

Special Volume 7 (2020): Political and Economic Interaction on the Edge of Early Empires, ed. by David A. Warburton, pp. 193–211.

DOI: 10.17169/refubium-28215

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Mediterranean Stone Anchors: Bronze Age Trade & Social Practice

Edited by Gerd Graßhoff and Michael Meyer,
Excellence Cluster Topoi, Berlin

eTopoi ISSN 2192-2608
<http://journal.topoi.org>



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Mediterranean Stone Anchors: Bronze Age Trade & Social Practice

The history and distribution of Bronze Age Mediterranean stone anchors reflect the trade routes, and probably that of copper in particular. Although generally associated with the eastern Mediterranean, they are found farther afield – and, although their usage in the late second millennium BC may well have been largely commercial, the origins of the anchors may lie in the activities of the Egyptian state. There is thus an historical development as well as a distribution pattern. Aligning this archaeological evidence with the various models on offer is a challenge or an opening, as the material is mute and open to discussion.

Bronze Age anchors; networking; world-systems; Mediterranean; seafaring

Die Geschichte und Verteilung der Steinanker im Mittelmeer in der Bronzezeit reflektieren die Handelsrouten, vermutlich besonders die von Kupfer. Obwohl generell mit dem östlichen Mittelmeerraum assoziiert, werden sie auch deutlich weiter entfernt gefunden – der Ursprung der Anker dürfte mit den Aktivitäten des ägyptischen Staates zusammenhängen, obwohl ihre Verwendung im späten 2. Jt. v. Chr. vor allem kommerzielle Gründe haben dürfte. So ergeben sich eine historische Entwicklung und ein Verteilungsmuster. Die archäologische Evidenz mit den verschiedenen, vorhandenen Modellen in Verbindung zu bringen ist eine herausfordernde Forschungslücke, da das Material stumm und interpretationsfähig ist.

Bronzezeitliche Anker; Netzwerke; Weltsysteme; Mittelmeer; Seefahrt

I Introduction

In trying to understand ancient trade systems, one can take the approach of choosing a time frame and a region, and then trying to isolate traces of interaction and assign them to a suitable framework (trade, networking, world-systems, etc.), as has been done in the preceding chapters. Here, I begin with an object category (anchors) which I can link to the island of Cyprus and its Bronze Age copper exports – and then try to see where the actual archaeological evidence can take us (Fig. 1).

Our means here are thick, worked, pierced slabs of stone, usually weighing less than 100 kg; most of them have been found in the area of the eastern Mediterranean. The objects themselves will be vaguely familiar to anyone who has strolled around museums of the Mediterranean and Black Seas; they are hardly an unknown novelty, and have been known and recognized for some time. Yet, even several decades after their identification by Honor Frost, who followed up her initial conjectures with catalogues and discussions, I am persuaded that the value of the stone anchors of the second Millennium Mediterranean for the understanding of Bronze Age trade has not been entirely exhausted. Attempts to isolate specific types may, however, have distracted attention away from the fact they could serve to identify a series of networks within a larger trading community.

The anchors can thus be studied in several different ways. Among the most obvious approaches are those concerned with their maritime role and the technology of manufacture. However, given the ease with which they can be identified, and their prominence,



Fig. 1 | Rough outline of the geographical range (i.e., not frequency!) of (a) the distribution of the Mediterranean stone anchors from the late third and second millennia BC, with (b) the distribution of recognisable Cypriot copper ingots from the late second millennium BC (including fragments and images).

one is also tempted to tackle other approaches. Among these would be the concept of establishing distribution maps which can hint at the ancient trade routes, as they have been found from the Gulf to the English Channel. Another would be to examine their religious role, as many of the findspots are temples or cemeteries. A fourth would be to link them to social identities, as types have been identified as Egyptian and Cypriote, etc. Another would be the chronological issue, as they seemed to have been used in a uniform fashion with little significant variation from the third millennium until the end of the Bronze Age (as they were largely replaced by iron anchors from the Iron Age onwards). All of these various approaches have been attempted to various degrees, but some fundamental issues remain which merit both attention and discussion, as well as research.¹

One issue of interest to us here would be tracing their history as well as their distribution, and thus linking them to regions, trade routes and usage. Among the most significant aspects is probably the fact that although some of these alleged anchors have been found in wrecks, others were evidently incorporated into ‘religious’ contexts without ever having been used; others seem to have been ‘abandoned’ (or dedicated) in temples rather than lost in the sea. Their usage thus bears some meaning beyond mere practicality and might thus offer access to a multi-faceted understanding. Buchholz, Frost, Schaeffer and Wachsmann have all pointed to this peculiar and undeniable aspect, and I continue in their tracks.²

- 1 For literature and references to various aspects, cf. the works of Frost; also, e.g., Buchholz 1999, 41–52; Evrin et al. 2002; Knapp and Demesticha 2017, cf. index “anchor”; Tóth 2002; Wachsmann 1998, 255–293.
- 2 See last note and Schaeffer 1978a; Schaeffer 1978b.

We begin with the survey of the anchors as related to their geographical distribution, and this will open the way to the history of the anchors. Then we will move to their potential symbolic role in terms of religion and identity. The object is to raise the issue of the importance of the relatively wide distribution of a relatively commonplace article, which apparently had a socially quite specific role. And this ‘social’ role gives an image of the 2nd millennium BC Bronze Age trade routes, probably finally corresponding to the distribution of Cypriote copper.

2 A survey

Thanks to the work of Honor Frost, this category of object was identified as an “anchor” long before a single one was found in a Bronze Age wreck, let alone the 24 found in the Late Bronze II Uluburun shipwreck off the Anatolian coast, dating to the end of the 14th century BC.³ Its main cargo consisted of raw materials: copper, tin, glass, resin, etc. The 11 tons of metal were supplemented by a half ton of squarish or oblong stone anchors. These anchors were clearly designed for use. The same can be assumed for the hundreds of similar pierced stones gathered from the Mediterranean and its coastal settlements. Although originally hypothetical, the fact that these stones were anchors need no longer be subject to doubt.⁴

There are altogether probably a thousand or so objects belonging to the general category, but many of these have been identified by presumed function and not according to typological form. Therefore, at the outset, it must be stressed that the criteria used to identify items as anchors are partially functional and partially typological. The number of specifically similar typological forms is only a small sub-set of the overall group. Nevertheless, due to a number of factors – including the discovery of such stones in the wreck of Uluburun and in the sea along the Levantine coasts – there can be no doubt that many of those items provisionally identified as anchors were in fact either used as anchors on sea-going vessels, or were made as imitations of such.

However, before anyone begins to suspect that the study of these stone anchors solves the entire issue, we must introduce some caveats. The first is Wachsmann’s observation that other methods of anchoring ships could easily be envisaged, such as the “kellick” where a stone with a suitable weight could have been enclosed in a wooden cage which would have left absolutely no archaeologically recognizable traces.⁵ The second is virtually the opposite, namely the rather obvious fact that pierced stones found in archaeological excavations could easily have served as weights for olive-presses or the like. Indeed others could even been used as weights for commercial or administrative purposes. Furthermore, it must be stressed that we cannot even be certain how those anchors which really served as anchors at sea were actually used: were they attached to special on-board apparatus, or to the rigging?⁶

Frost was the first to try to develop a typology.⁶ Her methodology was based upon a survey of stones which had been pierced by a large hole. In the initial surveys, most of these stone weighed between 20 and 120 kg, and thus this feature was decisive. Based on this simple criterion, she rapidly appreciated that this type of object was common around Cyprus and along the Levantine continental coast, but that such objects were not notably abundant in the Aegean area.

3 E.g., Pulak 2001.

4 Cf., e.g., Frost 1963a; Frost 1963b; Frost 1969a; Frost 1969b; Frost 1970; Frost 1973; Frost 1979; Frost 1982; Frost 1986; Frost 1991; Frost 2001. For additional literature, cf. also Basch 1985; Galili 1985; Galili 1987; Galili and Kurt 1988; Kirtland 1985; Owen 1997; Raban 1990; Wachsmann and Douglas 1997.

5 Wachsmann 1998, 275–279.

6 Cf. particularly Frost 1969a, 245; also Frost 1991.

In general, it would appear that Egyptian and continental Levantine anchors tended to be triangular, with a hole near the apex. However, there were numerous variations. Frost suggested that those from Byblos were characteristically “a triangular slab of stone with an apical piercing, sometimes surmounted with a shallow groove”. The Egyptian anchors differed slightly, having “an L-shaped piercing through one corner of the base, an oval top, [and] the capability to stand upright independently and the groove above the hole”⁷

In general, the Egyptian anchors tend to be more triangular and elongated than the Levantine anchors. However, in his own excavations Tallet seems to have found a large number of what appear to be more ordinary – “non-descript” – anchors in third millennium Egyptian Red Sea ports.⁸ Nevertheless in general, the anchors we can identify as ‘Egyptian anchors’ have a bent-axis hole at the base, presumably to allow the base of the anchor to be yanked up from the muck on the floor of the Sea (or Nile?), using a second cable.

These peculiar holes are rare outside of the Egyptian material, and certainly not present in any of the Bahrain anchors. This discrepancy in form contrasts with the maritime link from the Red Sea to the Gulf, and the date. There is a direct water-link between the Egypt and Bahrain, and the anchors are of a similarly ‘early’ date (late 3rd millennium/early 2nd millennium – whereas most ‘Cypriote’ anchors will date to the 2nd half of the 2nd millennium). However, the Bahrain anchors bear a closer resemblance to the Levantine material, typologically, while dating to an earlier period. Furthermore, also as Frost originally proposed, the peculiarities of the anchors Frost identified as being specifically linked to Byblos resemble in several respects the Egyptian anchors.

By contrast, Cypriote anchors differed somewhat. Some Cypriote anchors seem to have been circular with a hole in the centre, but there are also numerous examples of rectangular Cypriote anchors. In general, however, the parallels for the ‘oblong rectangular’ examples apparently can be traced back to the northern mainland Levant, i.e. at the port of Ugarit. Frost remarks that the Cypriote rectangular parallels are “smaller, squatter and squarer” than the Ugarit examples of the similar form.⁹ Following Frost, McCaslin also classifies the oblong rectangular shape with Ugarit more than Cyprus.¹⁰

In the end, therefore, we can identify one type – represented at Byblos – as being largely Egyptian influenced; and another type – represented by some examples from Cyprus – which is Ugarit influenced. The two types thus reflect a generally Egyptian type and a generally Ugaritic type. In addition, there are the Cypriote anchors which are either circular or squarish.¹¹

3 The distribution

There are no real problems with the eastern distribution: the typical Mediterranean stone anchors are found along the western coast of the Black Sea, Bahrain in the Arabian Gulf and on the Egyptian coast of the Red Sea. That the anchors are occasionally – if very rarely

7 Frost 1969b, Fig. 171.

8 These and literature about them are mentioned in Tallet and El-Sayed 2012 – along with a great deal of other material. Tallet suggests that although the anchors he has found in his Red Sea ports (primarily Ain Sukhna) are generally close to the Sinai Peninsula, the boats will have been travelling much further south in the Red Sea – and this is probably correct. If my suspicions about the anchors he has found are correct, it would imply that the Egyptians maintained a system involving demonstrative ideological anchors and simple practical ones. It is also possible that some of the ships (and correspondingly their anchors) used in the Red Sea may actually have belonged to Levantine traders.

9 Frost 1991, 381.

10 McCaslin 1980, 67.

11 However, it must be conceded that many of these forms (especially the small circular ones) might better be assigned to the Iron Age or later (to which Honor Frost testified). They are thus largely neglected here.

– found in the western Mediterranean is not surprising, but the northwestern extension is difficult. There are two problems with the north-westernmost distribution of the anchors. In the one case, it is not certain that the stone from the Heuneburg is an anchor and in the other it would appear to be debatable whether the object arrived on the English coast in ancient times or more recently.

A triangular stone (85 x 54 x 28 cm) was found on the threshold of the Danube gate at the Heuneburg, an early Iron Age citadel on the Danube in Württemberg, Germany.¹² This was initially interpreted by the excavators as a stone used for a door-post. Given the rather striking similarity to the anchors from Ugarit, C.F.A. Schaeffer proposed that this was an anchor. Although it was heavier than the usual examples, and is an unusual type – with the hole at one of the corners rather than in the middle near the top of the stone – Schaeffer concluded that it was an anchor. A closer examination revealed that the edges of the hole were abraded on both sides of the stone, as would be expected from a stone used as an anchor, but not one used for a door-post. Schaeffer also observed that door-post stones in Swiss museums were not completely pierced. Schaeffer accordingly proposed to interpret the stone found at the Heuneburg as an anchor.

Frost also recognized one of these anchors on the English coast of the English Channel, but suggested that this one (in the Dover Museum) might have been transported relatively recently from the Mediterranean.¹³ However, the specimen is in such poor condition that it is easier to imagine it having been abandoned or lost on the English coast in antiquity than to imagine it having been taken as a souvenir from the Mediterranean in recent times. In any case it was deposited in a maritime museum before the Mediterranean variety of these ‘pierced stones’ was understood and recognized as anchors. As in the case of the anchor from the Heuneburg, I propose that this was likewise an anchor which arrived in the Bronze Age.

It is doubtless potentially controversial to suggest that Bronze Age Levantine anchors were found along the Danube and the English Channel. However, the incidence of the Western migration into the Eastern Mediterranean at the end of the Bronze Age would offer a suitable point in time for the Heuneburg anchor to have found its final resting place. And the importance of Cornish tin for the Mediterranean in the late 2nd millennium may provide a context for Mediterranean trade with England. Thus, if one were to accept the possibility of these being anchors, it would also demand two different trade routes: one a route along the Danube from the Black Sea, the other through the Atlantic from the Mediterranean.

Furthermore, it would also suggest two different usages, since the one would appear to have been little more than a worn out anchor while the other might well be a votive offering, as we will see if we follow Schaeffer’s logic.

4 The sub-category of replicas

While the Heuneburg anchor may have been used as an offering, it was in all probability a real anchor (as deduced from the wear around the hole). Yet this leads us to another peculiar aspect of these ‘anchors’: that some were in fact imitations, made for some other purpose, such as two in the tomb of a merchant at Ugarit. These “replicas” identified by Frost are particularly significant, as they correspond to a specific subgroup which includes two quite different employments. Similar stones have been found at shrines at an Egyptian port on the Red Sea, at the temple of Karnak, at a temple at Kition on Cyprus, at the Baal temple at Ugarit, the Obelisk Temple at Byblos, and the Barbar temples on Bahrain.

12 Schaeffer1978a; Schaeffer1978b.

13 Frost 1963a, 4.

These stones appear superficially to be similar to the real anchors in shape, size, weight and material. However, there was a significant difference, since those found along the Red Sea were apparently real anchors which were used to fashion a shrine,¹⁴ whereas the two found in a tomb at Ugarit and some of those found at the obelisk temple at Byblos belonged to the category Frost identified as “replicas”. Significantly, the anchor found at Karnak was apparently at once a replica made of local (Egyptian) stone, but also of a Cypriote rather than Egyptian type – and thus this votive anchor at Karnak belonged to a different category than those found along the Red Sea coast. Therefore, many of these anchors were found in contexts which appear to be symbolic rather than practical. For Schaeffer and Frost, “it is evident that the anchors grouped in the Temple of Baal [at Ugarit] are votive.”¹⁵

5 Bahrain

Significantly, aside from the eastern Mediterranean¹⁶ and the Red Sea, objects which are indisputably anchors of this general type have also been found in the Gulf on the island of Bahrain. It is this latter group that is the most striking, as they are the easternmost known examples of the category, and several were found in what must be described as a sacred context – which was also the case for the anchors from the Red Sea, Karnak, the tomb of Mereruka at Saqqara, the obelisk temple at Byblos and the Baal temple at Ugarit.

Altogether, at least five large worked pieces of limestone (or sandstone) pierced with circular holes were found in the course of the excavations at the Barbar temple¹⁷ and at least another two were found at the Qala’at Bahrain.¹⁸ The pierced stones at the Barbar temple are generally more oblong rectangular, whereas one from the temple and those from Qala’at al-Bahrain had more rounded upper corners. The stones found at the Barbar Temple in Bahrain are similar in over-all shape to the Cypriote rectangular anchors, but they are larger than the Cypriote ones.

Despite their diminutive size, the shape and context of those anchors still standing at the Barbar temple have always attracted attention. Each of the three stones was sunk into the sand floor of the temple, but standing three quarters visible.¹⁹ Although potentially less prominent from a distance in antiquity, they will certainly have been prominently visible to anyone coming up the stairs of the temple platform. And it is improbable that they will have been deliberately obscured: the three free-standing pieces in the temple courtyard performed no structural role and were meant to be seen. Their presence there – in situ after centuries of neglect – also reveals some reverence.

Despite minor differences, the pierced stones from Bahrain are all clearly identifiable as typologically similar. At the time of their discovery, the stones were a bit of a novelty in the Gulf – where they have remained peculiar exceptions. It remains significant, however, that they bore a close resemblance to those similar stones catalogued in the Mediterranean, where they have been generically identified as anchors for sea-going vessels. The Barbar stones, therefore, belong to a rather large group of similar artefacts.

In principle, most of the known anchors from the Mediterranean can be dated to the Late Bronze Age – i.e., after 1600 BC – whereas the Barbar anchors must be linked to Temple IIB, and the one from Qala’at Bahrain which can be dated is City IIB in date. Via Mesopotamia, they are thus dated to the Isin-Larsa period, corresponding to the Middle

14 Sayed 1977; Sayed 1978; Sayed 1980; Sayed 1983.

15 Frost 1969b, 235.

16 Buchholz 1999, 43–52.

17 Andersen and Højlund 2003, 93–103; Figs. 102, 105–107, 112–119.

18 Højlund and Andersen 1994, 405.

19 Cf., e.g., Andersen and Højlund 2003, 107, Fig. 126.

Kingdom in Egypt (ca. 1st quarter of 2nd millennium). Significantly, the anchors from the Red Sea coast belong to an indisputably Middle Kingdom context.

This means that the Bahrain anchors are temporally parallel with the Middle Kingdom Middle Bronze Egyptian anchors, rather than with the Late Bronze Levantine anchors. But their forms parallel the later Cypriote and Ugaritic forms, with a significant nuance: the similar – i.e., more rectangular, less ‘shouldered’ – stone in an Egyptian tomb, that of the Dyn. VI vizier, Mereruka (dating to ca. 2300 BC).

It remains true that the stone in the tomb of Mereruka was never fully exposed, and thus its character cannot possibly be ascertained with certainty. However, the visible part bears a close resemblance to the known category of anchors, and Frost has identified examples of replica anchors at Byblos which remained unworked on those surfaces which were not intended to be exposed to view. Thus, the appearance of the stone – a rectangular slab of stone pierced with a hole and sunk into the floor – bears a superficial resemblance to the Barbar stones.

But given the overall chronological developments and geographical distribution, her observation remains interesting.

Along with the Egyptian anchors on the Red Sea coast, it has been remarked that “similar forms are found occasionally in the western Indian Ocean.”²⁰ However, the Barbar anchors have few parallels in the Indian Ocean and its waterways, and those few seem to have served a practical purpose. Those at the Barbar temple clearly represented a different tradition, and this was not part of the Indian Ocean tradition.

6 Discussion

While these facts are obviously an important obstacle to the creation of an understanding of, and more specifically, an exhaustive typology of, the category ‘anchor’, they have no impact on the analysis of those anchors which were clearly used as such, nor can they have an impact on the analysis of what Frost termed “replicas”. And, it is precisely this consciously defined category of ‘anchor’ that is of interest to us: those anchors which were used as such, and those stones which were modified with the object of reproducing a conceptual form of such anchors – even if they were never used as such. In fact, it is these which are of the greatest interest, since they allow us to approach the question of the development of identity.

7 The origins?

Significantly, Frost had identified the Egyptian anchors typologically, before any were found in Egypt. And, significantly, the examples actually found on the Red Sea port at Wadi Gawasis have since confirmed the postulated association of this form with Egypt.²¹

Where they can be dated, most of the Egyptian types can be assigned to the Middle Kingdom, and thus the Middle Bronze Age, ca. 1900–1800 BC, as can some of the Byblos anchors. By contrast, virtually all of the known parallels from Cyprus and Ugarit can be dated to the end of the Middle Bronze or the Late Bronze Age, i.e., ca. 1600–1200 BC. Significantly, both the rectangular and the triangular traditions can be traced back to Egyptian prototypes of the third millennium. One image from the temple of Sahure shows a triangular anchor which can be dated to early Dynasty V (2400 BC; Early Bronze III). A slightly rectangular or squarish anchor has been identified standing in the tomb of Mereruka, dating to Dyn. VI (ca. 2300).

20 Vosmer 1999, 251.

21 Sayed 1977; Sayed 1978; Sayed 1980; Sayed 1983.

Honor Frost once remarked,

In date, typology and even shape the closest comparisons to the Mereruka stone are to be found in the almost contemporary Barbar Temple III [now IIB!, DAW] at Bahrain.²²

Since Mereruka has remained in the third millennium BC while Barbar Temple IIB has moved to the beginning of the second millennium, Frost's note requires slight modification.

However, this is no minor change, for it would imply that the earliest usage of the anchors can be associated with Egypt. From Egypt, the concept seems to have moved to Byblos during the third millennium, and then onwards to the Red Sea and the Gulf during the early third millennium, while at the same time extending across the Mediterranean during the second half of the 2nd millennium BC.

From the beginning, they seemed to have had a dual role, as practical anchors and symbolic anchors, for why else would Mereruka have put a recognizable anchor in his tomb? This makes sense at least in the sense of an inductive reasoning, although we will be at a loss to understanding subjectively just what Mereruka thought.

8 The trade

In the late third millennium BC, Bahrain/Dilmun was the key intermediary, shifting copper from Oman to Mesopotamia. Later, in the Middle and Late Bronze Age, Ugarit was to play this role, importing copper from Cyprus and somehow organising the transport to Mesopotamia. The most important difference was price: the price of copper in the third and early second millennium generally lay at a silver : copper ratio of 1 : 50 – 1 : 120; in the second millennium the price ratio was generally below 1 : 120, reaching 1 : 180 or 1 : 240.²³ Because the prices in Anatolia were similar to those of Omani copper, the Assyrian merchants were unable to profitably send the copper overland to Mesopotamia as the Omani copper could be shipped in the Gulf. In this sense, the market determined which copper sources were exploited. The distribution of the Cypriot anchors probably reflects that part of the trade which they could manage in the Mediterranean. The similarity of the Cypriot anchors to the anchors from Bahrain is quite striking.

9 Sacred anchors

There are thus parallels in two different directions for the pierced stones found at the Barbar Temple. On the one hand, typologically, the stones resembled anchors used in the Mediterranean. On the other hand, contextually, they belonged to the sacred – rather than the profane. In contrast to these two parallel hints is the fact that most of the other typologically similar objects are restricted to the Mediterranean and waterways linked to it (possibly including the Danube and the English Channel, as well as the Nile). Of interest here is Schaeffer's explanation of the anchor at the Heuneburg:

I can easily imagine that a sailing freighter had reached the banks at the foot of the Heuneburg having sailed from the eastern Mediterranean through the Marmara, into the Black Sea and into the Danube, and there – at the end of his long voyage

22 Frost 1979, 145.

23 Reiter 1997, 133*–135*.

– left his broken anchor. Or might he even have offered it as an *ex voto* to the Hallstatt River God of the greatest and longest of the European waterways?²⁴

10 The Levant

Whereas Schaeffer referred to the River God, Frost had linked the Ugarit anchors to the temple of Baal.²⁵ Frost pointed out that these temples would have been extremely prominent and visible to mariners long before the shoreline had become visible. She even suggests that the burning of offerings on temple roofs could have permitted the towers of the temples to serve as lighthouses, even if this was not the primary intent. Sauer identifies both Baal and Dagan as weather gods, the former being that storm and weather god more associated with power and death, the latter with natural cyclical events.²⁶

At least 43 anchors (or fragments thereof) were found at Ugarit. Some were found in the port area, a few in tombs and more than half in the city. The first striking fact about the distribution of the anchors in the urban area was that all of the finds were concentrated in the vicinity of the temple of Baal. While about two thirds of all the anchors found at Ugarit were in the temple area, most of the rest were in “the Port quarter.”²⁷ There is thus a clear distinction. On the other hand, however, none were found in the context of the Dagan temple. Both temples lay in the city, on the tell, at a considerable distance from the sea, but the Dagan temple lay at no great distance from the Baal Temple. It was thus not due to casual chance reuse that the stones appeared in the Baal temple.

The second striking fact was that most of these anchors were apparently newly manufactured: according to Honor Frost, these were never used at sea. Her conclusion was based on the reasonable observation that wet ropes would have rapidly abraded the rough edges in the piercings, and that the absence of such wear would imply that the anchors had never been used. This observation was supplemented by the geological analysis which confirmed that all of the stones found at Ugarit – regardless of typological similarities to ‘Cypriote’ or ‘Egyptian’ types – were made from rocks locally available along the Syrian coast.²⁸

The anchors were therefore locally manufactured and dedicated to a local temple in a pristine state. The pair found in a tomb was likewise new. There are, therefore, grave doubts about whether these are ‘real’ anchors, if they are anchors at all. The evidence from the wrecks would imply that they are typologically identical. The fact that they are concentrated around one single temple at Ugarit is also important. Drawing on observations and conclusions developed by M. Yon, Honor Frost has assembled sufficient evidence to suggest that the Baal temple at Ugarit could have functioned as a lighthouse by night and as a major landmark by day.²⁹ The temple tower would have been one of the most prominent sights along the coast, by day or night.

At Ugarit, the anchors found in or near the building were built into it. Many were built into the temple threshold. An identical pair was built – for no structural purpose – into the entrance of Tomb 36 at Ugarit. Although the variant with rounded upper corners is more specifically Cypriote or Egyptian, and Frost gives a number of parallels from Cyprus, she concludes that they were “without any exact match.”³⁰ The fact that the tomb was also well supplied with Mycenaean pottery would also suggest that the owner was a merchant.

24 Schaeffer 1978a, 387; Schaeffer 1978b.

25 Frost 1991, 355–356.

26 Sauer 1996, 84–86.

27 Frost 1969a, 235; Frost 1991.

28 Mascle, *apud* Frost 1991, 374.

29 Frost 1991.

30 Frost 1991, 382–383.

But, the absence of an Aegean anchor tradition such as that known from the Levant would suggest that the conceptual home of these anchors lay in the Levant, where the tomb was located. Significantly, however, Frost also chooses to refer to these anchors in this tomb at Ugarit as “replicas”.³¹

The situation at Byblos is quite similar. One anchor formed the cornerstone of the Obelisk temple, and several more formed the first step of a stairway. These were likewise “dummy anchors”, “only the visible parts of the stones being shaped and dressed” (i.e., pseudo-“replicas”).³² Associations with fire are equally in evidence.

11 Dilmun/Bahrain

One of the great mysteries of the Ancient Near East is how the land of Bahrain got such a good press. The Mesopotamians were accustomed to describing their enemies and neighbours as barbarians, and animals, whereas Dilmun/Bahrain was viewed as holy. Bibby has suggested that the Land of Dilmun was holy because the people of Dilmun said it was.³³ How they managed to pull off this trick remains a mystery. Whether the anchors found at the Barbar temple played a role in this tradition is difficult to tell, certainly the use of stone anchors was not a fundamental characteristic of Mesopotamian civilization, and placing them in temples was obviously thus equally unknown. Furthermore, there was one additional feature that united Bahrain with a religious tradition which was likewise unknown in Mesopotamia: stone temples.

The temple of Barbar is made of stone, and thus similar to other buildings on Bahrain, including the temple at Saar. It thus differed from Mesopotamian temples in that these were generally made of brick. By contrast, the temples at Byblos (in Lebanon), at Ugarit (in Syria) and Enkomi and Kition (on Cyprus) were also made of stone – as were most of the divine temples built in Egypt during the second millennium. The common tradition of sea-faring folk who built solid stone temples and dedicated stone anchors to their gods at them would thus provide a parallel, one which actually links these Mediterranean sea-faring lands with Dilmun/Bahrain in the Gulf.

Furthermore, typologically and functionally the Bahrain anchors belong to a general group in the Eastern Mediterranean region. The three standing ones at the Barbar Temple most closely resemble a common mainland Levantine type. The examples (from the Levant and Qala’at al-Bahrain) with more pronounced rounding of the upper corners vaguely resemble a type classified as ‘Egyptian’. However, Frost’s identification of the stones in the Barbar temple on Bahrain and in the tomb of Mereruka as Bronze Age ‘anchors’ allows us to examine others. The striking fact about this particular sub-category of these ‘anchors’ is that they are found in temples and tombs, as well as on the seabed: the group found on the Red Sea coast was built into shrines; at Kition a wall in a temple was built with anchors, at Byblos a temple stairway.

31 Significantly, some of the anchors at Bahrain may likewise have been ‘replicas’. Geoffrey Bibby made it clear to me that he did not share the view that the ‘pierced stones’ at the Barbar Temple were ‘anchors’ (personal comment, Bibby 2000). It should be abundantly clear that the idea of the animal head protom (apparently broken off from the middle anchor at the Barbar Temple) would be incompatible with a ‘utilitarian’ anchor. Such an ornament would be unparalleled among the known replica anchors, but entirely compatible with the concept of a ‘replica’, and also with the innovative character of the culture of ancient Bahrain. Thus, Bibby may well have been correct that these were not anchors, but this may not mean that these ‘pierced stones’ could not have been ‘replicas’, as argued here.

32 Frost 1969b; Frost 2001, 70.

33 Bibby 1986.

12 Egypt

As mentioned above, the ‘Cypriote’ anchors found at Ugarit were apparently made of local Syrian stone. It would appear that the ‘Cypriote’ anchor found at the temple of Karnak in Upper Egypt was likewise made of local Egyptian stone.³⁴

Objects which were indisputably Egyptian type triangular anchors were found in four different locations near the Red Sea port at Wadi Gawasis. One was a broken fragment found at “the site of the port proper”. Examples of broken and unfinished anchors were found beneath the shelter of a huge rock “at the northern edge of Wâdi Gawâsîs”. Two different shrines at the port were erected using pedestals made of anchors. One of these shrines consisted of a pedestal made with four anchors surmounted by stele made from modified anchors. The pedestal of the other consisted on an anchor which was modified by cutting a groove into which the stele was inserted.³⁵

There are, however, also certain difficulties with the Egyptian material. There has been some dispute about Egyptian involvement with the sea. Hornung notes that the Egyptian hieroglyphs do not reveal any specific links with the sea,³⁶ and Frost has pointed out that the typical ‘Egyptian’ anchor was never used as a hieroglyph. Nibbi suggested that the Egyptians did not travel on the sea, and pursued a route which involved dismissing the vocabulary, including the words *yam* and *wadj-wer* which have been translated as the “sea”. Vandersleyen attempted to document Nibbi’s case,³⁷ yet it must be conceded that *wadj-wer* may on occasion mean “sea”.³⁸

Yet this digression should not deter us from noting that the official Egyptian use of the anchors at the Red Sea shrine was definitely a practical measure and not an *ex voto*; the purpose of the potential anchor in the tomb of Mereruka is not clear. Only the foreigners who left the replica at Karnak were clearly aiming at an *ex voto* – deposited there according to the Levantine custom visible at Kition, Byblos and Ugarit.

13 Identities in space

Yam is doubtless a Semitic loan word and thus not Egyptian. Since the one (*yam*) is a loan-word and the other native term (*wadj-wer*) is not absolutely unequivocally used as a designation for the sea, one could dispute Egyptian involvement in the sea. However, the anchors on the Red Sea document a case which can be linked to the texts and the art.³⁹ By the same token, the fact that *thalassa* is not Greek cannot possibly suggest that the Greeks are not familiar with the sea.

This link is crucial, since the concept of the rectangular stone anchor may have moved from the Mediterranean to the Gulf by several different ways.⁴⁰ The links between the Gulf material and the Syrian-Anatolian material have been discussed by Potts.⁴¹ Zarins linked the Amorites with Dilmun, and placed them in Arabia between the Mediterranean and the Gulf, on the fringe of the southern Alluvium.⁴² Edzard documented the appearance of the Amorites on the fringe of Mesopotamia from the end of the third millennium

34 Frost 1991, 371 with n. 4, contra Frost 2001, 71–72.

35 All quotes from Sayed 1980.

36 Hornung 1999, 6.

37 Vandersleyen 1999.

38 Kitchen 2000.

39 Sayed 1977; Sayed 1978; Sayed 1980; Sayed 1983.

40 Anchors must have been known since the Ubaid period, but the Levantine type stone anchor has not hitherto been documented earlier than the tomb of Mereruka (2300 BC).

41 Potts 1986.

42 Zarins 1986.

onwards, and their rise to power in the second quarter of the second millennium.⁴³ We can thus see an overland route, but anchors would be ‘conceptual baggage’ on such a route, and unlikely. The Red Sea route provides a contemporary link, as the anchors at Bahrain and on the Red Sea coast are contemporary, and the Egyptian anchors will doubtless have been known along the Levantine Coast during the Middle Kingdom.

There are thus links between the Egyptian anchors and the Gulf, both spatially and temporally. However, the Bahrain anchors are clearly more Levantine in character, as none of them reveals the elongated triangular form typical of the Egyptian anchors. And the sacred usage in Bahrain parallels the sacred usage in the Levant. Are the Levantine anchors more similar to the ones from Bahrain, implying that the tradition may have arisen there – potentially pushed by inspirations related to the third millennium Indian Ocean and Gulf copper trade?

14 Sacred anchors: conclusions

It can hardly be viewed as fortuitous that many of the anchors found at Byblos, Ugarit, and Cyprus (as well as Bahrain) were found in or near temples. Like Schaeffer, Frost also emphasized that some replica anchors were found in a tomb context in Ugarit, and that another parallel could be found in Italy, aside from the tomb of Mereruka in Egypt. Discussing those anchors built into the base of a Red Sea shrine, Frost suggested that “the secular nature of this Egyptian use contrasts with the religious associations and votive nature of anchors found on Levantine excavations.”⁴⁴ It can, however, be argued that building anchors into the walls and thresholds of a temple – as was done at Ugarit – did not differ significantly from the Egyptian procedure.

Speaking as a mariner and child of the Mediterranean, Frost linked the anchors and their placements to the needs of a sailor: fresh water, safe passage in life and death, and sex, and Frost concludes that anchors were dedicated at wells, temples, tombs and brothels.⁴⁵ It is fair to say that sailors will have appreciated the lighthouse temples of the storm gods at Ugarit and Byblos as much as the profane hostesses in the port. The merchants appreciated that their wealth was gained from navigation, and only the gods will have assured that they could reach their home port again to reach their final resting place.

However, the importance of a free-standing pillar – and an anchor is such, even if diminutive – is an even more universal feature of human religious belief, ranging from the central pillar of a Japanese pagoda and the Egyptian obelisk to the heelstone at Stonehenge. The concept of a votive offering which is itself a powerful symbol of the sacred is a fundamental human need.

The anchor is a link between man, the earth, the sea and the weather gods of the heavens. The anchor is also the shared common symbol of the sea-faring community, and thus the shape of the anchor can serve to identify one’s commitment to one’s communities: as a mariner, and as a member of a specific community: at Ugarit, Kition, Byblos, or indeed Bahrain. The votive pillar is a sacred offering, regardless of how humble. The stone votive anchor is thus a symbol of personal and communal piety.

There is, however, an enormous contrast when one looks further East. Vosmer noted that the study of Indian Ocean anchors was in its infancy, and linked this to the absence of maritime finds.⁴⁶ This is logical, but it should be pointed out that Frost developed her whole concept of Mediterranean anchors before a single one had been found in a wreck:

43 Edzard 1957.

44 Frost 2001, 72.

45 Frost 1991, 358.

46 Vosmer 1999.

her material consisted of finds on land. In the case of Ugarit, Yon has even ventured to point out that these stones are the only evidence of maritime activity at Ugarit.⁴⁷ This would imply that those sailors dedicating anchors to the gods were pursuing a tradition which was rooted in the West rather than the East. The paucity of anchor research in the East may be partially ascribed to the absence of wrecks, but this disadvantage is increased by the lack of votive offerings.

There is, however, one exception. An anchor of apparently Indian Ocean design was found in a temple in Egypt.⁴⁸ It is indisputable that the custom of dedicating anchors in temples was a Mediterranean custom. Following this logic, the Levantine anchors in Bahrain would be the mirror image of the Indian Ocean anchor from the Temple of Isidorus in the Egyptian Delta. The cultural context of these anchors and the practice of votive offerings could thus be linked to both the Levant and the world of sea-faring merchants.⁴⁹

However, it is also possible that the practice spread from the Gulf region – and that it was abandoned there as the trade patterns changed, shifting the copper trade to the Mediterranean.⁵⁰

15 Conclusions

No specific model of interpretation is offered here (i.e., in terms e.g., of networking, globalisation or world-systems-analysis) since the idea is simply to demonstrate that an artefact type (other than, e.g., Mycenaean pottery) can lay open a trading interaction context. Obviously the purpose here is not a mere typological presentation of the distribution of ‘anchors’ as an artefact category, but rather the suggestion that we can see at least the core area of a trading system which was far larger than a cultural or political system.

Significantly, this system was one where the ‘information’ borders of the overall commercial system must lie well beyond the distribution of the copper ingots and stone anchors, since each of the cultures at the fringes of the system (e.g., in the Persian Gulf and northern Europe, etc.) was anchored in trade systems which went well beyond that documented by the anchors. In this sense, Finley’s suggestion that interlocking markets did not exist in Classical Antiquity may be revealed to be irrelevant – as the Bronze Age Mediterranean market system certainly went far beyond anything which can be related to a specific culture or political unit. These were interlocking markets.

Of interest here is also the chronological sequence, since the earliest examples seem to be associated with the Egyptian state, which was among the most powerful in the world – at least at the time that these anchors came into use. By contrast, most of the others belong to the sphere of large scale commercial trade associated with the eastern

47 Yon 1991

48 Frost 1979, 158.

49 In this text, there is a conscious discrepancy in the assumptions about those dedicating the anchors. The reader will see ‘sailors’, ‘entrepreneurs’, ‘merchants’ being given responsibility; one could also add ship-owners for what it is worth. In fact, ship-owners and merchants are more likely than ordinary sailors – but it would be rash to assume that we actually know who deposited the anchors. I simply assume that those making the offerings were those (1) who were in the boats at risk, (2) with the authority to offer up a fundamentally useful piece of nautical equipment, and (3) with the funds to commission the work of a mason. Given the small size of the crews of these vessels, this probably comes down to ship-owners and merchants – who were themselves probably sailors or pilots as well.

50 I stress that the tradition of dedicating anchors must be associated with the commercial state of Bahrain in the Gulf – and not with the Indus Civilisation or the Indian Ocean trade of the third millennium – because the anchors used in the Indian Ocean are necessarily far heavier and of a different design. As noted, the sea-faring communities of the Indian Ocean did not seem to have developed a parallel tradition and thus origins in the Gulf are a distinct possibility.

Mediterranean after the rise of Cyprus as an international trade hub, since late Middle Cypriot III, probably around 1600 BC (when the Hyksos still controlled the Delta). The Egyptian anchors on the Red Sea and the Bahrain anchors belong to the first half of the 2nd millennium, just before the rise of Cyprus.

The rise of Cyprus as a copper exporter was probably crucial to the distribution of the Mediterranean anchors. And the rise of Cypriote copper is directly linked to the demise of the Omani copper industry in Old Babylonian times – where Bahrain played a major role in the copper trade, serving as a hub importing and exporting Omani copper. Thus, the anchors first entered the Mediterranean as Egypt began trading with Byblos in the second half of the third millennium, but only become more prominent with the rise of Cyprus.

This transformation in the Mediterranean paralleled a mirror image in the East: the collapse of the Indus Civilisation at the beginning of the second millennium BC accompanied (or caused?) the collapse of the Omani copper industry. Thus, the use of the anchors as cultural symbols may have begun in the Gulf, but with the collapse of the Gulf trade, the traders were no longer so elementary and may have wandered off – bearing a memory of a tradition with them. The growth of the Cypriot copper industry and its trading networks thus grew on the ashes of the Gulf trade.

Throughout this period of the blossoming Mediterranean Cypriot copper trade, the practice of placing anchors in tombs and temples continued to the end of the Bronze Age. But there was not only a regional shift, but also evidently a conceptual shift from being primarily a state activity (as witnessed in Bahrain and Egypt) to one of merchants. The story of these trading shifts is largely one of prices (as Cypriot copper cost less than Omani copper) and mobile merchants rather than politics. This latter tendency probably reflects the *longue durée* growth of private commercial trade, potentially reflecting an increasing appreciation of risk. Christopher Monroe has stressed that understanding Late Bronze Age Levantine trade becomes easier if one appreciates the role of the entrepreneur.⁵¹ The rise of the entrepreneur and private risk evidently also fuelled a transformation of religious understanding which blossomed in a shared but loose network of traders.

Thus, from the anchors, one can read both shifting patterns of power and commerce as well as recognizing the gradual emergence of the importance of commerce in religion, as religion gradually shifted from being an affair of state to one of merchants.

51 Monroe 2009.

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