from Birdsell, 2014, Fig. 2.4.6

reduced to the type of metaphors described by Lakoff and Johnson, they are but one kind of metaphorical thinking. In everyday situations, our mind operates on more than a binary mode of conceptualizing the world. In fact, source-domain metaphors appear to operate as a very specific type within the wider framework of conceptual blending, *i.e.* the multidirectional interaction of several domains and signs/objects (Fauconnier & Turner, 2003, pp. 126–127).

A well-known example of the blended metaphorical thought proposed by Gilles Fauconnier and Marc Turner (1998, p. 279) is contained in the following statement: 'this surgeon is a butcher'. While the sentence proposes the juxtaposition of two fields, the surgeon and the butcher, to understand its pejorative implications, it is not sufficient to map the source (butcher) onto the target (surgeon). Both the surgeon and the butcher share some structures or features within a *generic space*: cut parts of meat/flesh, use similarly sharp instruments, can be precise, clean, and reach the desired results. Out of these seemingly shared structures, the metaphor operates a further transformation in a fourth space, the *blend*, where the setting and actors of the surgery are combined with the tools and purposes of butchery creating new emergent properties (Fig. 2; Birdsell, 2014; Fauconnier & Turner, 1998, p. 279; Roberts, 2018, pp. 34–35).

The inputs (here: surgeon and butcher), which need not be limited to two, take the name of *mental spaces* and include all our pre-existing knowledge about them (here: medicine, economy, slaughterhouse, hospital, social status, profession, blood

and flesh, etc.). Fauconnier and Turner define mental spaces as the 'short-term constructs grounded in experience informed by the more general and more stable knowledge structures associated with a particular domain' (Grady *et al*., 1999, p. 102). Mental spaces, together with all the background of socio-cultural knowledge that we have about them, are connected to an infinity of other mental spaces in an equally infinite variety of relations, which come to the forefront or remain obscured on a contextual basis. From this pool of properties, the mind (which is influenced by society, milieu, culture, etc.) recruits the relevant knowledge and selects structures that are shared by the mental spaces involved in the blend. The mental space of shared properties takes the name of generic space. From the generic space, the mind takes the elements to construct a new metaphor within a blended space. It is in this blended space that the new concept takes form. In the case of the butcher and the surgeon, we have a surgeon that operates with the tools and skills of a butcher within a framework of surgery.

Generalizing from the above example, mental spaces share a certain number of conceptual structures in a generic space, while their conceptual elements are combined and reworked in a blended space (Fauconnier & Turner, 2003, p. 40). The use of *mental spaces* instead of *domains* as posited by CBT proves more adaptable than CMT to a variety of phenomena, including the use of figurative speech in ancient texts, as already demonstrated by Rune Nyord (2009, pp. 23–27), and I shall add, material culture. In the case of archaeological objects, a blended space framework allows us to recognize a variety of mental spaces. It also allows us to highlight the shared conceptual structures from different mental spaces that were associated to an object, and how these elements interacted with each other, shaping multifaceted and multidirectional metaphorical meanings. With Fauconnier and Turner's surgeon in mind, let us turn to a concrete example from an archaeological context.

The fish-shaped askos in Fig. 3 was found in one of the three MBA sea-side tombs discovered during construction works in Byblos in 1924 (Montet, 1928b, p. 244). Although there is relatively little information about this object, CBT allows us to frame our interpretation from a cognitive perspective. In the conceptualization of a fish-shaped vase in a Bronze Age cemetery, we can identify, at the very least, the mental spaces of the container, those of the animal, and the framework of the context in which the vessel is used (in this case, the sphere of death, as suggested by the finding spot in a necropolis). A basic structure shared by the input spaces is the cognitive metaphor of the body as a container, and water or another libation, which we often find in connection with concepts of purification and cleansing (Fisher, 2007). Additionally, the mental space of the tomb and the mental space of the fish have shared structures as well, particularly in the form of liminality (of water, in the case of the fish, and of death in the case of the tomb). Even without knowing which particular statement is being made by such an object, we can assume that properties common to the animal, the container, and the context are interacting in the creation of meaning for the zoomorphic jug. Following the known associations of vessels in mortuary rituals, purity, and liminality in the Levantine Bronze Age, the diagram proposes the integration, or blend, of multiple structures and mental spaces in the fish shaped vessel and thus presents a potential framework in which to interpret the

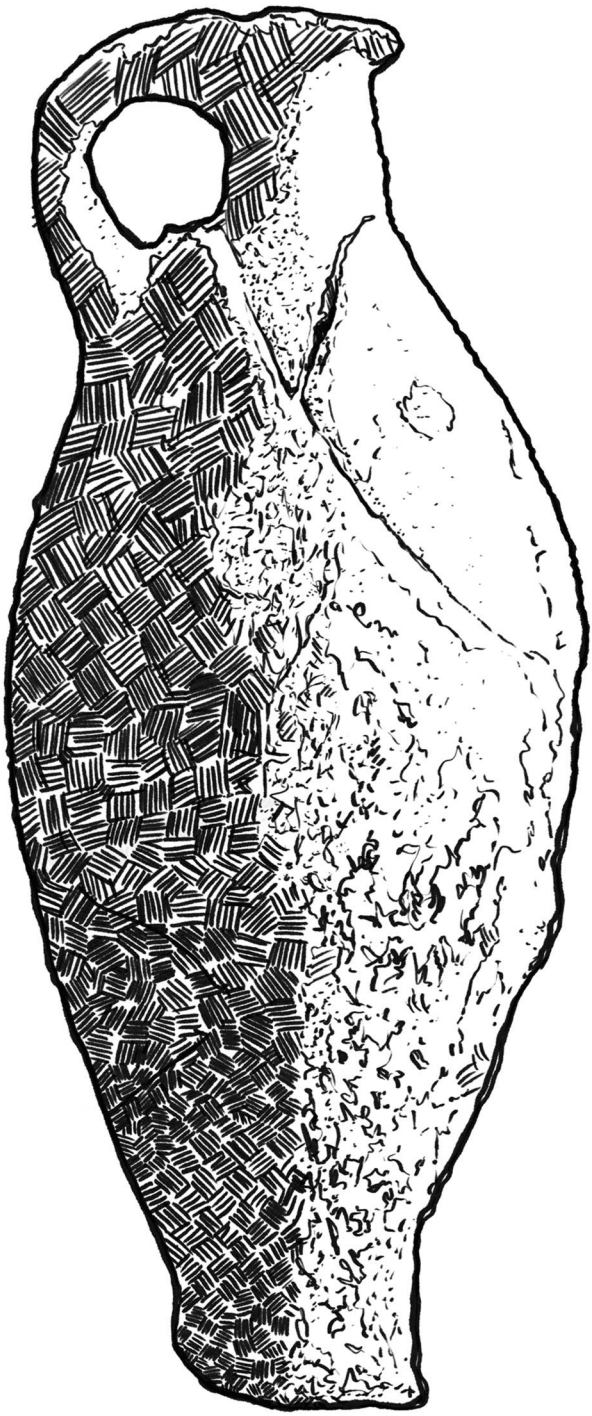

Fig. 3 Fish-shaped askos from Byblos. Drawing by K. Yamasaki after Montet, 1928a, Plate CXLV.910. Reproduced with permission

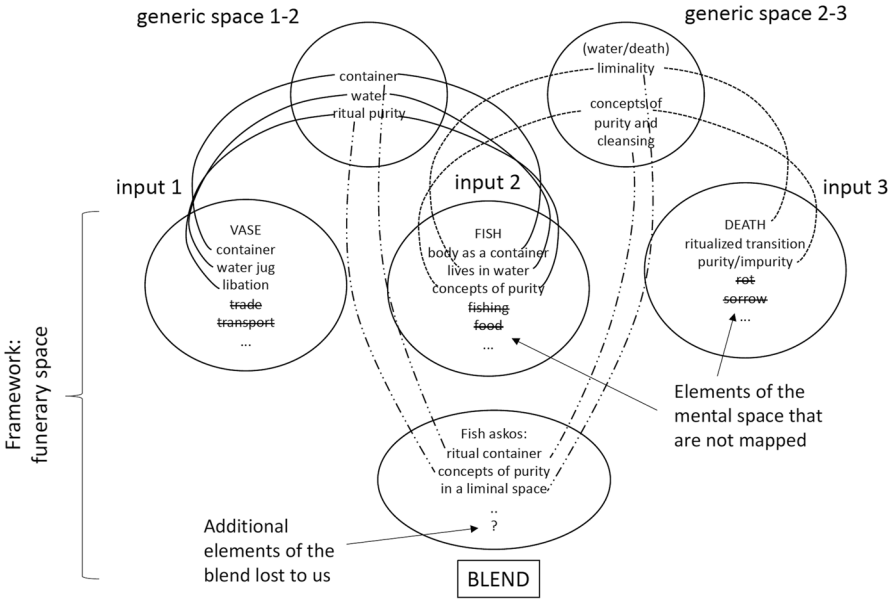

Fig. 4 Diagram of the fish-shaped vase blend

object (Fig. 4). This blended approach allows us to discuss also the Eastern Mediterranean votive stone anchors as material metaphors.

Stone Anchors in the Blend

As we have seen, the majority of anchors from sanctuaries for which we have a detailed analysis show that they had been deposited new: *i.e.* they were carved from the start to be used as votives. There would be no logical reason to carve an anchor only to use it as common building material when with less effort; one could dress an aptly shaped block from the start. These special, brand-new anchors were deposited in temples as votives and, as seen in Kition, at least in part employed in special rituals involving burning, libations and animal offerings.

Remarkably, only anchors that were never used at sea, were employed in the construction of the temple itself. If this were a case of opportunistic reuse of good stone material, we would have a wider variety of new and used anchors aligned in the walls and in the floors. The concentration of new anchors indicates that they had been specifically produced to be used within the sanctuary.

Now that I hope to have established that the anchors in question were not used in temple architecture by mere opportunism, I would like to focus the discussion on how these objects were conceptualized and go beyond the acknowledgement of their strong symbolic import. By bringing the cognitive process that underlie the construction of a concept to the forefront, CBT offers the right framework to address

this issue. Within the blend expressed by votive stone anchors, we can recognize, at the very least, three input spaces: the temple, the city, and the ship.

Temple and City

From the Ancient Near Eastern urban tradition, we know that the association between the city and its tutelary god(s) through their temple was more than a matter of patronage: the fate of the city was intertwined with that of its deity and their house-temple. Voluminous literature discusses the mapping of the Near Eastern temple onto the concept of the house in general, and of the palace in particular, and I refer the reader to the volume by Michael Hundley, *Gods in Dwellings* (2013), for an overview on the topic. When an enemy army entered a city, it was not infrequent for the statues of their gods to be taken away with the war booty. Far from being the simple removal of precious objects from a temple, this was intended to function as an actual abduction of the deity, without whom the city would be deprived of their protection (Johnson, 2011; Zaia, 2015). In a common literary *topos*, the gods, angered by human misconduct, decide to leave their city, with terrible consequences, and only reconciliation with and return of the deity can restore good fortune. Divine abandonment, whether voluntary or forcible, implied the ruin of the city (Zaia, 2015, p. 24). A well-functioning, solid temple thus guaranteed the continued residence of the tutelar deity. As such, the existence of the temple was perceived to be essential to the functioning of the city.

Ship and City

The other conceptual integration that we need to consider is that of ship and city. To best illustrate this blend, I would like to discuss a known passage from the Old Testament, the *Lamentation for Tyre* in Ezekiel 27:26–36. The Book of Ezekiel was likely composed sometime around the early sixth century BCE (Sweeney, 1998, p. 89; Zimmerli, 1979, pp. 9–15), thus several centuries after the deposition of the Bronze Age votive anchors in Byblos, Ugarit, and Kition. However, the metaphor expressed here might shed some light over the conceptualization of the city in function of the ship. In this passage, the city of Tyre is compared to a sinking ship:

> Your oarsmen brought you into many waters, but the east wind broke you in the midst of the seas. Your riches, wares, and merchandise, your mariners and pilots, your caulkers and merchandisers, all your men of war who are in you, And the entire company which is in your midst, Will fall into the midst of the seas on the day of your ruin [...] But you are broken by the seas in the depths of the waters; Your merchandise and the entire company will fall in your midst (Ezek. 27:26–36, *NIV*).

In this case, we have the two organizing frameworks of the city and the ship, from which only a selection of common structures is used to create the metaphor. The doomed historical trajectory of a city whose fortune was largely based on maritime trade is equated to a tragic shipwreck with no survivors: the common structures

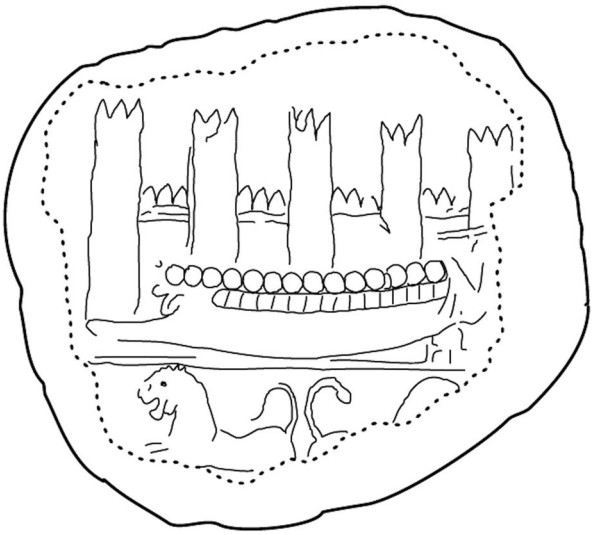

Fig. 5 Sidonian double shekel, fifth century BCE. Drawing by the author after Elayi and Elayi, 2014, Plate LXXIV.3

are thus the people whose lives depend on the ship or city (oarsmen, mariners etc., and inhabitants), the precious goods (as cargo and merchandise), and disaster (shipwreck and destruction of the city). Ezekiel's counterfactual equation of the city as ship allows the creation of a new mental space, where properties of the ship and the city can merge. A cryptic passage appearing twice in the Ugaritic poem of Keret (KTU 1.16.I.6–9; II.44–47) may also be interpreted as a metaphor of the ship as the city, depending on the reading of the Ugaritic *ḫl*. Brody (1998, 16, n. 31) presents a convincing argument in favour of such metaphorical equation. The emerging blended metaphorical concept is that of a city-ship that relies on both the conceptual structures of the city and the ship to function. Phoenician coinage from Sidon dating to the fifth century BCE appears to visually represent the same metaphor (Fig. 5). The Sidonian shekel and double shekel depict a galley in front of the towered city walls (Elayi & Elayi, 2014, pp. 587, Pl. LXXIV.3, LXXV.C11-12, LXXVI.C13-15). The composition of the image merges the city and the ship to the point that it almost appears that the latter is supporting the other. Certainly, neither the Sidonian coins nor Ezekiel's Lamentation for Tyre can be considered a generalization of the conceptualization of the city in the second millennium BCE. Nevertheless, given the cultural continuity between the Canaanite and Phoenician city states, the presence of city-ship imagery in the sixth and fifth centuries BCE at least suggests that similar metaphorical associations may have existed already in the Late Bronze Age, especially for coastal cities with strong maritime inclination.

Ship and Temple

Even more than between city and ship, we can clearly visualize the common cognitive structures shared by the temple and the sea in the Mediterranean Bronze Age: they are both powerful liminal spaces and as such potentially dangerous in a natural

and/or supernatural way, a similarity that facilitates conceptual blending. The ship is likewise understood to possess liminal qualities as she allows relatively safe passage between two points on land across the dangers of the sea (Westerdahl 2005; Monroe, 2011). It is safe to assume that her symbols would evoke similar scenarios and that the act of depositing anchors in a sanctuary, as seen at Kition, Ugarit, and Byblos, clearly brought the sea and its relations within the associative space of sacredness (Yamasaki, 2023, pp. 157–158; forthcoming). Additional evidence supports the close relationship between the concepts of ship and temple, and of the Temple of Baal in particular. In the Ugaritic Story of Keret, the house of Baal, the storm god, is referred to as a ship (KTU 1.16.I.6–9 and KTU 1.16.II.44–47; Brody, 1998, 15; Parker, 1989). In the Sallier IV Papyrus, we find the formula 'to the ship of Baal Ṣapōn' in reference to the god's temple (Brody, 1998, p. 17).[5]

Furthermore, if the temple is the house of the god, then the opposite may also be true that a place that is inhabited by the god may be regarded as a temple. In this respect, there is some evidence that ships may have functioned as cult spaces. Wachsman (1998, pp. 206–208) interprets the gilded female figurine from the shipwreck of Uluburun as the possible representation of the ship's resident goddess. The depictions of Syro-Canaanite ships on the wall of the Tomb of Kenamun (fourteenth century BCE) show Levantine merchants performing incense offerings at the bow (Davies & Faulkner, 1947).

It is reasonable to assume that, as early as in the Late Bronze Age (possibly even earlier), the ship would either be the house of the deity or that the deity had a dedicated space on board. Indeed, first millennium Phoenician and Greek evidence strongly implies the sacredness of the ship inasmuch as it was inhabited by the divine (Brody, 2008). Mark Christian (2013) suggests that part-time cultic personnel was part of the usual crew on-board long-range Phoenician seafaring vessels and that these specialists would have also been in charge of performing the rituals at small and remote coastal shrines. If we accept the ship-temple blend, we can see how the two input spaces of ship and temple share a significant number of structures (*e.g.* liminality, danger, and ritual) for which the ship acquires the properties of a sacred space.

Anchors were not the sole symbols of seafaring that appeared in maritime-oriented temples—we have for instance the very conspicuous ship graffiti at Kition (Basch & Artzy, 1985) and several ship models from Byblos (Wachsmann, 1998, pp. 52–54). There is little doubt, however, that in the materiality of the maritime cultures of the eastern Mediterranean, anchors possessed a strong communicative power, to the point of embodying the very essence of maritimity. Given that they are an integral part of the construction of temples, it is then apparent that examining them just as *voti* or *ex-voti* in the strict sense of *votum fecit gratia accepit* for a successful seaborne expedition is greatly reductive of the wide scope of interactions between the anchors and temples.

In her analysis of the anchors from the Tower Temple, Frost (1969, 430) suggested that the anchors deposited in group may have represented the standard

[5] Papyrus Sallier IV, (XIX Dynasty, c. 1225 BCE).

complement of a ship. She reprises this theory in her interpretation of the Kition material. However, this is a particularly difficult statement to verify, as it is clear that the number of anchors on board could vary immensely from craft to craft. Therefore, the number of anchors in a temple wall or at the bottom of the stairs may not literally represent the actual number on board a given vessel. Afterall, within a blended framework of ship and temple, it is not necessary for the temple to be equipped with the same number of anchors needed on board any particular ship (or ships).

The temple and the ship share essential structures common to both that enable the metaphor, of which the anchor is the material manifestation. Ships have a liminal relationship with a space (the underwater world) below, whereas temples and other on-land sacred spaces have a liminal relationship with a space (the heavens) above. Thus, both similarly allow a link both above and below to realms which otherwise humans cannot explore. Albeit with local differences from temple to temple, the placement of the anchors within the precincts makes them carriers of meaning intertwined with their function at sea of keeping a ship from drifting. In other words, it makes them material metaphors that acquire meaning within a blended space of maritime and sacred.

In the capacity of material metaphors, anchors create a connection between the sea and the temple with its associations of sacredness, transcendence and worship. The consistent use of these objects as maritime votives suggests that they would have been perceived as a salient part of the ship, able to represent *pars pro toto* the entire vessel within a sacred context. In maritime-oriented cities, whose wealth

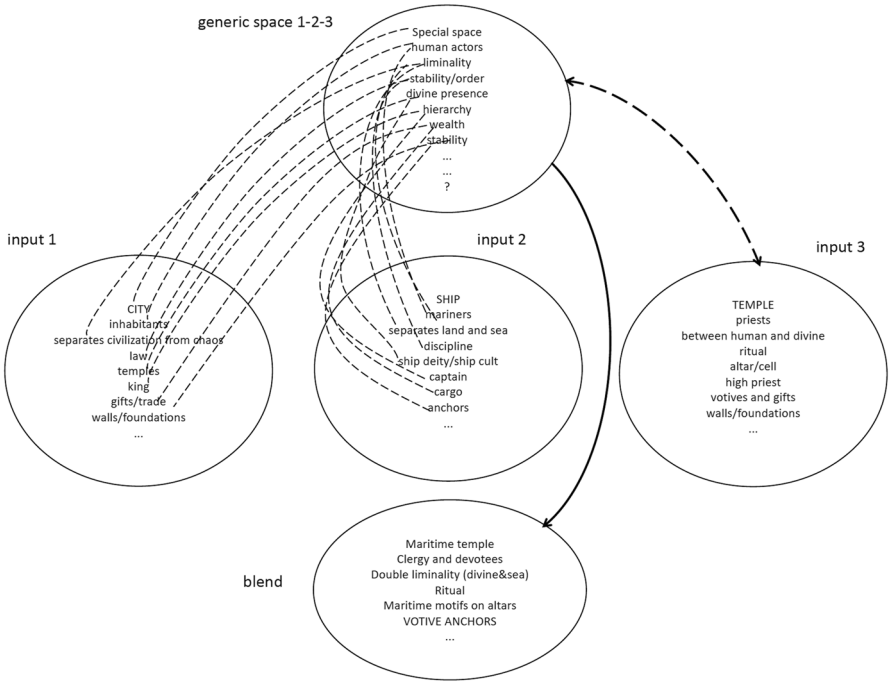

Fig. 6 City-ship-temple blend diagram

relied in no little measure on seaborne trade, we can imagine a community of mariners and merchants for whom the city = ship equation was more than a literary metaphor. Their livelihood and success depended on those same powers that governed a ship, and as such needed to ward themselves against the natural and supernatural dangers, both at sea and on land. In other words, just like ships, their lives depended on the steadiness of all of their anchors, on board and in the temples.

The vast chronological distance that separates the archaeologist from those who deposited these objects does not allow us to know all of the many layers of meaning that votive anchors had in the Eastern Mediterranean Bronze Age. Nevertheless, the model presented here allows us to understand how these objects blended maritimity and sacredness and became the pivot to establish a multitude of conceptual connections (Fig. 6).

Conclusions

As first observed by Frost, the numerous stone anchors discovered in Bronze Age sanctuaries strongly imply that they were attributed symbolic value as early as the third millennium BCE down to at least the Early Iron Age. Even today, the entanglement between the concepts of safety and anchor is so tight that it is difficult to separate one from the other: anchors are synonymous with security, stability, and hope.

While we cannot be certain of the exact meaning that the Bronze Age votive anchors were intended to carry, we can highlight how votive anchors functioned within a wider conceptual framework. By approaching the subject from the perspective of CBT, I have demonstrated that these special objects are found at the convergence of multiple conceptual domains of ship, temple, and city. On a ship, anchors are used to keep her from drifting and are essential to her safety during a storm. While we can infer that a part of the symbolic meaning of votive anchors is connected to safety, in the blend between ship, city, temple, and ship, there are a multitude of conceptual associations that connect the domains of maritimity to the sacred, the coastal cities, and their inhabitants. While many of the concrete associations are lost to us, they would have been clear to the inhabitants of Kition or Ugarit. Nevertheless, CBT shows how multiple conceptual spaces can be integrated together with their potential associative fields. Votive anchors are clearly the manifestation in stone of complex conceptual blending processes, and as such pivotal to the understanding of the conceptualization of maritimity in the Eastern Mediterranean Bronze Age.

Abbreviations Ezek.: Book of Ezekiel; Heb.: Epistle to the Hebrews; *KJ21*: 21St Century King James Bible; *NIV*: New International Version

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Data Availability Additional data available upon request.

Declarations

Competing Interests The author declares no competing interests.

Permission Statement I declare that I have permission from the copyright owner to reproduce the images in Figs. 1 and 4 and that I am the creator of the images in Figs. 2, 3, 5, and 6.

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