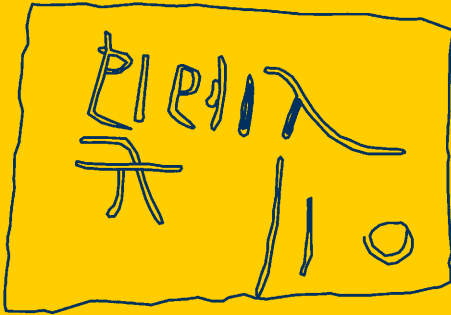


Muziris 1

Μουζιρίς



Trade and Seafaring in Antiquity

Red Sea – Persian Gulf – Indian Ocean

Proceedings of the 1st Muziris Workshop,
Trier, 28th May 2021

Edited by Stefan Baumann, Kerstin Droß-Krüpe,
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Historische Papyrologie, Epigraphik und
verwandte Gebiete der antiken Kulturen

Historical papyrology, epigraphy and
neighbouring fields in ancient cultures

Band 1

Herausgegeben von

Kerstin Droß-Krüpe

Patrick Reinard

Sven Günther

Sebastian Fink

Stefan Baumann

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Vorwort

*Stefan Baumann, Kerstin Droß-Krüpe, Sebastian Fink,
Sven Günther & Patrick Reinard*

Der vorliegende Band und die Reihe ‚Muziris‘, an deren Anfang er steht, haben ihren Ursprung in der Beobachtung, dass die Kultur-, Sozial- und Wirtschaftsgeschichte der Alten Welt in der gegenwärtigen Forschung zwar immer stärkere Aufmerksamkeit genießen, aber dennoch immer noch Forschungslücken zu identifizieren sind. Diese Lücken resultieren nach unserer Wahrnehmung aus zwei Missständen: Zum einen ist insbesondere die Einbeziehung des reichen dokumentarischen und archäologischen Quellenmaterials immer noch unzureichend. Zum anderen wird selten ein Blick über Epochen-, Disziplin- oder vermeintliche geographische und kulturelle ‚Grenzen‘ hinweg bemüht.

Hier setzt daher die in diesem Band thematisierte Beschäftigung mit dem ökonomischen Agieren zwischen dem Mittelmeerraum, dem Indischen Ozean, dem Alten Orient und dem Fernen Osten in der Antike an. Auf dem im Mai 2021 (aufgrund der Corona-Pandemie digital) abgehaltenen Workshop ‚Trade and Seafaring in the Red Sea, Persian Gulf and Indian Ocean in Antiquity‘,¹ dessen verschriftliche Beiträge hier nun vorliegen, wurde diese Großregion sowie die sie verbindenden See- und Landhandelswege in der Zeit vom dritten Jahrtausend v.Chr. bis in das dritte Jahrhundert n.Chr. aus der Perspektive unterschiedlicher altertumswissenschaftlicher Disziplinen thematisiert. Neben den literarischen Quellen standen insbesondere die historische Papyrologie und die Epigraphik im Fokus, aber auch numismatischem und archäologischem Material wurde breiter Raum eingeräumt. Es wurde dabei in allen Beiträgen und Diskussionen versucht, auch die kulturspezifischen Werte- und Regelsysteme in den Blick zu nehmen, die in den Quellen im Kontext ökonomischer Aktivitäten in diesem Raum fassbar werden. Zudem wurde eine *longue durée*-Perspektive erarbeitet, um strukturelle Entwicklungsprozesse sowie Kontinuitäten von kulturellen, infrastrukturellen oder ökonomischen Verbindungen erkennen und diskutieren zu können. Das ‚Aufbrechen‘ der oben angesprochenen ‚Grenzen‘ war ein wesentliches Anliegen des Workshops und ist das angestrebte Ziel dieses Bandes sowie der mit ihm begründeten neuen Reihe ‚Muziris‘. Das west-

1 Siehe Peter Meis, Tagungsbericht: Trade and Seafaring in the Red Sea, Persian Gulf and Indian Ocean in Antiquity, H-Soz-Kult, 13.07.2021, URL: www.hsozkult.de/conference-report/id/fdkn-127559, aufgerufen am: 10.3.2023.

indische *Μουζιρίς*, ein Ortsname, der u.a. durch den berühmten Wiener ‚Muziris-Papyrus‘ (SB 18/13167 = *P.Vindob. G 40822*) oder die Tabula Peutingeriana überliefert ist, erscheint uns daher als Namensgeber für den Blick über die etablierten fachlichen und methodischen Grenzen hinaus hervorragend geeignet. Der große Zulauf zum Workshop und die anregenden und konstruktiven Diskussionen haben das Potential eines solchen Ansatzes deutlich aufgezeigt.

Auch wenn nicht alle Vorträge Eingang in den Band gefunden haben, spiegelt er doch die umrissenen Zielsetzungen und deren Potential für die Altertumswissenschaften und insbesondere die antike Kultur-, Sozial- und Wirtschaftsgeschichte wider.

Den Anfang macht der Beitrag von Noah Kröll und Sebastian Fink (beide Innsbruck), die einen Überblick zum Indienhandel aus altorientalistischer Perspektive bieten und dabei insbesondere auf das dritte Jahrtausend v.Chr. fokussieren. Sie untersuchen den Warenaustausch zwischen Mesopotamien und *Meluhha*, einem weit entfernten Land, das zumindest für das dritte Jahrtausend grob im Indusgebiet verortet werden kann. Von dort werden wertvolle und exotische Waren, wie Tropenhölzer oder Schmucksteine, ins Zweistromland importiert.

Ein ähnliches Problem, nämlich das des Handels mit einem uns kartographisch nicht exakt fassbaren Land, thematisiert auch der Beitrag von Stefan Baumann (Trier). Dieser behandelt u.a. den ägyptischen Handel über das Rote Meer nach Punt: Dabei werden vor allem in einer Zusammenschau und Neubewertung des archäologischen wie inschriftlichen Materials der Zeit zwischen 2500 und 1000 v.Chr. die pharaonischen Seefahrtsaktivitäten auf dem Roten Meer beleuchtet.

Literarische Texte über die augusteische Zeit bilden den Analysegegenstand des Beitrages von Sven Günther (Changchun), der sich mit dem Volk der Serer sowie dem Seidenhandel befasst und nach dem Aufkommen ethnographischer *topoi* und den Narrativen innerhalb dieser Quellentexte fragt. Diese Quellen werden insbesondere im Diskurskontext von Roms Expansion gen Osten und dem durch Augustus formulierten Anspruch Roms, die gesamte *oikumēne* zu kontrollieren, untersucht und ausgewertet.

Der Beitrag von Patrick Reinard (Trier) konzentriert sich auf die Verkehrs- und Handelsverbindung zwischen dem Roten Meer und dem Nil; dabei wird der Fokus besonders auf die Siedlungen an der Wüstenstraße zwischen Berenike und Koptos gerichtet. Die infrastrukturelle Entwicklung dieser Region und die Frage nach erkennbaren Zäsuren bzw. Entwicklungssprüngen im papyrologischen, epigraphischen und archäologischen Quellenmaterial werden behandelt.

Der Betrag ergänzt sich inhaltlich mit dem Aufsatz von Kerstin Droß-Krüpe (Bochum/Kassel), die die beteiligten Akteure im kaiserzeitlichen Osthandel auf Basis

des dokumentarischen Befundes aus der Provinz *Aegyptus* in den Blick nimmt. Beide Beiträge schließen zudem – im Sinne der Betrachtung einer langen Entwicklungsperspektive – auch an den Beitrag von Stefan Baumann an. Inhaltliche Bezüge ergeben sich außerdem zu dem Aufsatz von Eivind Heldaas Seland (s.u.), da die östliche Wüste Ägyptens ein wesentlicher Aktivitätsraum palmyrenischer Händler gewesen ist.

Mit der römischen Kaiserzeit befasst sich auch der Beitrag von Leonardo Gregoratti (Durham), der darüber hinaus auch den Aspekt von Lokalisierungsproblemen aufgreift. Er widmet sich den Schwierigkeiten der genauen Definition der Grenzen des Partherreiches als dem bis in die hohe Kaiserzeit wohl bedeutendsten Gegenspieler Roms im Osten und beleuchtet die problematische Geschichte des Königreiches Omana am Persischen Golf. Sein Fokus liegt dabei auf der komplexen Frage nach der Ausgestaltung und dem Grad der Abhängigkeit Omannas vom Partherreich.

Machtkämpfe und politische Abhängigkeiten sind ebenso Thema im Beitrag von Eivind Heldaas Seland (Bergen). Palmyra, zunächst zentrales Bindeglied im Handelsnetzwerk zwischen dem römischen und dem parthischen, später zwischen Rom und dem sassanidischen Reich, wird im Rahmen dieses Aufsatzes als Fernhandelszentrum, aber insbesondere auch als Akteurin in den Konflikten an der östlichen Grenze des römischen Reiches im 3. Jh. n.Chr. untersucht. Hier ergeben sich Synergien mit dem Beitrag von Leonardo Gregoratti sowie in einer weiteren Perspektive auch zu anderen Aufsätzen des Bandes. Die Frage nach den wichtigsten Handelsrouten, die den Fernhandel zwischen Mittelmeerraum und Orient, Indien und dem Fernen Osten geprägt haben, kann nur durch das Zusammenführen von Spezialstudien erschlossen werden. Der Seehandel durch den Persischen Golf und das Rote Meer ebenso wie der Landtransfer über die sogenannten Seidenstraßen oder auch zwischen dem Roten Meer und dem Nil müssen vergleichend betrachtet und in größere Kontexte eingeordnet werden, um Abhängigkeiten und Wechselwirkungen zwischen den Handelsrouten erkennen zu können. Dafür sind interdisziplinäre Detailstudien notwendig – als solche sind die entsprechenden Beiträge des Bandes zu verstehen.

Auch Wu Tong (Chongqing) befasst sich mit dem *Erythra thalassa* und vergleicht die Ausführungen von Agatharchides und Diodor zur Ökonomie dieser Region. Dabei kann er zeigen, wie Diodor das bei Agatharchides angelegte Narrativ der einfachen Lebensart kritisiert und für sein Werk und sein Publikum neu gestaltet.

Beschlossen wird der Band durch eine umfangreiche, von den Herausgebern konzipierte Quellensammlung, in der zentrale Texte zum antiken Osthandel zusammengestellt sind. Allen Texten ist eine deutsche oder englische Übersetzung beige-

geben, zum Teil liegen hier die entsprechenden Texte überhaupt erstmals in einer modernen Übertragung vor. Diese Sammlung hat insbesondere die Aufgabe, dokumentarische Materialien sowie Quellenzeugnisse unterschiedlicher Disziplinen – wobei v.a. die sumerischen, akkadischen, altägyptischen und papyrologischen sowie epigraphischen Texte zu nennen sind – zugänglich zu machen. Die weitere Behandlung analytischer historischer Fragen zu Kontinuitäten und Zäsuren des Fernhandels in einer Perspektive langer Dauer soll, ganz den angestrebten Zielen der Reihe entsprechend, durch diese interdisziplinäre und chronologisch weitgefaste Zusammenstellung angeregt werden. Dass eine solche Quellensammlung dabei nur exemplarischer Natur sein kann und die Auswahl der Texte subjektiv ist, ist uns bewusst. Zugleich sind wir aber davon überzeugt, dass Potential und Mehrwert einer disziplin- und epochenübergreifenden Betrachtung hier ganz praktisch zum Ausdruck kommen. Es würde uns deshalb sehr freuen, wenn der Band und die hierin bereitgestellten Quellen zur weiteren interdisziplinären Beschäftigung mit der antiken Wirtschaftsgeschichte und den Beziehungen zwischen dem Mittelmeerraum, Altvorderasiens und Süd- und Südostasiens anregen könnten. Wertvolle Hilfe bei der Vorbereitung der Drucklegung und beim Korrektorat erhielten wir von unseren studentischen Hilfskräften Bianca Baum (Bochum), Julia Lehn, Simon Leukel, Peter Meis und Raphael Ruf (alle Trier), denen wir für Ihre Mitarbeit ganz herzlich danken.

In der mit diesem Band eröffneten Reihe werden künftig Monographien und Sammelbände publiziert werden, die sich einerseits dokumentarischen und archäologischen Quellen widmen, die zur Bearbeitung historischer Fragestellungen herangezogen werden können. Andererseits werden auch bewusst Themen aufgegriffen, die altorientalistische und ägyptologische Schwerpunkte beinhalten und somit über den traditionellen chronologischen wie geographischen Rahmen der griechisch-römischen Antike hinausgehen.

Trier / Bochum / Changchun / Innsbruck

Seafaring on the Red Sea in Pharaonic Times

A Critical Overview and Synthesis*

Stefan Baumann

Abstract: This article provides an overview of the sources on Pharaonic seafaring on the Red Sea, discusses the complexities involved in interpreting the varied sources and reassesses their informational value. The main focus lies on the period of about 1,500 years, from the attestation of the earliest secured sources around 2500 BCE to the end of the New Kingdom, when the evidence for voyages on the Red Sea becomes scarce. The Graeco-Roman period, in which the organization of seafaring fundamentally changes as Egypt becomes a member of a more global trade network, falls beyond the scope of this contribution (see however the contributions of Reinard and Droß-Krüpe in this volume). After a brief historical overview (chap. 3), the individual source categories are presented, beginning with the harbors on the Red Sea coast with their well-preserved infrastructure and artifacts (chap. 4). Of particular interest among these finds are the ship parts, which are considered in more detail in the next chapter (5) together with further written and visual evidence. The methodological problems associated with analyzing pictorial representations are subsequently discussed. The final chapter (6) explains various aspects relating to the operation of an expedition on the Red Sea.

Keywords: Pharaonic Egypt – Red Sea – Punt – trade – ships

1. The Egyptians and the Sea

The Nile is known as the lifeline of Egypt. Not only does this expression refer to the river as a perpetual stream of water, without which agriculture would be impossible, but also as the primary transportation route, extended by a ramified network of canals connecting all the major cities of the country.¹ The importance of navigation for ancient Egyptian culture is also reflected in the integration of this theme

* I thank Susanne Martinssen for sending me some parts of her unpublished master thesis on Punt (see Martinssen 1999). I am also grateful to Martina Minas-Nerpel for her careful reading of this paper.

1 For a comprehensive overview of the canal system in Egypt, see the dissertation of Philipp Sesterhenn, *Alexandria et Aegyptus. Studien zu den Marmorportraits des römischen Ägypten*, Tübinger Archäologische Forschungen, forthcoming.

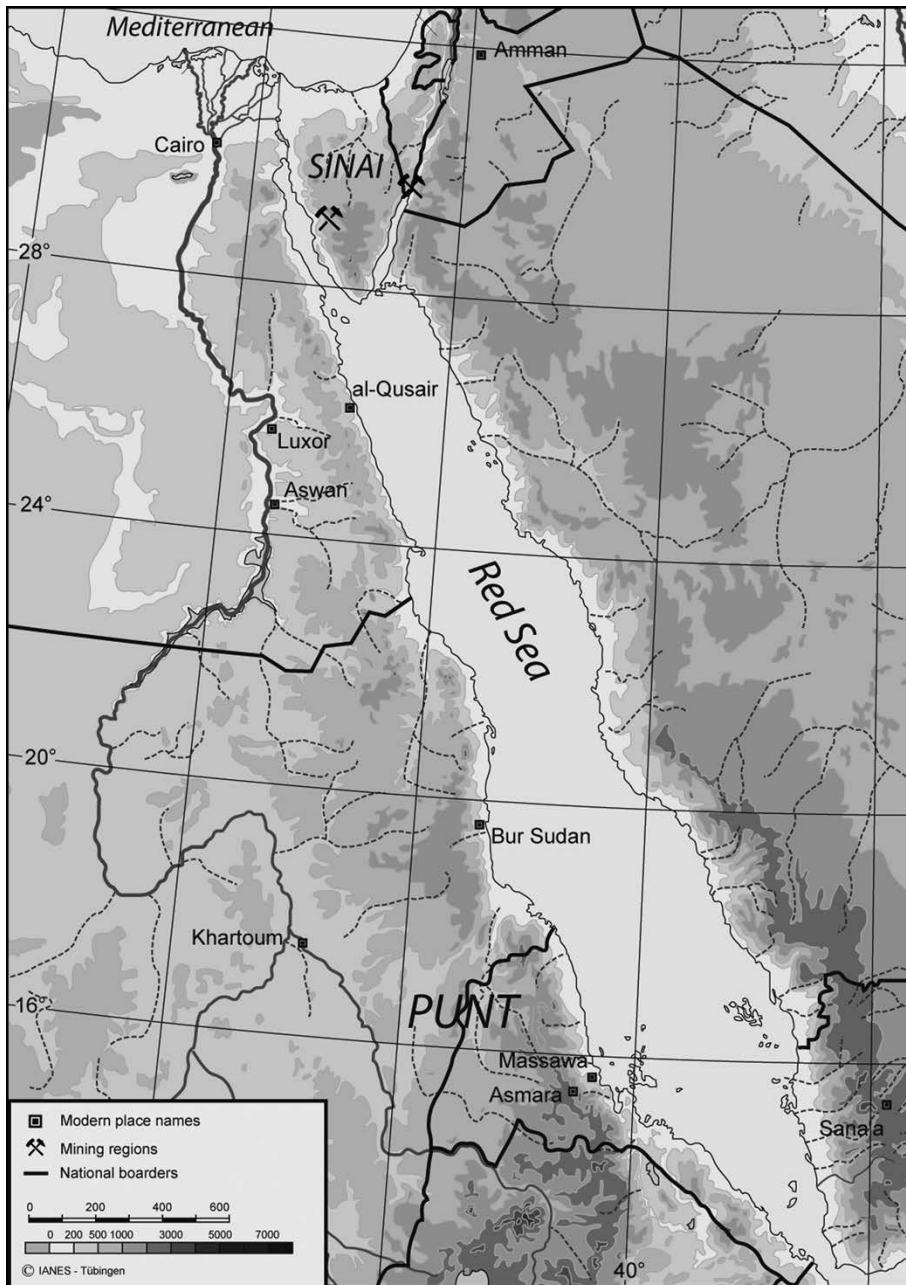


Fig. 1: Map of Egypt and Punt (base map by Richard Szydlak).

in religious ideas. The sun god travels through heaven and the underworld on a barque, and during festive processions, images of the gods were carried through the cities on sacred barques. The prominent position of the Nile as a route of travel

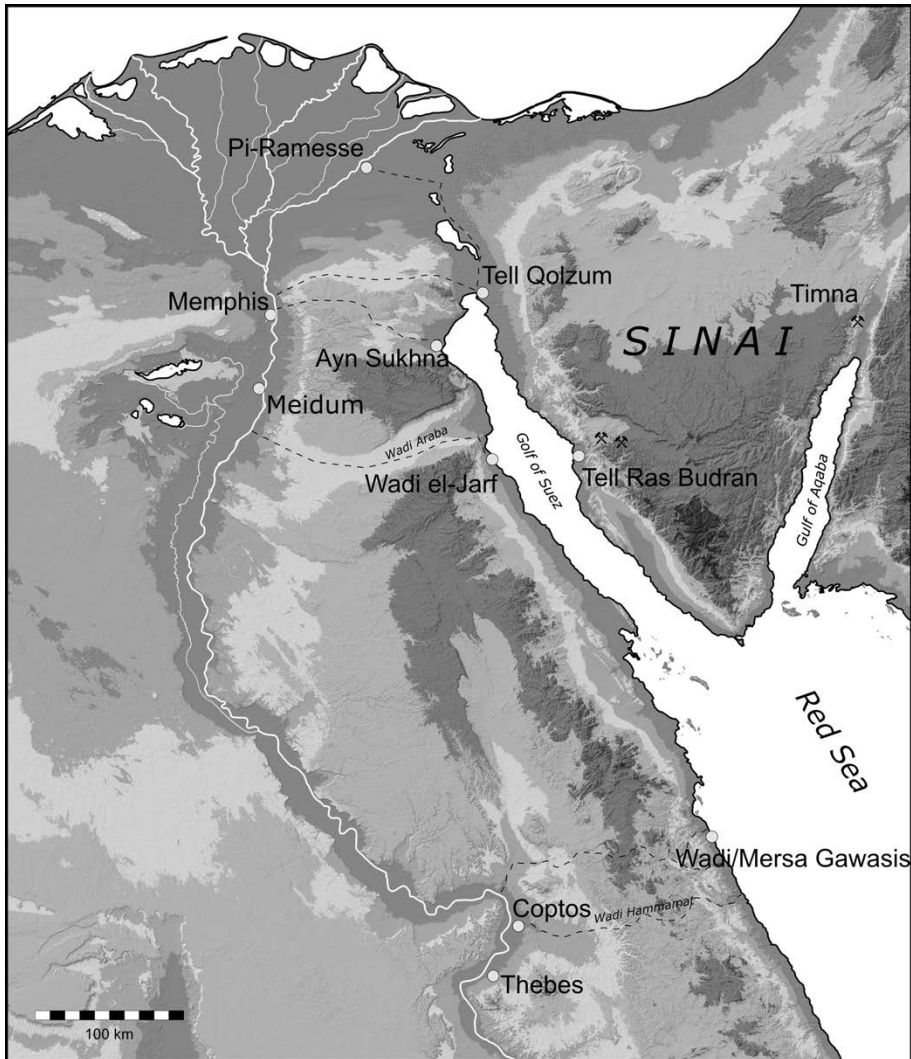


Fig. 2: Red Sea expedition ports (base map by <https://awmc.unc.edu/awmc/applications/alacarte/>, accessed: 16.2.2022).

and transportation led to the fact that, apart from religious sources, by far the majority of the evidence on Egyptian navigation concerns inland shipping.

Due to the open access it enjoyed to the Mediterranean Sea via the Nile Delta, Egypt was well connected to the Mediterranean maritime trade network from at least the 4th Dynasty onwards. In order to reach the Red Sea from the Nile Valley eastward, however, a relatively inhospitable desert landscape had to be first traversed for several days. The eastern desert and the coastal region of the Red Sea were no longer part of the core (*Zentralbereich*) of the Egyptian state, where rule was com-

pletely secure. According to the terminology of Andreas Fuchs, this area is rather to be described as a special form of *Herrschaftsbereich*, in which Egyptian rule was not completely secured, so that attacks had to be expected.² East of the Nile Valley, this area comprises an inhospitable, mountainous region with no urban structures. From the Egyptian side, there was only a claim to this area insofar as access to the mineral resources and to the expedition ports on the coast had to be guaranteed. However, this goal was not achieved by subjugating all the local tribes or even by a permanent military presence, but primarily through military support of the selective ventures. The surviving sources on the expeditions testify, sometimes more and sometimes less explicitly, to the dangers of a military conflict. In addition to the safety aspect, there were enormous logistical challenges. First and foremost, all the equipment necessary for the journey on the sea, including the ships weighing several tons, had to be brought to the coast by a host of porters. Moreover, this expeditionary army had to be supplied with water and food and navigated safely through the Red Sea. Even modern sailing manuals urge constant vigilance in these waters.³ On the one hand, as seafaring on the Red Sea took place on a smaller scale than on the Mediterranean Sea, it is possible to see it as playing a subordinate role to Mediterranean maritime trade.⁴ On the other, the high cost and potential dangers of the rarer trade journeys brought a great deal of prestige to the participants and especially to the ruling pharaoh.

2. Outline of research history

The foundation for the study of ancient Egyptian seafaring was laid in 1877 with Auguste Mariette's publication of the relief scenes from the mortuary temple of Queen Hatshepsut depicting the expedition fleet to Punt.⁵ With Ludwig Borchardt's publication of the illustrations of Sahure's Mediterranean ships from his pyramid temple in 1913, two of the most important pictorial sources on seafaring were thus finally known. Even if the latter source does not refer to the voyages in the Red Sea, Ernst Aßmann's analysis of the construction of sea ships in this publication remains

2 Fuchs 2010, 71–74; Baumann 2018, 498. Juan Carlos Moreno García calls this area “zone of direct control” (Moreno García 2021, 26). Cf. the Egyptian name for Egypt, *Kmt* “The Dark Land”, which only refers to the Nile valley with its dark cultivable soil (silt) as opposed to the yellowish-red rocks of the desert. Accordingly, Strabo (17.1.5) states that originally the Eastern and Western deserts were not considered part of Egypt.

3 Köster 1923, 126.

4 The Nauri Decree (see below chap. 5.1.1), for example, only mentions the Mediterranean fleet and not navigation on the Red Sea.

5 Mariette 1877, pl. 6. See chap. 3.3.

nevertheless of general importance.⁶

The above-mentioned surplus of sources on inland navigation compared to maritime navigation initially led to a high level of skepticism about the capabilities of Egyptian seafarers.⁷ August Köster tried to straighten out this negative image of the Egyptian seafaring skills in his seminal essay “Zur Seefahrt der alten Ägypter” published in 1923.⁸ Köster’s argument was based primarily on the challenging sailing conditions, drawing attention for the first time to the special current and wind conditions in the Red Sea. Despite numerous works on Egyptian navigation and above all the remarkable increase in knowledge over the last two decades, which will be discussed in more detail below, reservations about the abilities of the sailors and shipbuilders from the Nile persist.⁹

In the next decades, Charles Boreux (1925), Torgny Säve-Söderbergh (1946), and Björn Landström (1970) presented the first monographs on navigation and seafaring. While Boreux focused on the Old Kingdom, Säve-Söderbergh confined himself to the New Kingdom. The work of the graphic designer and ship expert Landström, which was translated into several languages, was widely disseminated outside the field of Egyptology due to its vivid reconstruction and section drawings. Shelley Wachsmann’s work, published in its first edition in 1998, deals primarily with seafaring in the eastern Mediterranean, but generally provides a good overview and brief assessment of the sources available to date on Egyptian seafaring.¹⁰ Of particular note is her analysis of the iconographic documents, which warns against interpreting the images as reflecting reality.¹¹ This is an aspect that cannot be emphasized enough and was apparently not consistently taken to heart in subsequent studies either.

During the excavations along the causeway of the Sahure pyramid in 2002–2003, more relief blocks with images of ships were discovered. In contrast to the earlier finds from this building complex, these are related to voyages on the Red Sea.¹² As these important finds were only published from 2007 onwards, they were not yet included in David Fabre’s 2005 survey on ancient Egyptian seafaring. After

6 Aßmann 1913.

7 Säve-Söderbergh 1946, 16, n. 2; Edgerton 1923, 134; Barnett 1958, 223.

8 Köster 1923.

9 See, for example, the remarks of Bob Brier, *The Khufu Boat*, lecture at the Harvard Museum of the Ancient Near East (<https://www.youtube.com/watch?v=VSSoCkyqEQQ>, last assessed 21.4.2020).

10 Quoted below after the 2nd edition: Wachsmann 2009.

11 Wachsmann 2009, 11–12.

12 El Awady 2009.

Cheryl Ward has extensively studied the physical remains of Nile boats and their construction details in 2000, excavations of Red Sea coastal harbors that began in 2001 eventually uncovered parts of sea-faring vessels, which have since been published in several smaller studies.¹³ While the investigations of the port facilities provided a great deal of information on the logistics of sea travel, the discovery of ship parts allowed Ward and her team to reconstruct a ship from the New Kingdom and test it in the Red Sea between 2008 and 2009. Back in 1988, a similar project had deployed a life-size reconstruction at sea, but at that time, there were fewer details available on the construction of sea-faring vessels. After all the years of theoretical discussion about Egyptian shipbuilding technology, the seaworthiness and sailing characteristics of such a vessel can now be studied on a more reliable basis.¹⁴

3. Chronological overview of sources

The following section provides a chronological overview of Red Sea maritime sources, drawing in large part on partially annotated listings of Egyptian sources of varying scope and focus.¹⁵

3.1 Old Kingdom

For the phase before the Old Kingdom, i.e. the Pre-Dynastic and Early Dynastic periods, no tangible evidence of Egyptian seafaring on the Mediterranean or the Red Sea exists.¹⁶ According to Steve Vinson, however, it is quite conceivable that the river boats of that time were also used on the sea.¹⁷ Clear evidence for voyages on the Red Sea is only available from the 4th Dynasty under Khufu (ca. 2509–2483 BCE) and Khafre (ca. 2472–2448 BCE) in the form of archaeological remains at the port of Wadi el-Jarf. Even though voyages to Punt can probably be assumed, there is no extant evidence for such long-distance trade in this period, but only for expeditions to the Sinai. This changes in the following 5th Dynasty.

Early on, inscriptional references to an expedition were known from royal annals recorded on the so-called Palermo Stone (source 14). In the entry that probably

13 Ward 2000. For the ship remains, see below chap. 5.1.3.

14 See chap. 5.3.1.

15 Breasted 1906b, 103, § 247; Kitchen 1993b, 587–603; Säve-Söderbergh 1946, 10–13; Tallet 2013; Breyer 2016, 18–26, Tab. 1–2; 594–653; Bard/Fattovich 2018, 8–10, 62–74; for the stelae from Mersa Gawasis, see 69–71. For a list of all expeditions to Punt and the Sinai up to the 18th Dyn., see Tallet 2015, 60–62.


16 Cf. Martin-Pardey 1984, 614. For possible early navigation on the Red Sea, see Adamson 1992; Ward 2009, 9.

17 Vinson 2009, 2–3.

belongs to the 13th regnal year of King Sahure (ca. 2428–2416 BCE) it is recorded that products from Punt and from the “Turquoise Land” (*Mfkꜣt*),¹⁸ i.e. from Sinai, were brought to Egypt. The information about the products from Sinai are not preserved but they will certainly have been turquoise or copper. At least four products are listed from Punt: myrrh (*ntyw*), electrum (*dꜣm*), malachite (*wꜣd/šsmt*)¹⁹ and an item that is mostly unreadable.²⁰

Finally, in 2002–2003, relief fragments were found beside the causeway of Sahure’s pyramid (source 15), which most probably refer to this event.²¹ On it, four boats with their crews can be seen praising the pharaoh with raised arms upon their arrival (fig. 3). In the two lower ships are exclusively Egyptian sailors, while in the two larger, upper ships, women, children and men with different hair and beard style are also depicted.²² El Awady interprets them as inhabitants of Punt,²³ which is in accordance with the sources concerning later expeditions in the New Kingdom under Hatshepsut and Ramesses III, where Puntite people were taken to Egypt.²⁴ None of the imported goods mentioned in the annals are depicted on the ships, but dogs and several leashed monkeys of various species are on board. The monkeys on the upper ships are probably to be identified as baboons, while those on the lower ones are probably green monkeys.²⁵ Both species as well as the dogs are also mentioned and depicted around one thousand years later in the Punt reliefs of Deir el-Bahari.²⁶

18 Sethe (1933, 246, l. 4–5) renders the toponym as *Htyw-mfkꜣt* – „Turquoise terraces“, which refers to the same region, cf. Gomaà 1987, 256 and Wilkinson 2000, 169.

19 In view of the raw materials which were brought back from Punt under Hatshepsut, the sign reproduced as  could also be . This would mean that *nbw wꜣd* – “green gold” would also be mentioned here. For “green gold”, see Harris 1961, 35–36. For other green minerals that other sources say come from Punt, see Baumann 2018, 406–408. This evidence speaks against the accidental mention on the Palermo Stone postulated by Breyer (2016, 168).

20 For the last element, see El Awady 2009, 256.

21 See also Tallet 2013, 190.

22 El Awady 2009, 155–186 with pl. 5–8.

23 El Awady 2009, 155, followed by Tallet 2013, 190.

24 Sethe 1906, 329, 11; Naville 1898, pl. 74; P.Harris I, 77, 11 (Grandet 1994, 338). On the families in the depictions of the Mediterranean expedition of Sahure, see Wachsmann 2009, 12.

25 Cf. El Awady 2010, 198.

26 Naville 1898, pl. 70, 74–75; Breyer 2016, 135–137.

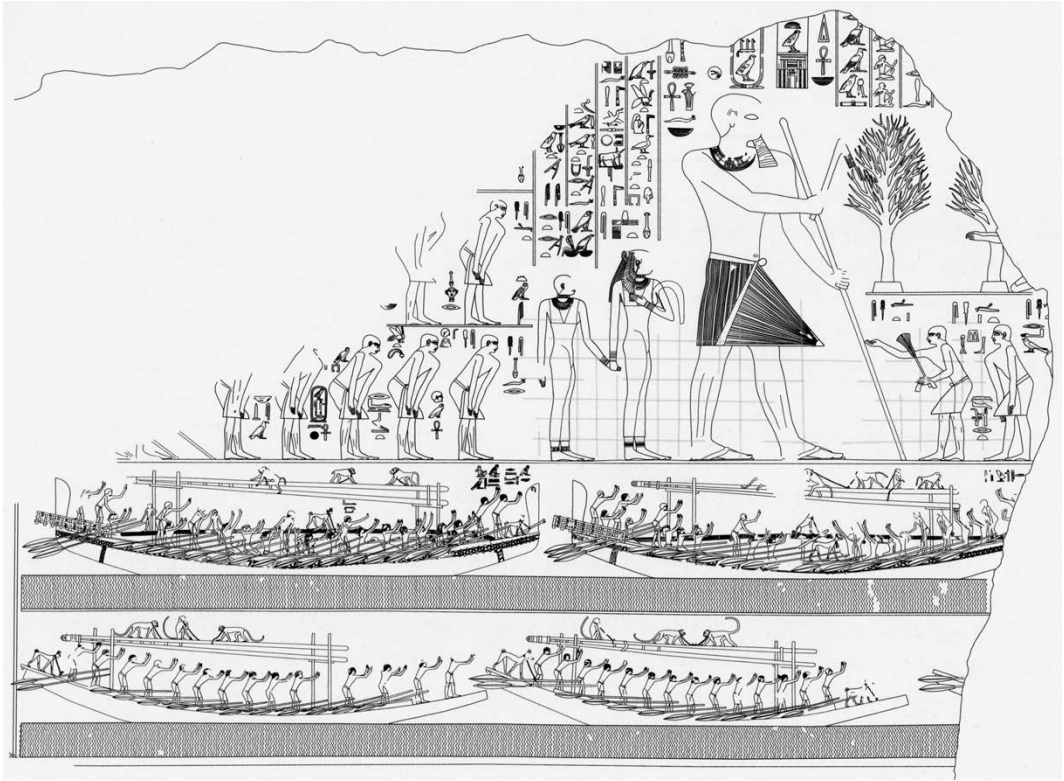


Fig. 3: Arrival of Sahure's Punt expedition (after Awady 2010, 199, fig. 159).

Some of the goods brought back, namely several incense trees that were not native to Egypt, are also pictured next to the pharaoh.²⁷ Even though Breyer agrees with El Awady's interpretation, he remains reluctant to classify these reliefs as an unambiguous source for a Punt journey because, among other things, the name Punt is never mentioned and the "foreigners" cannot be clearly identified as Puntites.²⁸ Contrary to Breyer's assessment, however, there is no doubt about the identification of the trees as aromatic or incense trees, since it is implied that the king scratched the bark with an axe, which is necessary for the extraction of resins (fig. 3). The only question is where the trees were imported from. Given the distribution areas of the frankincense/myrrhum trees, Arabia and the northeast African coast come into consideration.²⁹ Of the two species of monkeys shown, the green monkey

27 For the identification of the trees, see El Awady 2009, 253–257. Cf. Wb I, 206, 7–8, which lists 'nḏ as a variation of 'ntyw.

28 Breyer 2016, 27.

29 Martinetz et al. 1989, 73–100.

is found only in Africa.³⁰ This suggests that the sailors depicted took a route along the African coast but does not rule out the possibility that they also crossed to the Arabian side. In any case, the depiction refers to a voyage through the Red Sea.

Even though no other imported goods are depicted on the ships, it is quite possible that they were depicted or mentioned in the parts of the relief that have not been preserved. Based on the titles of the leading personnel, it is certain that the expedition fleet was sent out not only to fetch exotic animals and incense trees, but also to mine minerals. Besides the “supervisor of quarry work“ (*imy-rʾ mr*)³¹ named Kaaper, the “supervisor of prospectors” (*imy-rʾ smntyw*) named Menia was also part of the team.³²

Observing the scene, it is noticeable that the ships in the Sahure reliefs are divided into two registers, as later in the temple of Hatshepsut. In the later representation, this division expresses different episodes of the journey – the outward journey and the return; in the case of Sahure, however, both registers concern the return to Egypt. This is to be concluded from the fact that in both registers the monkeys and dogs imported from the south are present on the boats. It is likewise striking that in the case of Sahure, different types of vessels are shown in the respective registers. In the upper register there are sea ships while below there are Nile ships, which one would assume did not participate in the journey through the Red Sea. Why then are they depicted at all? Samuel Mark assumes that the scene depicts a ceremony on the Nile, which is why Nile boats are also shown.³³ However, this does not explain why the returning party with their imported animals was divided on two different types of ships. As explained below in the discussion of the port facilities (see chap. 4), after their return, expedition members dismantled their ships into individual parts and stowed them neatly in the galleries on the coast. The return to the Nile valley took place on foot or on donkey. As the description of the Punt expedition under Ramesses III implies,³⁴ it seems quite likely that a solemn ceremony was held at this point in the presence of the pharaoh and the expedition members. But if their expedition ships remained on the Red Sea, they had to transfer to other ships on the Nile. If the scenes thus show a ceremony on the Nile that actually took place, the ships depicted are not the ones actually used on the expedition. This brings us back to the question: why were seafaring ships depicted at all? One solution is to consider the scenes as representing a generic “return to

30 Osborn/Osbornová 1998, 33 and 40.

31 Jones 2000, 243–244, no. 889.

32 El Awady 2007, 23–24 with fig. 10.

33 Mark 2014, 37–38.

34 See below, chap. 3.3.

Egypt” motif without intending to specify any particular voyage. This idea is also supported by the way the return is embedded in the expedition scenes in the New Kingdom temple of Deir el-Bahari. There, coming directly from Punt, the ships approach and greet the pharaoh standing on the Egyptian coast.³⁵ Of course, other interpretations that assume a reality-based representation of the two types of ships cannot be ruled out in principle. For example, the scene could be seen as an indication that only a part of the ships was actually dismantled and remained on the coast, while another part was transported back to the Nile Valley. In view of the expedition sequences as documented by the archaeological finds and the schematic reliefs with their limited information, however, such an interpretation will always turn out to be extremely speculative. The aforementioned schematic nature of the scenes warns against trying to deduce too many historical details from them.

Several sources point to journeys to Punt during the reign of Djedkare Isesi (ca. 2365–2322 BCE). An expedition is indirectly recorded by a later letter from the time of the 6th Dynasty, where reference is made to the fact that at that time, a pygmy³⁶ was brought from Punt to Egypt (source 16). Two other inscriptions from this period were found at the port of Ayn Sukhna (sources 17–18). One of them mentions ships of the type *kbnt*, which are named after Egypt’s important trading partner Byblos (*Kbn(y)*).³⁷ While some assume that the ships were given this name because they were bound for Byblos or because they were built there,³⁸ others assume that the name was chosen because of the coniferous wood that was imported from this area.³⁹ In any case, the term refers to seaworthy ships, which is why this text indirectly proves voyages on the Red Sea in this period. It remains questionable, however, whether it can be deduced from this that the port also served in the Old Kingdom for expeditions to Punt, which is located far to the south.⁴⁰ Bard and Fattovich doubt this, since there is no clear written evidence for it. The same is true for Mersa / Wadi Gawasis and Wadi el-Jarf,⁴¹ so that the location of the ports for the Old Kingdom Punt expeditions have not yet been identified with certainty. It is certain, how-

35 See Säve-Söderbergh 1946, 13–15.

36 Dasen 1993, 25–28.

37 Jones 1988, 148 no. 79.

38 Düring 1995, 144; Wb V, 118, 3, “Byblosfahrer”.

39 Cf. Ward 2012b, 221; Wachsmann 2009, 19; Vinson 1994, 23; Landström 1970, 63, n. 4 with further references. Previously, Boreux 1925, 462, Faulkner 1941, 3 and Säve-Söderbergh 1946, 12, n. 4 also commented on this designation. For *kbnt*-ships in the Late Period, see Darnell 1992.

40 Tallet 2013, 191.

41 For the latter port as a possible starting point for travels to Punt, see Tallet 2013, 197.

ever, that the ports of Ayn Sukhna and Wadi el-Jarf served for the expeditions to the Sinai to mine copper and associated secondary minerals such as turquoise and azurite.⁴²

Also in the 6th Dynasty, there is some evidence for voyages to Punt under Pepi II (ca. 2278–2184 BCE). According to the first editions of the funerary inscription of Khui (*Hwi*), he claims to have traveled to Kush and to Punt eleven times – an indication of a frequent contact with this region (**source 19**).⁴³ A re-examination of the original text indicates, however, that this numerical information is largely illegible.⁴⁴

Other interesting details about the Red Sea expeditionary activity in this period are handed down through the description of the tragic fate of Anankhet (**source 20**). The latter was supposed to build a ship in the “Land of the Asiatics” (*H3st 3mw*) for the journey to Punt, but was killed by Bedouins along with the military unit assigned to him (*ṯst nt mšʿ*). Percy Newberry wrongly assumed that the mentioned *kbnt*-ship was built only in Byblos and concluded that the event had taken place there.⁴⁵ Vinson also concludes from the source that Egyptians were partially dependent on shipbuilders from the western Near East to build their sea vessels during this period. The ships in this case would not have been built on the Red Sea.⁴⁶ Sølver and Fabre assume that the deadly raid on the Egyptian force took place at the Gulf of Suez.⁴⁷ Fabre justifies this localization by arguing that this site, although close to Egypt, was largely under the control of nomadic Asiatics. In agreement with this argument, Pierre Tallet explicitly names Ayn Sukhna, which currently represents the only known port on the coast that was used in this period.⁴⁸ But Kitchen could also imagine other places on the Red Sea besides the Gulf of Suez.⁴⁹ Considering that large parts of the Eastern Desert fall under the above-mentioned designation “Land of the Asiatics”, this last assessment is more likely and it should be noted that the translation of *3mw* as “Asiatics” is misleading for the peoples living there.⁵⁰

42 Tallet 2013, 197; Bard/Fattovich 2018, 9. For references to the turquoise terraces of Sinai, see Tallet 2012b: 226–228, no. 250.

43 Sethe 1903, 140, l. 17 – 141, l. 1; Breasted 1906a, 164, § 361; Sølver 1936, 453.

44 Newberry 1938, 182–183; Edel 2008, 468. Cf. also Breyer 2016, 598 (Dok. 5).

45 Newberry 1942, 65. Cf. also the view of Helck 1962, 21 and Herzog 1968, 11. For the *kbnt* ship type, see above **sources 17–18**.

46 Vinson 2009, 3.

47 Sølver 1936, 452–453; Fabre 2005, 82.

48 Tallet 2013, 191.

49 Kitchen 1971, 192.

50 Baumann 2018, 302 with further references. Cf. also Breyer 2016, 597, n. 13. For the localization of the *3mw*, see recently Cooper 2020, 74, 80–81.

3.2 Middle Kingdom

The sources from the Middle Kingdom allow to speak of regular long-distance trade journeys across the Red Sea to Punt.⁵¹ It is the documents found mainly at the Red Sea ports (see chap. 4) that attest to expeditions to Sinai and Punt, although only a few actually provide detailed information on the course of these undertakings.⁵² In what follows, therefore, the focus will be on this body of evidence. A particularly detailed source is a **rock inscription in Wadi Hammamat (source 21)**. It dates from the 11th Dynasty, more precisely from the 8th year of Mentuhotep III (ca. 2004–1992 BCE). The goal of the venture, led by the high official Henu (*Hnw*), was to retrieve myrrh from Punt. The inscription mentions details about the composition and size of the expedition, the tense security situation in the Eastern Desert, **the construction of the ships on the coast**, and the logistical challenges involved in supplying the participants. Under the two following rulers Mentuhotep IV (ca. 1947–1940 BCE) and Amenemhet I (ca. 1939–1910 BCE), it is documented that massive expeditions with more than 3000 and 4000 men respectively were undertaken from Ayn Sukhna to the Sinai, in order to mine minerals.⁵³

Stelae and shrines from the ports of the Red Sea continue to be the most important witnesses of voyages on these waters for the following years. Under **Sesostris I** (ca. 1956–1911 BCE), there is the **shrine of Ankhu (*nḥw*)**, which is only fragmentarily preserved (**source 22**). The legible parts mention such information as the construction of the boats, the destination Punt, the titles of participants and the presence of 400 soldiers. The **stele of Sesostris I's vizier Intef-iker (Antefoker) (*In-it.f-ikr*)** erected on site possibly describes the same expedition (**source 23**). This high official goes into detail about the construction of the ships at Coptos and the assembly of their parts on the coast, and further mentions the groups and crew sizes of the total 3,756 participants in this venture.

Several stelae from the Middle Kingdom do not prove much more than the mere existence of further Punt expeditions,⁵⁴ perhaps with one exception (**source 24**). It was partly understood in such a way that the official **Khnumhotep (*Hnmw-ḥtp*) serving under Sesostris II** (ca. 1877–1870 BCE) had erected monuments for the pharaoh

51 Cf. Bard/Fattovich 2018, 90.

52 See e.g. Abd el-Raziq et al. 2002; Talet 2012a.

53 Abd el-Raziq et al. 2002, 40–43; Tallet 2012a, 148–149.

54 Bard/Fattovich 2018, 62; Breyer 2016, 610 (Dok. 13), for expeditions during the reign of Amenemhat II (ca. 1914–1877 BCE); Bard/Fattovich 2018, 67–68, for Sesostris II (ca. 1877–1870 BCE) and Bard/Fattovich 2018, 64–65; Breyer 2016, 605–606 (Dok. 10), for Amenemhat III (ca. 1831–1786 BCE).

in Punt.⁵⁵ In this case, however, it is clear from the context that the expression for monument (*mnw*) refers to the stele itself.⁵⁶ Furthermore, the place name “God’s land” (*Tꜣ-ntꜣr*) need not automatically be a reference to Punt, as it is a designation for all regions outside Egypt, including the Eastern Desert where the stele was erected.⁵⁷

Another source about Red Sea navigation is the *Tale of the Shipwrecked Sailor*, which deals with the failed trade voyage to the south to import minerals, incense and *hknw*-oil (**source 25**). Although the text, probably written in the 12th Dynasty and preserved on papyrus, contains mythical elements, the verisimilar description of the ship with its dimensions (l: 120, w: 40 cubits) and the number of sailors (120) has made it a popular source for information about seafaring.

3.3 New Kingdom

In the New Kingdom period, several expeditions to the peninsula to mine copper and its secondary minerals are attested in inscriptions from the Sinai and the Egyptian ports of the Red Sea. Thomas Hikade assumes that such an enterprise was undertaken every few years. For the well-documented reigns of Hatshepsut and Thutmose III, a Sinai expedition can be proven for every four years, but apparently between the time of Amenophis III and Ramesses I, all Egyptian activities in the Sinai were suspended.⁵⁸ It is mainly sources from the 18th Dynasty that indicate commercial traffic with Punt, without revealing many details about the nature of these undertakings.⁵⁹ The annals of Thutmose III, for example, only mention the amount of myrrh imported from Punt (1,685 *hkꜣt* = ca. 8,088 liters).⁶⁰ While many stelae inscriptions have come down to us from the Middle Kingdom, it is texts and representations from private tombs that now form the most richest source. One of the new aspects of trade during this period is that Puntite boat trips to Egypt are also documented.⁶¹

A fragmented inscription from Bubastis, which probably also dates to the 18th Dynasty,⁶² tells of a royal expedition to the south that involved fighting with Nubi-

55 Bard/Fattovich 2018, 62–63.

56 The supposed note is in the indication of the date, see Sayed 1977, 139, pl. 8a. Cf. also the translation by Breyer 2016, 609.

57 Baumann 2018, 371–373.

58 Hikade 2001, 10–24; 273; Tallet 2015, 38–39.

59 For contact with Punt during the time of Haremhab, see Breyer 2016, 650 (Dok. 37).

60 Breyer 2016, 642–643 (Dok. 29).

61 Breyer 2016, 645–648 (Dok. 31–34) and 649–650 (Dok. 36).

62 Breasted (1906b: 337–338) wanted to assign the text to Amenophis III; Faulkner (1955, 89–90) was more cautious here.

ans.⁶³ While Breasted took this as an account of an expedition along the Nile very far into southern Nubia,⁶⁴ Faulkner interpreted the passage as evidence of a royal sea voyage to Punt.⁶⁵ If this is indeed the case, it would be the extraordinary and rather improbable circumstance of an Egyptian ruler being part of a Punt expedition.⁶⁶ While some scholars follow Faulkner's interpretation,⁶⁷ others are more cautious, not least because of the fragmented state of the text.⁶⁸ In any case, recent studies on the toponyms mentioned in the text tend to speak against a localization of the events at the Red Sea.⁶⁹

The most outstanding sources from the New Kingdom with information on seafaring are undoubtedly the so-called **Punt reliefs from the funerary temple of queen Hatshepsut at Deir el-Bahari** (Thebes West) (**source 26**). The principal edition is by Edouard Naville, but the older and less accurate edition by Auguste Mariette is still often used since Naville did not include an overview of the ship scene.⁷⁰ As Francis Breyer has pointed out, even Naville's edition by no means corresponds to an accurate reproduction of the texts and scenes according to modern standards (see fig. 9).⁷¹ Given the importance of these scenes, it is therefore gratifying that a new edition is in preparation by the Polish Academy of Sciences.⁷²

63 Naville 1891, 10 and pl. 34A.

64 Breasted 1906b: 337–340 (§§ 846–850).

65 Faulkner 1955, 85–90.

66 Two further details concerning this voyage are worth noting. First, the inscriptions mention that a raiding patrol of 124 soldiers was sent out inland to a well, where they encountered and captured Nubians with their livestock (Fabre [2005, 38] and probably following him, Breyer [2016, 154] mention 180 men, although this number does not appear in the text. Nor does the inscription mention that landings were made every night, as both of them state). Faulkner (1955, 85–90) associated this action with the necessary procurement of water on a sea voyage, while Breasted (1906b: 338) cited another text regarding a military campaign in Nubia that involved moving out to the wells of the natives, possibly to destroy them (cf. also Köpp-Junk 2015, 309–310). Second, the text would confirm the obvious assumption that certain landmarks served as orientation during a journey along the coast (Breyer 2016, 317), in which case the name of such a special place would also have been handed down: the “height of Hua”.

67 Fabre 2005, 38, who however strongly simplifies and distorts the content.

68 Martinssen 1999, 61.

69 For *Wnšk* and *Ḥwš*, see Cooper 2020, 383–385, for *Ḥst-imntt*, cf. possibly *Tš-imntt* (Baumann 2018, 369–370).

70 Mariette 1877, pl. 6. In fact, the adapted version printed by Säve-Söderbergh (1946, 14, fig. 1) with slight modifications and in a reduced scale is often used as an illustration.

71 Breyer 2016, 63–68.

72 The project is under the direction of Filip Taterka.

The Punt reliefs are distributed on several walls, each of which is divided into multiple registers. On the right side, scenes related to the events in Egypt have been depicted, while the left is dedicated to the land of Punt with its inhabitants, flora and fauna. The central area covers the sea voyage between these two locations (fig. 4). In addition to the sailing ships with their crews, the scenes referring to Punt also show the loading of trade goods, which are specified in more detail in an inscription: myrrh resin, ebony, ivory, gold, fragrances and fumigants, eye paint, baboons, green monkeys, dogs, leopard skin. In addition, the ships also carried back Puntites and their children.⁷³

Basically, the central reliefs consist of two viewing levels. On the first, each register presents a coherently conceived panel, showing five sailing ships on their voyage. On a second viewing level, the details were finally woven in, presenting the scenes as a sequence of events and thus as a narration. Even though the reliefs at Deir el-Bahari are a particularly remarkable example of this form of representation, they are by no means unique. Another striking example is the illustration in relief of the naval battle of Ramesses III against the Sea Peoples in his temple at Medinet Habu.⁷⁴ On closer inspection, various other pictorial tableaus are also divided into individual motifs that follow one another in time, whereby narration in general can be described as an essential aspect of Egyptian art.⁷⁵ A close examination of the ship depictions from Deir el-Bahari consequently shows that two different stages of the voyage are depicted per register (see fig. 4). While the lower register shows (1) the departure from Egypt and (2) the arrival in Punt, the upper register pictures (3) the loading of the goods in Punt before the return journey and (4) the arrival in Egypt. The orientation of the ships' crew on the right side of the tableau towards the king depicted to the right of it and the orientation of the crew on the left side towards the shore of Punt leaves no doubt as to the validity of this interpretation. As has been noted, the ship scenes are on a west wall, with the land of Punt depicted to its left, i.e. in the south, while Egypt is at its right end, i.e. in the north. Thus, the movement of the ships to the left/south (= Punt) or to the right/north (= Egypt) coincides with the real geographic situation.⁷⁶

73 Sethe 1906, 328, l. 17 – 329, l. 12.

74 Baumann 2020.

75 Braun 2015, 351–357; Rogner 2019; Gaballa 1976. For the Punt reliefs, see *ibid.* 50–53.

76 Breasted 1906b: 103, § 248; Wachsmann 2009, 22–23 and Taterka 2019 contrary to Servajean (2016, 195 with n. 67), who wants to see in the reliefs a journey to the East. Besides, such a deliberate arrangement of reliefs as a reflection of geographical conditions is also documented on other monuments, see e.g. Baumann 2020, 341.

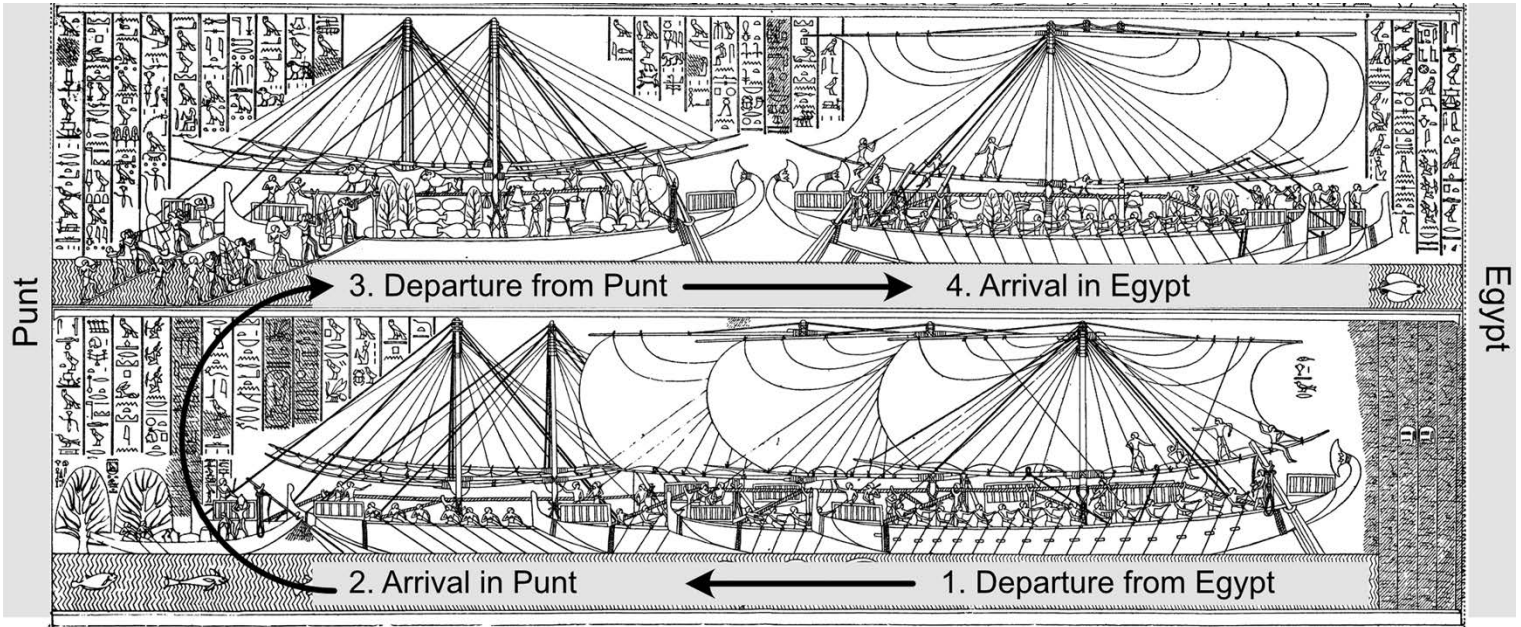


Fig. 4: Phases of Hatshepsut's Punt expedition (after Säve-Söderbergh 1946, 14, fig. 1).

In both registers, the left half of the panel shows two ships lying on the coast of Punt and the right half shows three ships on their way, thus deliberately creating symmetry in the design of the scenes. This stylistic feature already shows how artistic conventions dominate the depictions and serves as a warning against interpreting them as reproductions of reality that are valid in detail.⁷⁷

One of the latest pieces of evidence for pharaonic expeditions on the Red Sea comes from the time of **Ramesses III** (ca. 1184–1153 BCE) (**source 27**). Contrary to the sources presented so far, the information in this case has been passed down on a papyrus describing the deeds of the king. Recording in brief the main stages of the journey, the text describes that the Pharaoh sent an expedition across the Red Sea to Punt. The merchant fleet consisted of several cargo ships and smaller boats loaded with goods from Egypt. They certainly served as a means of exchange for the highly prized local products, such as the myrrh mentioned by name.⁷⁸ On the way back, the loading of goods on donkeys on the coast to get through the desert to Coptos is explicitly mentioned. From there, the precious imports were loaded onto cargo ships for onward transport to the royal residence. In addition to the products from Punt, family members of the Puntite rulers were also on board. Finally, it is mentioned that they were presented to the pharaoh together with the goods.⁷⁹

In addition to trips to Punt, **Ramesses III also led expeditions to the Sinai and to Timna (Wadi Arabah) on the east side of the Sinai to mine turquoise and copper.**⁸⁰ The inscription states that part of the expedition to Timna was conducted over land, while another part of the enterprise was carried out by ships, so that a **circumnavigation of the Sinai Peninsula** is attested here.⁸¹ It is thus conceivable that parts of all other archaeologically attested expeditions to Timna since Seti I (1290–1279 BCE) to Ramesses V (1149–1146 BCE) sailed over the sea as well.⁸² Sources about seafaring on the Red Sea in the following Late Period (ca. 722–332 BCE) are scarce.⁸³ However, the completion of a canal from the Nile valley to the Red Sea under Persian rule

77 Cf. Pirelli 1993.

78 On the trade with Punt, see Breyer 2016, 423.

79 For the possibility that the pharaoh awaited the homecoming expedition in the palace of Tell Qolzum, see von Pilgrim 2021, 508.

80 P.Harris I, 78,1–78,8 (Grandet 1994, 338–339); Breasted 1906c, 204, § 408; Maderna-Sieben 1991, 68–69. For Timna and its mineral resources, see Baumann 2018, 243–344, 344, 403, 417–418, 421, 485, 488.

81 Tallet 2013, 198–203.

82 For the expeditions to Timna, see Hikade 2001, 24–32.

83 For a general overview of the sources concerning seafaring in the Late Period, see Belov 2017; Muhs 2016, 207–208; Schulz 2016, 44–47; Schulz 2018.

indicates⁸⁴ that this image is deceptive and that traffic on these waters were in fact frequent.

4. Harbors

Three harbors from the Pharaonic period have been identified on the coast of the Red Sea so far. From north to south, they are located at the sites of Ayn Sukhna, Wadi el-Jarf in the Gulf of Suez, and Mersa / Wadi Gawasis near Safaga. In addition to these, there are the possible harbor at Tell Qolzum and the port of El Markha / Tell Ras Budran in the Sinai. As they were in use at different times, taken together, these sites provide evidence of trade or expeditionary voyages to the nearby Sinai Peninsula as well as to the more distant region of Punt over a period that covers almost the entire pharaonic era. The harbors were each located close to a wadi, which ensured a swift connection to the Nile Valley. In addition to this basic prerequisite, other practical aspects were taken into account in the choice of location, especially the provision for a berthing area protected from the wind by natural conditions and access to fresh water. Characteristics of the now well-explored ports of Ayn Sukhna, Wadi el-Jarf, and Mersa / Wadi Gawasis include economic facilities, workshops, and residential buildings. They also feature galleries driven deep into the rock.⁸⁵ These galleries were used to store the ships, which were dismantled into individual parts so that they did not have to be transported back to the Nile Valley between individual expeditions, as was assumed for a long time.⁸⁶ Since the archaeological evidence suggests that there was no permanent Egyptian presence at the ports,⁸⁷ the question arises as to how these magazines were protected from being looted. Sealing the rock galleries with heavy stone blocks was certainly part of the strategy but not a very secure one. It is therefore possible that agreements were made with local ethnic groups.

According to current research, there are indications to suggest that the ports were never used concurrently but rather replaced one another. In the 4th Dynasty, the location at Wadi el-Jarf was chosen for a harbor as it was conceivably the shortest distance to the mines in the Sinai. Although there is evidence of expeditions to Punt during this period, there is no evidence for them departing from this port. Under the reign of Khafre (ca. 2472–2448 BCE), the port was moved a little north to Ayn Sukhna, where there is also no solid evidence for Punt voyages. From the time of Sesostris I (ca. 1956–1911 BCE), the far more southern port of Mersa Gawasis was put

84 Breyer 2016, 348–349; Kuhrt 2010, 486; Schmitt 2009, 150; Cooper 2009; Schulz 2018.

85 Tallet 2015, 54–56.

86 For example, by Landström 1970, 123.

87 Fattovich/Bard 2012, 28; Tallet 2015, 57.

into operation, which was then clearly used for the voyages to Punt. At times, however, the facilities at Ayn Sukhna were reused and while Mersa Gawasis was abandoned at the end of the Middle Kingdom, Ayn Sukhna remained in use until the New Kingdom under Amenhotep III (1390–1353 BCE).⁸⁸ It is not clear from when exactly the port of Tell Qolzum was in operation but its existence in Ramesside times can be assumed. In the following, the individual ports will be presented in more detail.

4.1 *Wadi el-Jarf and Tell Ras Budran*

The port of Wadi el-Jarf lies about 20 km south of the mouth of the Wadi Araba and thus roughly at the latitude of modern Bani Suwaif. Although it has been known since the early 19th century, systematic research of the site only began in 2011. The copper and turquoise mines of the Sinai that were exploited by the Egyptians lie opposite Wadi el-Jarf. Directly on the coast at El-Markha / Tell Ras Budran is a military fortified harbor complex, which was built at the same time as the complex of Wadi el-Jarf and clearly corresponds with it (fig. 2). A primary use of the port of Wadi el-Jarf for the expeditions in the Sinai therefore seems obvious.⁸⁹ The facilities of the port themselves extend for six kilometers from the coastline to the rising coastal mountains. The course of the harbor pier can still be clearly traced along the coast today. There is a residential complex slightly further inland, on the plain there is a large building (60 × 40 m) with a function that has not yet been precisely defined, and further to the west, some 30 rock galleries were built in the style of the complexes of Ayn Sukhna and Mersa Gawasis. Both the number of galleries at Wadi el-Jarf and their dimensions (max. 34 m length) exceed those of the other sites. The archaeological finds speak to a use for a limited period – from the early 4th Dynasty until the end of the reign of Khufu. After that, the entrances to the rock galleries were blocked with large boulders.⁹⁰ The short period of use is probably related to the establishment of the strategically better located port about 100 km further north at Ayn Sukhna.⁹¹

4.2 *Ayn Sukhna*

Discovered in 1999, the port of Ayn Sukhna is located about 70 km south of Suez on the west coast of the Gulf of Suez and could thus be reached in a few days from the

88 Tallet 2015, 59–67.

89 Tallet/Maroud 2016; Mumford 2006; Mumford 2012.

90 The locking system with heavy stone blocks that could be slid into position on wooden planks are reminiscent of the technique used in the crypt locks of later temples. Cf. Baumann 2019, 133–140 and Tallet 2015, 50, fig. 33.

91 For a detailed overview, see Tallet et al. 2012; Tallet 2015, 46–54, 63.

capital city Memphis. The site was in use from the Old Kingdom to the New Kingdom, i.e. for over a thousand years (ca. 2450–1350 BCE), with many sources dating to the Middle Kingdom in particular. Primarily, the facility served for the short crossing to the Sinai. This can be deduced, on the one hand, from the toponyms mentioned in the texts discovered on site and on the other, from the fact that particular expedition members are attested both in the inscriptions of the port and in inscriptions on the Sinai. Only vague indications exist for the site's use as a starting point for trips to Punt.⁹² Not far from the shore, ten galleries between 14 and 24 m long were discovered, which according to inscriptional evidence were already driven into the rock in the 4th and 5th Dynasties. Once created, the infrastructure continued to be used in the following centuries to store equipment for shipping expeditions. Various structures were also built on site over time, one of which was a large complex for metal processing.⁹³

4.3 Mersa Gawasis

The port of Mersa Gawasis / Wadi Gawasis is located about 50 km north of al-Qusair. According to pottery finds and radiocarbon dates, the port was in use from the end of the Old Kingdom until the New Kingdom. However, as the numerous inscriptions show, the main period of use was clearly in the Middle Kingdom.⁹⁴ From the complex, partially destroyed by the construction of a modern road and railroad line, eight rock galleries with various nautical equipment as well as several shrines and stelae with commemorative expedition inscriptions were found. Several of them bear witness to journeys to the Sinai and to Punt.⁹⁵ The large number of sources for the Punt trips is certainly related to the much more southern location of the site compared to the ports at Wadi el-Jarf and Ayn Sukhna. Since wind conditions often made it necessary to row the last leg of the return trip to Egypt during Punt expeditions (see below), a stop at Wadi Gawasis would have saved 400 km of arduous travel compared to Ayn Sukhna. This advantage was also possibly exploited for the return journey of the Punt expedition under Ramesses III, which according to the report in the Papyrus Harris, ran across the desert to Coptos.⁹⁶ That Ramesses III chose Mersa Gawasis as a landing site is uncertain but at least one of the above-

92 See also Bard/Fattovich 2018, 9.

93 Abd el-Raziq et al. 2016, 41–46; Tallet 2012. For an overview of this port, see also Breyer 2016, 42–55.

94 Bard/Fattovich 2018, 31–35.

95 Bard/Fattovich 2018, 62–74; Tallet 2015, 33–36.

96 On this assumption, see already Fabre 2005, 84–86.

mentioned radiocarbon samples speaks for a selective use of the Mersa Gawasis harbor under this ruler.⁹⁷

4.4 Tell Qolzum

Until very recently, the site of Tell Qolzum near present-day Suez has received little scholarly attention.⁹⁸ Kenneth Kitchen once surmised that this site served as a starting point for trips to the Sinai in the Middle Kingdom.⁹⁹ However, so far, there is only proof of an Egyptian presence from the time of Ramesses III (1187–1157 BCE) onwards.¹⁰⁰ A well-preserved fortress was excavated on site,¹⁰¹ which might also date to the reign of that king, as Cornelius von Pilgrim argues on the basis of its structure.¹⁰² Due to modern overbuilding, it is unlikely that parts of a harbor will be discovered but its existence close to the fort is very likely. In any case, since the ports known so far show no traces of expeditions from the late 18th Dynasty onwards,¹⁰³ another one must have existed during this period. Its location at the boarder to the east but not too far from the capital in the Delta makes the fortress a perfect base for land and maritime expeditions to the Sinai, Timna and Punt.¹⁰⁴

5. Ships

5.1 Sources of evidence

To begin with, information about ship designs can be obtained from inscriptions and two-dimensional representations, i.e. wall scenes and graffiti. A more immediate source with clearer information are the physical finds of ships, but in contrast to the finds of complete inland vessels,¹⁰⁵ only single individual parts of seafaring vessels are preserved. Another potential source would be ship models that were mainly used as grave goods; but there is no clear evidence of seagoing specimens among the extant corpus.¹⁰⁶

97 Bard/Fattovich 2018, 34.

98 See now von Pilgrim 2021.

99 Kitchen 1971, 197, n. 62.

100 Leclant 1963, 85.

101 Leclant 1964, 342 with pl. 25.

102 Von Pilgrim 2021.

103 Cf. Tallet 2015, 59.

104 Somaglino/Tallet 2013, 515; von Pilgrim 2021, 507–508.

105 For the boat finds, see Ward 2012b, 219–220 with further references. On Egypt's oldest wooden boats (1st Dynasty) discovered recently at Abu Rawash, see Tristant et al. 2014.

106 Jones 1995, 26–33; Reisner 1913; Stephens 2019.

5.1.1 Inscriptions

Of all the written sources describing ships,¹⁰⁷ very few refer to sea vessels. The best known of these is a story about a shipwrecked sailor, who was sailing in the Red Sea on a mighty ship about 60 m (120 cubits) long and 20 m (40 cubits) wide before it sank in a storm and he was washed up on an island as the sole survivor (**source 25**). Since this is a literary work, in which the sun god also appears as a giant talking snake, these dimensions should be interpreted with caution.¹⁰⁸ The so-called Nauri decree from the time of Seti I (1290–1279 BCE) is potentially of more validity, although here too, there is no sober description of the ships. The aim of the inscription was to praise the deeds of the ruler and so a certain level of exaggeration may be expected here as well. In any case, the text states that the king owns a whole fleet of merchant ships over 50 m (100 cubits) long, which are used to supply his mortuary temple:

The Nile mouths are crowded with craft, Qareret-Ships equipped with their crews, each one 100 cubits long, laden with herbs (from) God's Land.¹⁰⁹

Although the paraphrase “God's land” (*T3-ntr*) can possibly refer to regions on the Red Sea, the location of the ships at the mouths of the Nile makes it clear that the Mediterranean fleet is described here.¹¹⁰ In brief then, there are no reliable written sources with information about the size of the ships that sailed across the Red Sea.

5.1.2 Reliefs and graffiti

The source base for visual representations of seafaring vessels from Egypt is limited to a few monuments.¹¹¹ The context and the intention of the illustrations vary greatly here. Moreover, great differences in the level of detail can be observed in these sources.¹¹² Focusing on representations of seagoing vessels depicted in the context of the Red Sea further reduces this source base considerably. The main sources are the reliefs from the time of Sahure (ca. 2428–2416 BCE) and Hatshepsut

107 For a description of an alleged nearly 70 m (130 cubits) long cult barque to Amun, see P.Harris I, 7,5–7,6 (Erichsen 1933, 8, l. 11–17; Grandet 1994, 230). For the sizes of different types of ships, see Köpp-Jung 2015, 92.

108 See also Vinson 2009, 4; Vinson 1997, 71.

109 KRI I, 49, 15–16, translation: Kitchen 1993a, 43. Ships of exactly this size are also documented from the time of Snofru (ca. 2543–2510 BCE), although it is not said where they were used. Anyhow, because of their size, Faulkner (1941, 3) considered them to be seagoing vessels.

110 Baumann 2018, 371–373.

111 Moussa/Altenmüller 1971, 27 with n. 160–161, pl. 18–19 and 23.

112 Cf. Aßmann 1913, 166.

(1479–1458 BCE), which were carved into the wall of a temple about a thousand years later. However, for a long time, the representations from the time of queen Hatshepsut published at the end of the 19th century formed the only detailed pictorial source for seafaring on the Red Sea. Her mortuary temple contains highly artistic and finely executed representations of the expedition – of the crew, the products and of course the ships – whose construction details are clearly recognizable (see chap. 3.3).

In 2002–2003, fragments of stone reliefs were discovered along the causeway of Sahure's pyramid and these have been interpreted as a representation of a returning Punt expedition.¹¹³ Two types of ships can be distinguished in the preserved scenes: a relatively flat, simple type in the lower register and a type with more superstructures and a hogging truss in the upper. Both feature a bipod mast that was apparently in use only until the end of the 6th Dynasty.¹¹⁴ The more representative ships in the upper register bear a strong resemblance to those depicted further up in the so-called “Querraum” (transverse room) of the pyramid temple, in the context of an expedition to the eastern Mediterranean.¹¹⁵ This is similar to the context of the main pictorial sources from the time of Sahure and Hatshepsut. In the broadest sense, the high-quality reliefs originate from royal funerary temples and deal with trade expeditions.

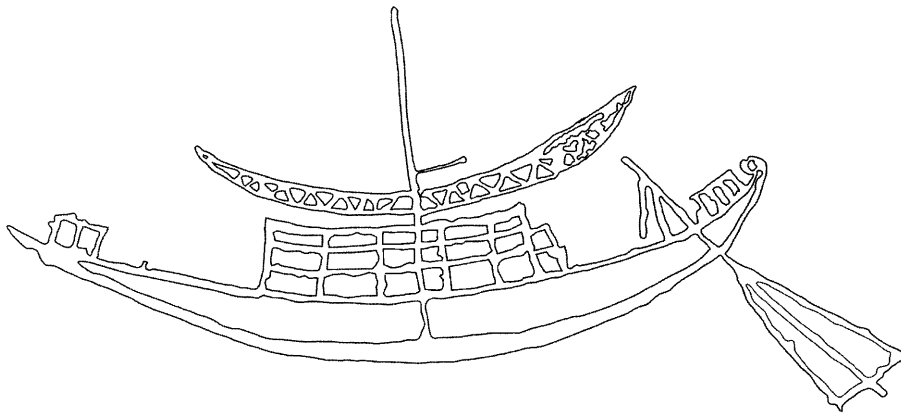
Less attention has been paid to the depictions of ships in the Sinai at Rod el-Air. These illustrations consist only of schematic sketches and were engraved onto the rock during the Middle Kingdom in the vicinity of expedition inscriptions; thus, they very likely depict the vessels used for the respective expeditions to mine copper and its secondary minerals. Among these representations, Patrice Pomey distinguishes two types of boats known from river navigation on the Nile (fig. 5). One corresponds to the Dashur boats (type 1) and the other to models and images from Beni Hassan (type 2). Pomey therefore believes it possible that these Nilotic types were adapted for navigation on the ocean. Such medium-sized boats were apparently sufficient for the short journey of about 100 km between Ayn Sukhna on the Egyptian side and Tell Ras Budran in the Sinai.¹¹⁶

113 El Awady 2009, 155–186 with pl. 5–8. See above chap. 3.1.

114 Vinson 1994, 23–24.

115 Borhardt 1910, 19; Wildung 2010, 187; Faulkner 1941, 3. While these authors assume a military purpose, Aßmann emphasized that no military equipment is depicted (Aßmann 1913, 133). Wachsmann (2009, 13) assumes that the people aboard were brought to Egypt as tribute.

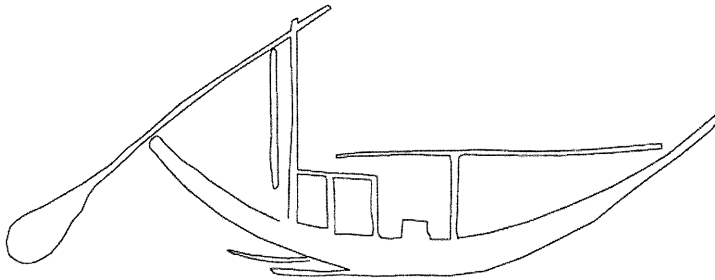
116 Pomey 2012, 12–13.



a - Type 1

20 cm

I-RA 70



b - Type 2

I-RA 27

Fig. 5: Graffiti from Rod el-Air (Sinai) depicting ships
(after Pomey 2012, 13, fig. 2.5).

5.1.3 Ship remains

Physical remains of seafaring vessels have so far been found exclusively on the Red Sea coast, at the ports of Wadi / Mersa Gawasis, Ayn Sukhna, and Wadi el-Jarf. It should be emphasized that not a single Egyptian shipwreck has been discovered; all the finds have been made on land, mainly in the rock galleries of these ports.¹¹⁷ The extant evidence reveals that parts that had become unusable were either sorted out or repaired.¹¹⁸ A total of four rudders found at Mersa Gawasis also make it possible to determine the size of the ships used at that site. Experts assume that one type of

117 Ward 2012b, 220. For an overview of the ship parts, see also Breyer 2016, 381–387. For a compilation of the finds of Nile ships, see Ward 2000.

118 Bard/Fattovich 2018, 25; 90–96; 185.

ship of 20 m length and another with at least 30 m length existed.¹¹⁹ The ship parts of this port were made of imported cedar and oak as well as of several woods that were locally available in Egypt.¹²⁰ Globally, the remains represent the earliest evidence of such large seaworthy vessels.¹²¹

In two galleries (G2 and G9) of Ayn Sukhna, archaeologists have recovered ship parts that probably belonged to two separate ships. The vessels, which had been dismantled into individual parts, were neatly stored here before they were badly charred by fire and additionally affected or completely destroyed by the collapsed ceiling. The ship planks had a polygonal shape with a length between 2.35 and 6.4 m, a width of 28–44 cm and a thickness of 9.5–13 cm. Other parts provide evidence that the present type corresponds to the boats found at Dashur, whose design, according to Pomey, was adapted for use at sea. Like in Mersa Gawasis, most of the planks were made of imported cedar and oak, while the connecting elements were made of domestic acacia wood. Varying radiocarbon dates suggest that ship parts from the 5th Dynasty were still in use in the 12–13th Dynasty. Only a small percentage of the total fleet of ships are preserved, which may be related to the fact that the remaining elements burned or else that they were not kept in these galleries. Nonetheless, the available parts indicate a length of 13.5–15 m for the ship from gallery G2.¹²²

Among the finds from Wadi el-Jarf, a floor frame of a potentially large ship stands out.¹²³ Unfortunately, it cannot be determined at which position of the hull that part was located. Its diameter of 2.75 m can therefore only be taken as a minimum width dimension for the vessel. Depending on the length-to-width ratio of 3 : 1; 4 : 1 or 5 : 1, the ship must have had a length of at least 8.25–13.75 m.

5.2 *The construction of Egyptian sea vessels*

The sources about the construction of pharaonic sea ships are on the one hand the physical ship parts already presented above, and on the other hand, representations in reliefs. The well-preserved Nile boats, especially the barque of Khufu and the boats from Dashur, are also useful for comparison.

119 Ward et al. 2010, 389. Previously, the length of the smaller type of ship was calculated to be 14.4–20 m (Zazzaro 2007, 153) and 14–18 m (Zazzaro 2009, 7).

120 Bard/Fattovich 2018, 95. On the possibility that oak was growing in Egypt, see Fabre/Belov 2011, 110.

121 Ward 2012b, 222.

122 Pomey 2012.

123 Tallet 2012a, 152 with fig. 20.

Due to paucity of sources, it is uncertain how exactly the sea ships looked like before the 5th Dynasty. It can be assumed that initially, a series of attempts were made to make Nile ships seaworthy.¹²⁴ According to Pomey, ships of the type used on the Nile were still in use in the Middle Kingdom for shorter trips to the Sinai, although they may have been adapted for sea travel.¹²⁵ With regard to the representations of the Punt ships of Hatshepsut from the New Kingdom, there is a broad consensus that these were not ordinary cargo ships but rather merchant ships designed for long voyages on the sea.¹²⁶ The type of wood used for shipbuilding was debated for a long time.¹²⁷ Only with the discovery of the ship parts at the Egyptian ports came some clarity. As was often assumed, most of the wood needed for shipbuilding was imported; however, native timbers such as *Faidherbia albida* and *Acacia nilotica* were also exploited to a not inconsiderable extent. They usually served to make the tenon joints but also for the large steering blades. Cedar, and to a lesser extent oak, was used for structural elements of the hull, especially for the beams and large planks; both were sourced from the eastern Mediterranean.¹²⁸

While it is assumed that older ships did not have a keel, its existence in the New Kingdom is mostly accepted. Once again, an important source is the images of Hatshepsut's ships. For instance, Landström assumes a keel in this case and Bormann, Gil-Artagnan and Ward all equipped their reconstructions of this type of ship with it.¹²⁹ A critical position is taken by Frederick Hocker, who assumes a kind of "proto-keel" in this case, which was not yet fully developed.¹³⁰

A peculiarity of Egyptian ship constructions is that the planks are held together with mortise and tenon joints and these were not further fixed by pegs. Another distinctive feature is the use of relatively thick (min. 6 cm), irregularly shaped and short planks (Mersa Gawasis: max. 3.5 m; Ayn Sukhna: max. 6.4 m). These last two aspects prevented longitudinal shifting of the planks, which in other cultures was ensured by the use of peg fixings. Avoiding these dowels allowed the ships to be disassembled and reassembled without damage, whenever needed.¹³¹ During this

124 Faulkner 1941, 4.

125 Pomey 2012, 12–13. See also chap. 4.2.

126 Landström 1970, 124 with further references in n. 5.

127 See Creasman 2015, 25.

128 Bard/Fattovich 2018, 95–96; Pomey 2012, 11.

129 Landström 1970, 123; Bormann 2013b, 28; Gil-Artagnan 1994, 49.

130 Hocker 2009, 245–246. See also Belov 2015 and Servjean 2016, 205 with n. 94.

131 See Newberry 1942, 64–65 with references to Classical and modern sources attesting to the dismantling and transportation of ships. On this aspect, see also Landström 1970, 64; Creasman/Doyle 2010, 16; Pomey 2012, 12; Ward 2010, 46; Mark 2014, 43.

process, individual parts could also be easily replaced, if for example, they were infested with shipworm. At the same time, this system made sound economic sense, as even shorter pieces of the valuable wood could be put to use in construction and repairs. Such an exchange of parts is very well documented at the ports of Mersa Gawasis and Ayn Sukhna (see above).¹³²

The basic construction and repair technique outlined above remained more or less constant throughout the Pharaonic period, although the use of pegs increased in the Late period.¹³³ Even in the 20th century of our era, the technique was used in Sudan.¹³⁴ Herodotus very aptly described these peculiarities of Egyptian shipbuilding in the 5th century BCE. In his time, the joints were apparently sealed from the inside with papyrus (Hdt. 2,96,2), which is also possible for earlier times.¹³⁵ In the 1920s, Somers Clarke also observed sealing from the inside during the construction of a boat which he describes as a direct descendant of the Dashur type. In that case, old pieces of clothing were used for the task. According to Clarke, the advantage of the technique is that a leak can easily be sealed during the voyage without having first to lay the boat on dry land.¹³⁶ During the construction of the “Min of the Desert” (see section 5.3.1) by maritime archaeologists, it was assumed that the timbers would swell in the water in such a way that the ship’s hull would be sealed watertight.¹³⁷ However, since the gaps were too large or this effect did not occur to the required extent, linen strips and beeswax were finally introduced into the joints from the outside, which actually resulted in a satisfactory seal. Although this approach is not supported by textual sources or direct findings on ship parts, the choice of materials can be justified by the fact that they were also found at the port of Mersa Gawasis.¹³⁸ Archaeological evidence from the boats recently discovered on

132 See also Ward 2009, 15; Ward 2010, 45 with further references.

133 Ward 2012b, 219 and 229; Ward 2000, 134.

134 Aßmann 1913, 136. For medieval sources regarding ancient ship construction at the Red Sea, see Edgerton. 1923, 133.

135 On this passage, see already Clarke 1920, 44; Casson 1971, 14–15, referring to Boreux 1925, 236–239. Vinson 1994, 48, would rather translate “to bind” instead of “to caulk” and relate the passage to the binding together of parts of the ship. However, the use of papyrus as a rope substitute would not have resulted in strong and long-lasting joints, which is why the traditional translation makes more sense.

136 Clarke 1920, 50.

137 For this general assumption, see e.g. Köpp-Junk 2016, 14; Bormann/Mährlitz-Galler 2013, 17. In the reconstruction of the “Pount”, the swelling of the timbers actually sealed the ship (Gil-Artagnan 1994, 79).

138 Bard/Fattovich 2018, 99; Couser et al. 2009, 7; Ward 2012b: 224. See also Creasman 2015, 25.

the Mediterranean coast at Thonis-Heracleion proves Herodotus' description exactly, that vegetal material – probably papyrus – was “driven between the seams of the planks”.¹³⁹

Ernst Aßmann was one of the first to comment in detail on the characteristics of Egyptian seagoing vessels.¹⁴⁰ Published in 1913, his study already discussed a large number of the constructive elements that were revisited in various studies after him.¹⁴¹ Of particular importance is the hogging truss, which has been documented since the 5th Dynasty and belongs among the early innovations that remain almost unchanged, even some thousand years later in the 18th Dynasty's depictions of the Punt ships at Deir el-Bahari. It is a rope stretched over the long side of the ship to maintain the structure of the vessel even in a swell. Without it, there is a risk that the weight of the boat could cause it to break.¹⁴² In scenes depicting boat building, such ropes are also seen on smaller boats, usually interpreted as Nile boats.¹⁴³ Norbert Düring assumes that this rope was used to give the boat's hull the desired shape. On Nile ships the rope could be removed after some time; only on seafaring vessels was it left for stabilization.¹⁴⁴ Thus, the presence of a hogging truss in depictions is generally cited as an indication for a seagoing vessel.

139 Belov 2016, 41. Papyrus was also found in association with the recently discovered boats of the 1st Dynasty elite cemetery at Abu Rawash. On these boats, see Tristant et al. 2014. The papyrus remains will be published in the excavation monograph by Yann Tristant.

140 Aßmann 1913, 133–161.

141 For the construction of seafaring vessels in general, see Fabre 2005, 102–128; Casson 1971, 20–22; Boreux 1925, 474–488. For the construction of the ships of Sahure, see Faulkner 1941, 3–7; Landström 1970, 64–69; Wachsmann 2009, 14–18; Vinson 1994, 23–24; Sølvér 1961; Mark 2014; Bormann 2013a, 20–25; Jones 1995, 40–42. For the construction of the ships from the reliefs of Hatshepsut, see Faulkner 1941, 7–9; Landström 1970, 123–124; Wachsmann 2009, 23–29; Vinson 1994, 38–39; Sølvér 1936, 454–462; Bormann 2013a, 25–27; Mark 2014, 43–46; Jones 1995, 53–58. Specially treated elements are sails (Wachsmann 2009, 248–254), rope and knots (Wachsmann 2009, 254), and anchors (Wachsmann 2009, 255–293; Aßmann 1913, 152–156; Frost 1996).

142 Aßmann 1913, 140–142; Boreux 1925, 474–478; Faulkner 1941, 4; Moussa/Altenmüller 1971, 27 with pl. 19 and 23. See also Servajean 2016, 212–213; Bormann/Mährlitz-Galler 2013, 19. For the rigging, see the reconstruction by Landström 1970, 126–127, fig. 377.

143 For the sources, see Moussa/Altenmüller 1971, 27 with n. 160–161, pl. 18–19 and 23; Vinson 1994, 42–43. The image from the Late Period (TT 34, Monthemhet) is probably inspired by an older monument (Cooney 1956, 30).

144 Düring 1995, 120; Boreux 1925, 475; 249–251.

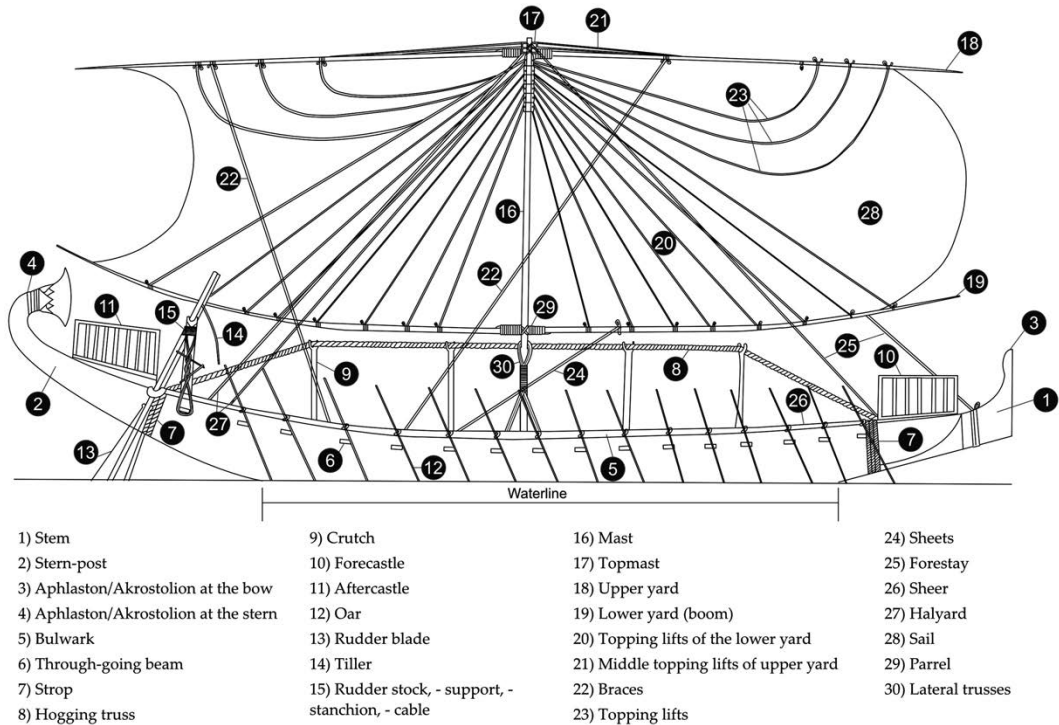


Fig. 6: Terminology of ship parts (after Naville 1898, pl. 73 and 75; Aßmann 1913, 135, fig. 13; Landström 1970, 146–147).

According to Aßmann, another criterion to distinguishing seafaring vessels from Nile boats in depictions is that with the former, the waterline length is larger. He claims that in the case of the sailing ships of Sahure and Hatshepsut's expeditions, this constitutes between 58 and 65% of the ship's length, whereas in depictions of Nile ships, less than half of the ship lies directly in the water.¹⁴⁵ But as Landström has pointed out, the fact that the ships lie very high in the water in such illustrations does not correspond to the real conditions; rather it is a convention of representation.¹⁴⁶ Another of Aßmann's observations can be used as a dating criterion for ship depictions. In the Old Kingdom, as indicated in the reliefs of Sahure, the mast was located in the front of the ship or more precisely, at the end of the first third. Over the course of the time, this position moved further and further back, until finally under Hatshepsut in the New Kingdom, the mast with the square sail was

145 Aßmann 1913, 134–135. The calculations for Sahure's Punt expedition are my own and are based on the drawing at El Awady 2009, pl. 5. For the vessels in the lower register, the part lying in the water comprises only 52% of the vessel's length.

146 Landström 1970, 124; Gil-Artagnan 1994, 52.

placed quite exactly in the center of the ship.¹⁴⁷

As Säve-Söderbergh noted, nautical conditions in the Mediterranean made it possible to rely on bulky ships with a large cargo capacity, while in the Red Sea, a lighter design with a shallow draft was advantageous.¹⁴⁸ According to Samuel Mark, this theory can also be understood on the basis of the ship representations from the time of Sahure.¹⁴⁹ A crucial argument he makes is that the Mediterranean ships were depicted with long planks, which would prove that they were heavy vessels. However, William Edgerton has shown that the published drawings of the Mediterranean ships do not show all the joints between the planks once present in the relief.¹⁵⁰ In addition, there may also have been other joints painted on as many details in Egyptian reliefs were only executed in paint.¹⁵¹ In any case, Edgerton's observation makes it clear that the utmost caution is required to draw conclusions about the structure of the ships from individual details. A closer look also shows that while the lengths of both ships in relief are identical (ca. 1 m), the size of the figures aboard varies noticeably. This gives the impression that the Punt ships are in fact larger than the Mediterranean ships – a point that Mark ignores in his discussion.¹⁵² Although the question of relative size is ultimately difficult to answer, the differences between the depictions of the Mediterranean ships and the Punt ships that Mark has assembled show, in sum, that two distinct varieties of sea-going vessels were depicted in the scenes referring to the Mediterranean and the Red Sea.

5.3 Modern reconstructions of sea vessels and their equipment

5.3.1 Replicas

While several small-scale reconstructions of Egyptian seafaring ships have been made over time,¹⁵³ only two life-size ship replicas exist to date. Both were designed primarily on the basis of the representations of Hatshepsut's Punt expedition in the temple of Deir el-Bahari. The first construction named "Pount" set sail in 1988 on the French Mediterranean coast with the aim of clarifying whether the circumnav-

147 Aßmann 1913, 148. Cf. the archeological evidence from the big Nile boats of the baris-type discovered at Thonis-Heracleion. The masts of these vessels dating to the Late Period were situated in the middle of the hull (Belov 2020, 103).

148 Säve-Söderbergh 1946, 16.

149 Mark 2014, 44.

150 Edgerton 1923, 130–131. Cf. below chap. 5.3.3.

151 Baumann 2020, 349 with fig. 8, and 359.

152 On the sizes of figures as a guideline for estimating other dimensions, see chap. 5.3.3.

153 See e.g. Bormann 2013a: 20, fig. 17; Bormann 2013b: 28, fig. 33–36; Fabre 2005, 93 and 110; Faulkner 1941, pl. 2–4; Partridge 1996, 56, fig. 41; 62, fig. 48; Gil-Artagnan 1975, 38.

igation of Africa with a quarter rudder and square sail, as mentioned in ancient written sources, was possible.¹⁵⁴ In fact, the journey was successfully completed after three years.¹⁵⁵ Nevertheless, the scientific validity for evaluating the performance of ancient Egyptian ships is limited because as Pierce Creasman notes, among other things, the hull was created according to modern criteria.¹⁵⁶ The reconstructed hull measures $20.5 \times 5.12 \times 2$ m displacing 40 t.¹⁵⁷

Especially given the new archaeological finds of ship parts discovered during the 21st century, Cheryl Ward felt able to build a more accurate reconstruction of a full-sized, seaworthy ship.¹⁵⁸ Her model was based on ship parts found in Mersa / Wadi Gawasis and on comparisons with river ships, above all the boat of Dashur from the Middle Kingdom.¹⁵⁹ The similarity of its hull shape to that from the Deir el-Bahari reliefs formed the basis for the reconstructed shape, which was finally adjusted to conditions on the open sea. Furthermore, overlaps in terms of proportions between the relief representations and certain archaeologically proven parts of the ship justified the reliance on the reliefs. Named “Min of the Desert” after the main god of Coptos and the Lord of the Eastern Desert, the ship measures $20.3 \times 4.9 \times 1.7$ m and with a loading capacity of 17 t, it displaces 30 t. The boat was tested for a week on a 135 km trip from Safaga to Mersa Allam, anchoring each night in protected lagoons. The average speed was 6 knots, the maximum speed reached 9 knots with up to 25 knots in the wind. Thereby 2.5–3 m high swell was mastered, only one wave sloshed over the deck.¹⁶⁰ Although the data in ancient literary texts must always be taken with a grain of salt, in view of these figures, the particulars given in the *Tale of the Shipwrecked Sailor* could give an indication of the breaking point of Egyptian seafaring ships. In this account, an exceptionally large surge of 8 cubits (about 4 m)

154 On the circumnavigation of Africa under Necho and the possible Egyptian sources for this event, see Schulz 2016, 44–47; Schulz 2018.

155 Gil-Artagnan 1994, 165.

156 Creasman 2015, 23–24. Cf. Gil-Artagnan 1994, 77.

157 Gil-Artagnan 1994, 54.

158 Ward 2012b: 223.

159 Even though the structure of the boats on display largely corresponds to the original findings, Clarke (1920, 7) pointed out the problem that the modern restaurations were not clearly highlighted, and so that they were already indistinguishable from the original parts at the time. In recent years, more than 60 Nile boats were discovered at Thonis-Heracleion that offer new insight into Egyptian shipbuilding techniques, see Fabre/Belov 2011 and Belov 2020.

160 Ward et al. 2008; Couser et al. 2009; Ward 2010, 46–48; Ward 2012b: 223–225; Ward et al. 2012.

caused the mast to break (**source 25**).¹⁶¹ Surprisingly, this figure coincides with the actual maximum wave heights that can rarely occur in the Red Sea,¹⁶² which lends credibility to certain details in the story. Even if some elements are still hypothetical reconstructions, the construction and testing of the “Min” is a pioneering work in the field of ancient Egyptian navigation, upon which the seaworthiness of a reconstructed ship’s hull could be tested practically for the first time.¹⁶³

5.3.2 *Ship size*

The number of sources concerning the size of Egyptian sea ships is relatively limited.¹⁶⁴ The most concrete information about the size of the expedition ships so far is provided by the ship parts found at the Red Sea ports, which are described in detail above (see chap. 5.1.3). The floor frame from Wadi el-Jarf and the rudder blades from Mersa Gawasis constitute the most significant of the finds. Although these components are not enough to specify the exact size of the ships, they nonetheless provide indications of ships of various sizes. In one case, the ship is assumed to be about 13.5–15 m in length, in another case about 20 m, whereas another type of ship had apparently been at least 30 m long. A ship-shaped pit dating back to the Old Kingdom was also found at the port of Ayn Sukhna, which may have been used to assemble or dismantle disused ships.¹⁶⁵ If this interpretation is correct, its length of 17.50 m would provide at least a vague indication of the size of the vessels used on site. With regard to the graffiti from the Sinai, no reliable statements can be made about the size of the ships.¹⁶⁶ Even though the ships depicted in the temple reliefs are of much finer quality, the reconstruction of the size of the ships is no less problematic. The following chapters will deal with them in more detail.

5.3.2.1 Sahure’s ships

The comparatively recent discovery of the ship reliefs referring to a Punt expedition sent by Sahure (ca. 2428–2416 BCE) has naturally not been analyzed as frequently as

161 Blackman 1932, 44, l. 10 [104–105].

162 Deutsches Hydrographisches Institut 1963, 89–91.

163 For this, see Couser et al. 2009. For the evaluation of the project, cf. also Creasman 2015, 24–25.

164 Cf. Marcus 2007, 154–157.

165 Abd el-Raziq et al. 2016, 43; Tallet 2015, 45 with fig. 25.

166 Pomey (2012, 12–13) assigns both the ship parts of Ayn Sukhna and the ones from the graffiti to the Dashur-type. This classification is more about similarities in the construction method and not about size. While the actual boats found at Dashur were just 10 m long (Ward 2000, 83–102; Clarke 1920), the Ayn Sukhna vessels appear to have been considerably larger.

the depictions of this king's Mediterranean fleet published a hundred years earlier. One study is by Samuel Mark, who compares the representations of the Mediterranean ships from the pyramid temple of Sahure with those of the Punt ships from the causeway to that temple. Although the ships have an almost identical length in relief, the ships from the Punt context have a shallower shape.¹⁶⁷ Mark also notes various differences in design elements such as the mast and hogging truss and concludes that the Punt ships were smaller and lighter than the Mediterranean ships.¹⁶⁸ Since no specific dimensional data have yet been proposed for Sahure's Punt ships, the following will briefly consider Mediterranean ships as a reference.

Michael Bormann assumes a length of 30 cubits (15.75 m) and a width of 7 cubits (3.68 m) for Sahure's Mediterranean ships. However, he provides no justification for the selected length-to-width ratio of 4.3 : 1. The basis for calculating the length is the distance between two oarsmen (interscalium/interscalmium), which Bormann sets at 2 cubits (1.05 m) each,¹⁶⁹ probably because Vitruvius mentions this number for the Roman period (Vitr. 1,2.21–24).¹⁷⁰ The section of the seven oars calculated in this way is then set in relation to the total length. Thus, he calculates a length of 15.9 m, which corresponds to approximately 30 cubits. The length of the mast in relief corresponds to about two-thirds of the length of the ship, which is why he assumes a measurement of 20 cubits (10.5 m) for it.¹⁷¹ A similar calculation was already been made by Björn Landström, who also assumes a true-to-scale image and bases his calculation on an interscalium of 2 cubits. The result of 17.5 m ship length, however, deviates slightly from Bormann's result. The ship expert derives the reconstructed width of the boat of 4 m from the proportions of a wooden model, which in his opinion represents the same type of boat.¹⁷² Shelley Wachsmann considers much larger dimensions to be conceivable, as the number of oars may have

167 The ship representations in the pyramid temple are 1.06 m long (Aßmann 1913, 133). According to the drawing, the same measurement applies to the section from bow to stem of the completely preserved ship at the causeway (El Awady 2009, pl. 5). The superstructure at the stern protrudes approx. 5 cm beyond the hull, resulting in a total ship length of approx. 1.11 m. Mark (2014, 36) gives 1.024 m, but also incorrectly refers to a ship (El Awady 2009, pl. 12) that, first, is not complete and, second, does not refer directly to the Punt trip. In any case, due to the incorrect dimensions, the superimposition of the two ships depicted in Mark 2014, 36, fig. 4, is not correct. Still, his comment that the Punt ships are depicted flatter than the Mediterranean ships remains valid.

168 Mark 2014.

169 Cf. Vinson 1994, 36 and the similar calculations mentioned further below.

170 For the problem with this calculation, see n. 208.

171 Bormann 2013a: 20.

172 Landström 1970, 65.

been reduced in favor of depicting the figures in an oversized manner.¹⁷³ Samuel Mark also assumes the Mediterranean ships to be larger. He even considers it possible that they correspond to the type of ship mentioned in the Palermo Stone, which had a length of about 52 m (100 cubits).¹⁷⁴ Estimates for the size of Mediterranean ships thus vary significantly; they range from just under 16 to 52 m.

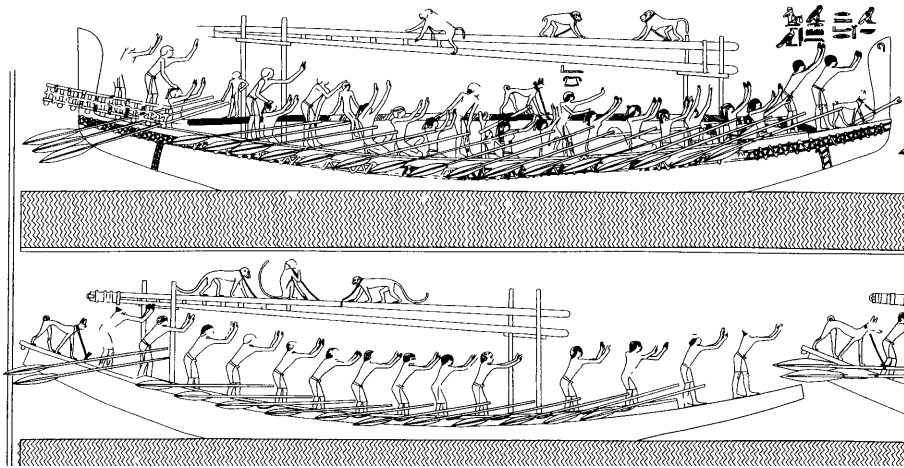


Fig. 7: Sahure's ships (after El Awady 2010, 199, fig. 159).

5.3.2.2 Hatshepsut's ships

Various estimates have been proposed for the dimensions of the ships depicted in the mortuary temple of Hatshepsut, although their basis is not always explained. It can be assumed that the size ratios between the ship and the crew were always taken into account.¹⁷⁵ Where available, the justifications for the dimensional data are explained below before the results are summarized in table 1.

Björn Landström has made several reconstructed drawings of a Hatshepsut-era ship. The shape of the hull is not taken one-to-one from the relief depictions but is rather based on that of ship models from the New Kingdom. Landström does not present an exact calculation of the length but the dimensions can be extracted from the drawings. His reconstruction has a length of about 25 m and a width of about 5 m, making the length-width ratio 5 : 1.¹⁷⁶

Michael Bormann's calculation is based primarily on an interscalium of the 15

173 Wachsmann 2009, 18.

174 Mark 2014, 44.

175 Cf. e.g. Herzog 1968, 74.

176 Landström 1970, 122–127. Cf. also Gronen 1979, pl. 1.

rowers each measuring 2 cubits (1.05 m), to which the length of the bow and stern is added proportionally. The resulting estimate of the length of 25–26 m serves him as an approximate point of reference. Due to the fact that ship lengths in Egyptian texts are often given in decadal cubits, he assumes 50 cubits, which corresponds to 26.25 m. A length-to-width ratio of 5 : 1 is assumed based on older research, which is not explicitly cited.¹⁷⁷ Consequently, the ships would have had a width of 10 cubits or 5.25 m.¹⁷⁸ A similar calculation using an interscalium of about one meter was made by Shelley Wachsmann, but with the caveat that the number of rowers could also just be a convention. The length of her reconstruction is about 23 m.¹⁷⁹

The reconstruction of the life-size ship by André Gil-Artagnan's team takes the drawings as a close model. Contrary to many other scholars, they calculated with an interscalium of 75.6 cm. A close examination of the relief revealed that the spacing is inconsistently executed. Depending on which measurement was taken as the standard, the researchers obtained a ship length of at least 15.25 m and at most 20.15 m as a result. Since the latter value would be more in line with the overall impression of the representation, they finally settled on a length of the reconstruction of 20.5 m. The width of the hull was set at 5.12 m based on practical considerations such as flow characteristics.¹⁸⁰

Cheryl Ward and her team calculated that the ships of Hatshepsut were about 20 m long based on the representations in Deir el-Bahari. As with the previous project of Gil-Artagnan, the basis for this is the assumption that the ships “are drawn to a reasonable degree of accuracy in terms of scale related to the human figures depicted.”¹⁸¹ The width of the hull was calculated on the basis of the Middle Kingdom boat find from Dashur, resulting in a width of just under 5 m and a length-to-width ratio of 4 : 1.¹⁸²

Frédéric Servajean looked at the ship dimensions listed in Egyptian texts and based on the measurements of cargo ships attested therein, considers a length-to-width ratio of 3 : 1 to be more likely.¹⁸³ For the calculation of the length, he takes the height of a sailor as a yardstick, which seems justified to him due to the assumption

177 He probably refers to Landström (see above).

178 Bormann 2013b, 25.

179 Wachsmann 2009, 24.

180 Gil-Artagnan 1994, 51–54. Earlier calculations resulted in a length of ca. 25 m (48 cubits) and a width of 4.5 m (9 cubits), see Gil-Artagnan 1975, 35–36.

181 Couser et al. 2009.

182 See in detail chap. 5.3.1.

183 Servajean 2016, 197–205. Vinson 1997 also considers a ratio of 3 : 1 for Egyptian ships to be the common measure.

“que tous marins disposent d’une taille similaire”.¹⁸⁴ For different body sizes (1.65 m, 1.70 m, 1.7 m), he first calculates a ship length that lies in the narrow range of approximately 19.5–20.5 m. Within this spectrum, he searched for a whole cubit measurement, which, moreover, is divisible by three due to the above proportions. He therefore assumes 39 cubits, according to which the ship would have been 20.39 m long and 6.79 m wide.¹⁸⁵

	Length	Width	Length-width ratio	Draft
Barnett ¹⁸⁶	ca. 21 m (70 feet)	ca. 5–5.5 m (17–18 feet)	ca. 4 : 1	ca. 1.2–1.5 m (4–5 feet)
Kitchen ¹⁸⁷	ca. 21–30.5 m (70–100 feet)	ca. 6–7.5 m (20–25 feet)	ca. 3.5–4 : 1	1.5–2 m (5–7 feet)
Bormann	26.25 m (50 cubits)	5.25 m (10 cubits)	5 : 1	
Ward	ca. 20 m	ca. 5 m	4 : 1	
Landström	ca. 25 m	ca. 5 m	5 : 1	ca. 1.4 m
Wachsmann	ca. 23 m			
Sølver ¹⁸⁸	ca. 30 m	ca. 8 m	3.75 : 1	ca. 1.5 m
Servajean	20.39 m	6.79 m	3 : 1	ca. 1 m (2 cubits)
Partridge ¹⁸⁹	ca. 25 m			
Gil-Artagnan	20.5 m	5.12 m	4 : 1	1.4 m

Tab. 1: Summary of calculated ship dimensions.

Overall, the presented estimates of ship length are in the range of about 20–30 m. Given that most ancient shipwrecks were no longer than 30 m,¹⁹⁰ these dimensions do not seem unrealistic. However, if one believes the naval architect and historian of naval engineering Jean Boudriot, 30 m is far too large. According to him, the maximum length for such a single-masted ship with one sail as is depicted in the temple of Deir el-Bahari was about 20 m.¹⁹¹

¹⁸⁴ Servajean 2016, 205.

¹⁸⁵ A sailor would thus be 1.73 m tall, which is relatively large in view of the average height of 1.61 m for a male individual during the New Kingdom (Habicht et al. 2015, 521–522).

¹⁸⁶ Barnett (1958, 223) does not present any justification for these measurements.

¹⁸⁷ Kitchen 1971, 195.

¹⁸⁸ Sølver 1936, 454.

¹⁸⁹ Partridge 1996, 60 & 2010, 378.

¹⁹⁰ Casson 1971, 189–190; Vinson 1997, 71.

¹⁹¹ Quoted at Gil-Artagnan 1994, 51.

5.3.4 Methodological problems in the analysis of ship representations

It was pointed out earlier that the detailed illustrations in the Punt reliefs from the mortuary temple of Hatshepsut can only be explained by the fact that artists took part in the expedition and documented what they had seen. It would thus be conceivable that the depictions of the ships were also drawn on the basis of the artists' observations.¹⁹² The numerous constructive details of such representations have led many scholars to assume an extremely faithful reproduction of reality. For example, the rigging on Hatshepsut's ships is so accurately depicted that Ward was able to incorporate this element into the replica of the Punt ship. Furthermore, as the above calculations of the ship dimensions show, it is generally assumed that the illustrations are true to scale. Ward further states that individual ship parts recovered at Mersa Gawasis have the same proportions as these elements in the reliefs of Hatshepsut (see above).¹⁹³ However, since physical finds like the oar blades are fragmentary and as the corresponding parts in the reliefs are sometimes not completely visible because they are partially hidden by water, such comparisons cannot be taken as entirely accurate.¹⁹⁴

As a general rule, all analyses of the shape and dimensions of the ships' hull based solely on relief images must be treated with great reservation.¹⁹⁵ The basic mistake is to read the reliefs like technical drawings. Some researchers implicitly assume that the Egyptian artists actually had the exact dimensions of ships and reproduced them in their drawings exactly to scale. However, after all that has been learned about Egyptian art in the last 200 years, it is clear that such an approach is completely misguided.¹⁹⁶ In the field of architecture too there were no scale drawings in Pharaonic times.¹⁹⁷ Already in 1920, Somers Clarke cautioned against taking boat models and reliefs as true-to-scale and as absolutely realistic illustrations simply because of how detailed they are.¹⁹⁸ Although these warnings were subse-

192 Sølver 1936, 436; Mark 2014, 34; Wachsmann 2019, 13–15 According to Francis Breyer (2014), however, parts of the scenes may have been taken from old pattern books. Cf. also Wachsmann 2019, 18.

193 Ward 2010, 46; Ward et al. 2008, 123–124; Ward et al. 2012, 4; Ward 2012b, 223; Couser et al. 2009, 2.

194 On the steering oars, see Zazzaro 2007, 153 & 2009, 7.

195 Critically also Breyer 2016, 380. For such an attempt, however, see most recently Servajean 2016, 207–211.

196 Cf. Baines 2015, 7. In Egypt, a canon of proportions was established early on, but this primarily concerns the proportions of the figures among themselves (Robins 1994) and not the size of the figures in relation to the objects surrounding them.

197 Fauerbach 2014, 54–57.

198 Clarke 1920, 40 and 45–46. See also Edgerton 1923, 116, "Ancient Egyptian pictures were

quently repeated by various researchers,¹⁹⁹ they were only half-heartedly heeded. Among those listed above who have made a calculation of the ships' dimensions, Kenneth Kitchen is aware that the proportions of the representations do not allow for exact calculations but that they could nevertheless serve as rough guides.²⁰⁰ The fact that this assessment can be a fallacy will be analyzed in more detail below.

Methodological problems with regard to analyzing the visual sources touch on various areas:

- 1) The first point to consider how the ancient Egyptian artist conceptualized the representation, clarifying which artistic conventions shaped the final design.
- 2) Next, one must investigate the artistic realization of this design and the surviving state of preservation.
- 3) Finally, one must evaluate how accurately modern scientific publications reflect the ancient data.

Fundamentally, it should be recognized that the representations in the pyramid complex of Sahure and the mortuary temple of Hatshepsut are embedded in a religious context. They are thus subject to certain conventions and are the products of an artistic canon;²⁰¹ never were they intended to serve as scaled illustrations for shipbuilders.

First and foremost among these conventions is the spatial arrangement of scenes, which depends on how, for example, spatial depth and narration are depicted in Egyptian art. The conventions also determine which elements are mapped, which are omitted, and also which are given special emphasis. As explained in more detail below, with regard to the considerations of fleet size, knowledge of these conventions of Egyptian imagery is critical for understanding and interpreting the illustrations.²⁰² Two elements are regularly used as a basis for calculating the size of the ships: the number of oars with a spacing of about 1 m, which is derived from other cultures and the size of the sailors.²⁰³ However, in such representations, both elements are dependent on each other, with the size of the figures determining how

not drawn to scale.”

199 For example, Säve-Söderbergh (1946, 11–12) and Wachsmann (2009, 11–12 and 2019, 42).

200 Kitchen 1971, 195.

201 This knowledge nevertheless did not prevent Samuel Mark (2014, 35–36 with fig. 4) from superimposing the outlines of the Punt ships and the Mediterranean ships of Sahure in order to compare their construction plan.

202 Cf. Wachsmann 2019, 4–6; 48 and 50–52.

203 In addition to the authors discussed above, the procedure is also found in Tallet 2017, 157–158.

many rudders can be mapped.²⁰⁴ The question is what the artist wanted to focus on. In the naval battle scenes from Medinet Habu, for example, the warriors of the Sea Peoples are depicted disproportionately larger than all other elements (i.e. the ships and the Egyptian sailors), allowing the artists to show the various details of their equipment.²⁰⁵ In this case, the size ratio of the figures to each other is a way to highlight their relative importance in the particular context presented.²⁰⁶ In the ship scenes of Deir el-Bahari too the crew members clearly have different body sizes (fig. 8) – this fact warns against the use of the figures as a scale.²⁰⁷ Similarly imprecise is the use of the interscalmum as a scale. One reason for this is that the exact spacing between the oars is unknown for Egyptian boats of this type.²⁰⁸ And even if the relief was executed true-to-scale, the interscalmum in the representations varies, resulting in widely deviating calculations of the ship's length.²⁰⁹

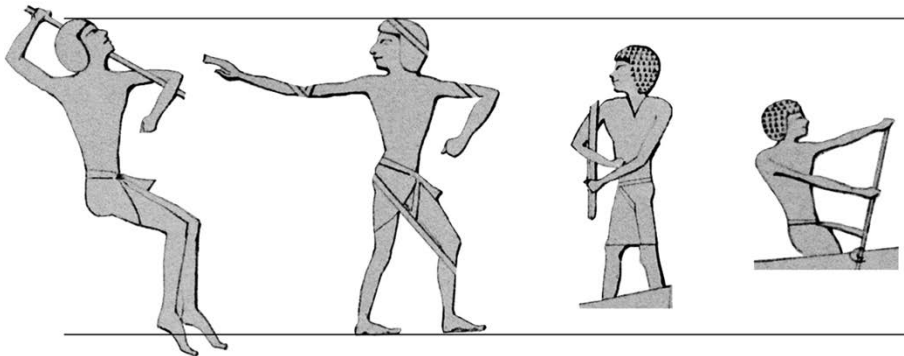


Fig. 8: Persons of different sizes on one ship (after Naville 1898, pl. 73).

204 Cf. Wachsmann 2009, 18.

205 Baumann 2020, 358.

206 Baumann 2020, 358 with further references. For other depictions of ships with crew members shown in different sizes, see e.g. Landström 1970. On different scales in one picture, see Schäfer 1974, 230–234.

207 See also Mark 2014, 44. Cf. Servajean (2016, 205), who legitimizes his calculation of ship size using the sailors as a yardstick based on the assumption that they would all have the same size.

208 Calculations are usually made with an interscalium of two cubits (ca. 105 cm), very likely because Vitruvius mentions this number for the Roman period (Vitr. 1.2.21–24). However, the length of two Roman cubits (89 cm) (Bockius 2013, 34–35) differs greatly from the Egyptian measurement; moreover, there is no evidence that Egyptian boat builders used whole cubit measures to arrange the rudders.

209 See above and Gil-Artagnan 1994, 51–54.

Another consideration to keep in mind is the technical aspects related to the production of the reliefs themselves. In many cases, only the engravings have survived, while the paint layer has been lost. One might initially assume that the outlines of the reliefs and those of the overlying painting match perfectly since the painter would have considered the carved lines to be binding; this, however, is not always the case. Painters frequently disregarded these boundaries and chose different outlines with different proportions. Therefore, the reliefs that have survived today reflect only a preliminary stage of the final polychrome work of art.²¹⁰ Edgerton's examination of the ship reliefs from the pyramid temple of Sahure published in 1913 shows how complex the interpretation of the findings can be. His studies have revealed that a few essential details were engraved in ancient stucco repairs. However, since these became detached from the stone shortly after discovery, they were not recorded on the subsequent, meticulously prepared drawing for publication.²¹¹ Further details had been added by the ancient artists only with the final painting of the reliefs. With the loss of polychromy, a great deal of information about the appearance of the ships was thus also lost.²¹²

Despite their often fragmentary state of preservation, the ship representations discussed here display a wealth of detail that belies numerous inaccuracies²¹³ and omissions.²¹⁴ Therefore, they should by no means be taken as perfect reflections of reality.²¹⁵ Another aspect to keep in mind is that scholarly interpretations are often made on the basis of the drawings produced for the publications, simply because high-resolution photographs were not integrated into these works. This unfortunately affects both the old and the more recent publications of the main sources discussed here. The interpretations are thus based on an already subjective reproduction of the findings, which, as briefly indicated above in the case of the reliefs from Deir el-Bahari, do not always correspond to modern epigraphic standards. For example, Howard Carter, who drew the Deir el-Bahari ship scene for Naville, refrained from measuring certain fixed points.²¹⁶ Consequently, the bases for interpretation are already flawed or at the very least inaccurate and thus themselves

210 See e.g. Der Manuelian 2003, pl. 2; Arnold 1999, 49, fig. 37.

211 Edgerton 1923, 130–131.

212 Baumann 2020, 349 and 359; Servajean 2013, 270; Wachsmann 2009, 29 and 170–171.

213 For example, locks of hair are only engraved for some sailors. For a photo, see Ward 2012a, 61, fig. 1.

214 Wachsmann 2009, 11–12; Mark 2013, 270 and 276. For ship parts that were not depicted but must have been present, see Vinson 1994, 38.

215 Clarke 1920, 45; Wachsmann 2009, 23.

216 Breyer 2014, 63–68.

hold great potential for misinterpretation.²¹⁷ Fig. 9 contrasts a recent drawing that is based on a photograph with an illustration from Naville's publication and thus demonstrates the level of inaccuracy in the latter.

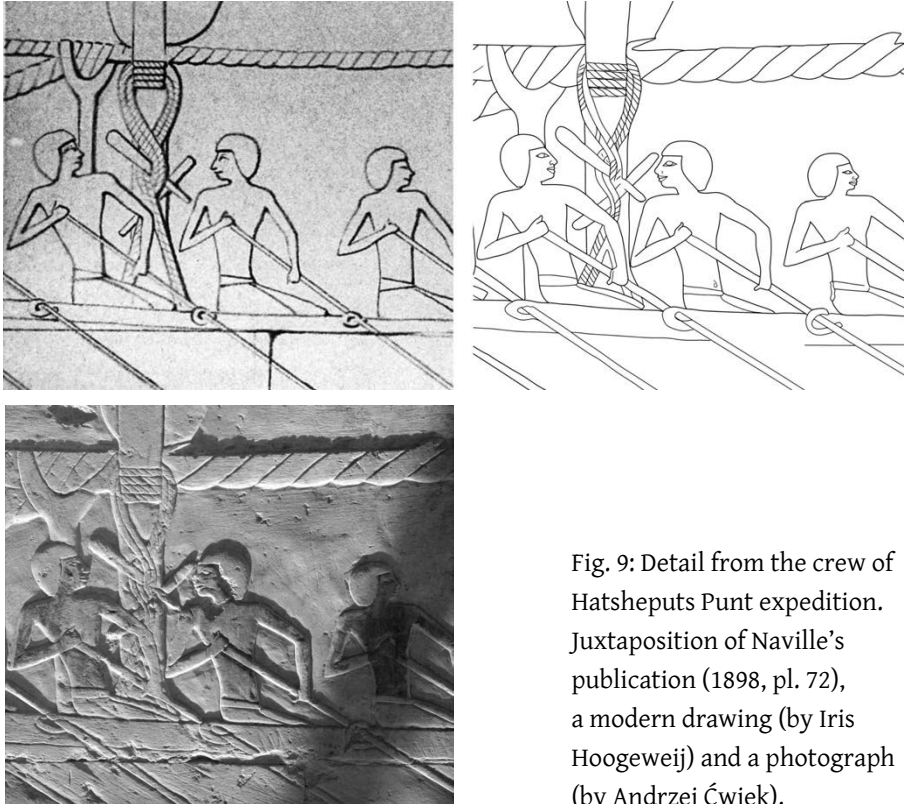


Fig. 9: Detail from the crew of Hatshepset's Punt expedition. Juxtaposition of Naville's publication (1898, pl. 72), a modern drawing (by Iris Hoogeweyj) and a photograph (by Andrzej Ćwiek).

6. The expeditions

6.1 Frequency

When thinking about the frequency of expeditions across the Red Sea, it is necessary to differentiate between the individual destinations, i.e. the mines in the Sinai, Timna and Punt. Exact answers are certainly not possible due to the fragmentary transmission of Egyptian sources. Depending on the condition of the Egyptian state and its political ambitions, it can generally be assumed that there were periods with frequent trips as well as periods in which there were hardly any or even no under-

217 Cf. Wachsmann 2019, 23. See however above Servajean's assumption that all figures are the same size, which may be based on the analysis of Mariette's unfortunately very inaccurate rendering.

takings.²¹⁸ As already explained above, in the New Kingdom, a Sinai expedition took place at least every four years, while later, there is a gap in the sources for several decades.²¹⁹ For the period from the Old Kingdom to the New Kingdom, 101 expeditions to the Sinai are recorded, although, as Tallet rightly points out, the number of actual expeditions was probably much higher.²²⁰

Since hardly any evidence of Punt trips was known for a long time, it was supposed early on that they were very rare. Sølver, who assumed that there was no contact with Punt under Hyksos rule (ca. 1645–1530 BCE), therefore called Hatshepsut's expedition a "rediscovery of Punt".²²¹ As more and more source material became available for study in the 20th century, Säve-Söderbergh proposed that expeditions were regular and that Puntite traders also traveled to Egypt; if not all, at least most pharaohs would have carried out an expedition, he concluded.²²² Since then, the source situation has improved considerably, especially due to the discovery of the harbor at Mersa Gawasis, so that at least for the 12th Dynasty, the frequency of expeditions can be estimated. During this phase, which lasted about 212 years, the port served as the starting point for at least twelve expeditions to Punt. On average, therefore, a trip to the south was made at least every 18 years.²²³ As the density of sources remains far thinner for the remaining periods of pharaonic history, such a calculation cannot be made.

6.2 *From the Nile Valley to the coast*

The geographic circumstances of Egypt, with the Red Sea coastline far from the heartland, meant that sea travel there could only be undertaken with enormous cost and logistical effort. This explains the fact that all verifiable ventures appear to have been state-organized. The participants, ship parts, food and all equipment had to be transported from the Nile Valley to the coast. In order to keep the distance through the desert as short as possible, the starting point of the expeditions in the Nile Valley was chosen depending on the location of the seaport. In the extant sources, Coptos is mentioned more often, where the ships were first built and finally disassembled again into individual parts for easier transport.²²⁴ Depending on the scale of the

218 See also Tallet 2015, 57.

219 See above chap. 3.3; Hikade 2001, 10–24; 273.

220 Tallet 2015, 57.

221 Sølver 1936, 454.

222 Säve-Söderbergh 1946, 17–29. For the Puntite merchants, see also Servajean 2017; Breyer 2016, 414–417.

223 Bard/Fattovich 2018, 69–72 and 85–86.

224 On this, see Breyer 2016, 339–340; Creasman/Doyle 2010, 14–16.

undertaking, a considerable caravan of several hundred to several thousand people and donkeys serving as transport animals would have set out. We may assume that the caravan traveled as much as possible as a cohesive unit because only in this way could the safety of the participants and materials be guaranteed. The report of the high official Henu is particularly informative in this regard. He describes that a military escort was formed from various parts of Egypt.²²⁵ Moreover, as Säve-Söderbergh pointed out, this report mainly emphasizes the dangers and the logistical challenges of desert travel, while the voyage on the Red Sea itself is mentioned almost in passing.²²⁶

Depending on the port targeted, the expedition party reached the coast after about four to nine days of marching.²²⁷ In addition to the route on foot, the possibility that the Red Sea was already connected to the Nile Valley by a canal in Pharaonic times has long been discussed. It would have allowed the expeditions to comfortably reach the open sea by ship. This thesis, which goes back to a comment in Strabo 17,1. 26, is still wide-spread today,²²⁸ even though clear arguments against it are put forward again and again.²²⁹ Newberry already pointed out the known text sources

225 Couyat/Montet 1912, 82–83, pl. 31, no. 114.

226 Säve-Söderbergh 1946, 11–12. Cf. the report of the high official Uni (*Wni*), who served under Pepi I and Merenre that emphasizes the preparations and the return of a military expedition, omitting details about the major purpose of the journey (Burkard/Thissen 2003, 43). On travel through the Eastern desert, see the contribution of Reinard in this volume.

The logistical challenges included, above all, the supply of water, for which Henu had wells dug (cf. Breyer 2016, 159–160. For supplies in general, see Breyer 2016, 357–366). This circumstance may have several causes. On the one hand, the existing wells could have become unusable; on the other hand, one could see in it an indication that the infrastructure at that time was not yet particularly well developed or at least that it was not sufficient for the size of the expedition.

227 As Colin Adams (2007, 44–45) points out, the speed of travel varied significantly depending on the intention of the traveler. The loading of the transport animals also plays an important role. According to Pliny, the 257-mile (about 380 km) journey from Coptos to Berenice took 12 days (Plin. nat.hist. 6,26.103). This means that about 32 km could be covered per day. For a heavily packed donkey caravan, on the other hand, we can assume about 25 km/day (Paprocki 2019, 64–65), which is in line with the marching speed of the Egyptian army (Redford 2003, 202). Thus, 15–30 km daily workload can be assumed as a rough guideline for land transportation (cf. Adams 2007, 45). Breyer (2016, 363), however, assumes a maximum of 10–15 km/day for the route through the Eastern Desert.

228 E.g. Breasted 1906b: 103, § 248; Köster 1923, 130; Sølvér 1936, 446–451 and 454; Faulkner 1941, 9; Rougé 1988, 61–62; Meeks 2002, 319–320; Fabre 2005, 76–83; Servajean 2016, 191.

229 E.g. Posener 1938; Sayed 2003.

that show that the ships were transported to the coast in individual parts,²³⁰ a fact that has since been confirmed by archaeological findings at the Red Sea ports (see above). Most recently, Francis Breyer has summarized the discussion and has argued decisively against the existence of the canal in Pharaonic times. Only from the Persian period can its existence be actually proven.²³¹

Arriving at the port facilities of the coast, it was necessary to put back into operation the infrastructure that ideally had already been established during previous ventures.²³² It was then possible to use the parts deposited in the rock galleries to construct the ships.²³³ Conceivably, an advance party scouted out whether the magazines were intact before the start of the expedition, so that only replacements for the parts that had become unusable had to be transported to the shore. The assembly of the vessels possibly took place in ship-shaped pits, which were dug for this purpose.²³⁴

6.3 *The journey on the sea*

Depending on whether the mines in the Sinai and Timna were to be approached, or whether the journey was to depart for the distant land of Punt, the undertaking was planned at a different time of year. The dated inscriptions referring to trips to the Sinai from the Old and New Kingdoms show that the hot summer months were avoided for mining activities.²³⁵ The northern Red Sea is dominated by northerly winds all year round, so the location of the port has a great impact on the sailing time. The more or less east-west crossing from Wadi el-Jarf to Tell Ras Budran, about 50 km long, was possible within one day. The distance between Ayn Sukhna and this bridgehead on the Sinai, which was about twice as long, took about 14–18 hours according to Pomey.²³⁶ At least on the way back north, however, the journey was disproportionately longer and much more arduous as it was often necessary to row into a headwind. These wind conditions were certainly a reason to head for the port of Mersa Gawasis, located much further south, as the end point on return trips from Punt.²³⁷ Even if the final destination of the journey was in Lower Egypt, after cross-

230 Newberry 1942, 64.

231 Breyer 2016, 348–349; Kuhrt 2010, 486; Schmitt 2009, 150; Cooper 2009.

232 For on-site activities, see Breyer 2016, 366–378; Bard/Fattovich 2018.

233 Breyer 2016, 413–414.

234 Abd el-Raziq et al. 2016, 43; Tallet 2015, 45 with fig. 25.

235 Hikade 2001, 16. Based on the inscriptions, Tallet (2015, 57–59) assumes the period from the end of March to the end of July. For the Old Kingdom, see Eichler 1993, 152–153.

236 Pomey 2012, 12–13. He calculates with a cruising speed of 4 knots.

237 Cf. Sølvér 1936, 451.

ing the desert, it was more convenient to continue on the northward flowing Nile and perhaps save several weeks of arduous rowing along the way.²³⁸

The journey to Punt, located far to the south, was much longer than to the Sinai and had to be planned in accordance with the wind and current conditions that change throughout the year. The Egyptian sources all point to the location of Punt being on the African coast, with increasing evidence pointing to the border area of Eritrea, Sudan and Ethiopia as the core. Another travel destination that appears in the sources is Bia-Punt (*Bī-Pwnt*).²³⁹ Bard and Fattovich consider this an area somewhat more northerly than Punt proper, namely in the hinterland of Port Sudan and the highlands of northern Eritrea.²⁴⁰

Contrary to popular belief, Punt is not a narrowly defined land; rather, the Egyptian sources reveal that the toponym describes a very broad area under which several regions with their different products were subsumed. “Punt” is therefore comparable to such vaguely defined terms as the Levant or the Far East. Considering its proximity to the Eritrean coast, it is not surprising that Egypt was also in contact with Arabia. As Köster explains, the only important thing during the crossing was to pass the outer coral reefs before nightfall.²⁴¹ It is therefore possible that over the course of time, the southern Arabian coast, together with the incense-rich regions located in the hinterland, were also understood to be part of Punt.²⁴²

Overall, the Red Sea is divided into a wide central channel and two narrow channels on the sides between the shore and the reefs/islands. It is highly probable that the ancient Egyptian voyages took place close to the coast because there was a much calmer fairway.²⁴³ This meant, however, that close attention had to be paid to numerous coral reefs lying just below the water’s surface. These reefs were easily

238 Cf. Kitchen 1971, 195, and Köster (1923, 130), who states that it would have taken several weeks to row from al-Qusair to Sinai.

239 On this term, see Breyer 2016, 73–74.

240 Bard/Fattovich 2018, 172–175.

241 Köster 1923, 130.

242 For a more detailed discussion, see Baumann 2018, 318–327. A relatively recently discovered and so far unnoticed source that also points to a primarily African location for Punt is a historical inscription stating that Punt entered into a coalition with Kush, Wawat, and other Nubian groups during the Hyksos period (see Davies 2003, 53 with n. 9; Michaux-Colombot 2014, 516). For further literature on the controversial discussion regarding the location of Punt, see Meeks 2018 and Taterka (in press).

243 For considerations that, at least for the return journey, the middle channel may well have been used, see Sølvér 1936, 445. However, there are concerns about this given the nature of the vessels, cf. Bard/Fattovich 2018, 185. Ward 2012b: 225 assumes that the return journey followed the Arabian coastline. See also Bard/Fattovich 2018, 184.

visible from an elevated position during the day, although depending on the weather, visibility could be severely impaired by desert dust and haze. When the dominance changes between the north and south winds twice a year, storms and squalls occur particularly often in the southern part of the Red Sea, leading to poor visibility, especially near the coast.²⁴⁴ The strong cross currents that could reach approx. 1–3 km/h also had to be taken into account. Sailing at night was therefore too dangerous and ships had to call at a sheltered bay every evening.²⁴⁵ In view of the barren coastal landscape, the replenishment of water supplies had to be well planned as well, requiring knowledge of the possible wells and water stations.²⁴⁶

Since the wind and current conditions reverse during the year, especially in the southern Red Sea, the departure to the south could not be chosen arbitrarily. From about June until September, northwest winds dominate, causing a southward surface flow. Towards October, at least in the area south of 20 degrees latitude, i.e. up to about the height of Port Sudan, the winds turn and blow from the southeast. During these wind conditions, which prevail until May, the current also flows northward, with southeast winds dominating, especially from November to April.²⁴⁷ Accordingly, the departure to Punt could reasonably be made from the beginning of summer, whereas the return trip could be made in October at the earliest.²⁴⁸ This timetable is also reflected in Roman sources, which give a period from June to September for the departure towards Bab al-Mandab, with some preferring September as the starting date.²⁴⁹ If Henu made his inscription on the outward journey, this date coincides with his expedition (see above) in the Middle Kingdom.²⁵⁰ The advantage of such a start date was that the unsettled weather of the summer combined with at times extreme humidity and heat without nightly cooling, could be avoided.²⁵¹ In sum, there was a certain time window for the departure as well as for

244 Especially the period from March to May is highlighted here (Rasul et al. 2015, 23; Great Britain Hydrographic Office ⁵1900, 10 and 16). The second change of winds takes place in October. On storms, see also Sølvér 1936, 439–446; Rougé 1988, 73; Deutsches Hydrographisches Institut 1963, 87–89.

245 Köster 1923, 126–127; Kitchen 1971, 194–202; Sanlaville 1988, 17–21; Degas 1995, 219–227; Fabre 2005, 38–40 and 83; Breyer 2016, 147–156, Servajean 2018, 147–148.

246 Sølvér 1936, 444; Servajean 2016, 215–216 and 218; Servajean 2018.

247 Rasul et al. 2015, 22–23. Great Britain Hydrographic Office ⁵1900, 7–10; Deutsches Hydrographisches Institut 1963, 86–87.

248 Köster 1923, 128–129; Kitchen 1971, 194–195. See also the references given in n. 245.

249 Bradbury 1988, 128.

250 See most recently Bard/Fattovich 2018, 167; Breyer 2016, 395.

251 Deutsches Hydrographisches Institut 1963, 91–92. Sølvér 1936, 439–446 also notes that during his time, navigation virtually ceased during the summer months on the Red Sea.

the return journey. Depending on how long of a stay was intended,²⁵² the travel dates could be moved within this window. According to Sølver, however, the return trip north in the spring was particularly favorable, since the southerly winds at this time sometimes reached as high as the 25th parallel and sometimes even as far as Suez, so that it was possible to reach the Egyptian ports with a significantly reduced rowing effort.²⁵³

Estimates regarding the cruising speed vary significantly.²⁵⁴ Kitchen assumes an average speed of 3 knots. With 8–9 hours of sailing per day, he calculates a travel distance of 45–50 km/day.²⁵⁵ Alternatively, Bard and Fattovich only assume a cruising speed of 10 nautical miles/day (approx. 18.5 km).²⁵⁶ The reconstructed ship “Min of the Desert” reached an average speed of 6 knots during the one week tests in the northern Gulf of Suez.²⁵⁷ However, given the shortness and limited cruising range of the test run, the values obtained in the process cannot be calculated for the entire trip, especially as wind conditions in the north are relatively stable compared to regions further south. Part of the trip also had to be rowed, which decreases the average speed.²⁵⁸ If we take Mersa Gawasis as the starting point and locate the end point of the voyage at about the height of Massawa in Eritrea, the sailors would have had to travel about 1400 km. According to Kitchen’s calculation, this voyage would have taken about a month; Bard and Fattovich, as well as Sølver assume a longer journey of 10–11 weeks, i.e. 2.5 months.²⁵⁹ For the return journey, however, Sølver estimated a maximum of half the time.²⁶⁰ This would be consistent with the information given in the *Tale of the Shipwrecked Sailor*, which reports a duration of two

See also Rougé 1988, 73.

252 A hint for the length of stay could possibly be obtained from the story of the shipwrecked sailor who was rescued after four months by a vessel that may have been on its way back. For these and alternative considerations, see Fabre 2005, 41–42; Bradbury 1988, 139–140. For the text, see Blackman 1932, 44, l. 16 [117–118], for the translation, see Burkard 1993, 76 and **source 25**.

253 Sølver 1936, 439–446.

254 On this, see also Breyer 2016, 394–403.

255 Kitchen 1971, 196.

256 Bard/Fattovich 2018, 184–189.

257 See above chap. 5.3.1. Servajean (2016, 217–218) assumes a narrower design, which he believes could even achieve an average speed of 8–9 knots.

258 Rasul et al. 2015, 23; Sølver (1936, 443) explicitly refers to the area of low wind, which lies between the northern and southern wind zones. According to the Great Britain Hydrographic Office (s1900, 8), this lies between the 18th and 20th parallel.

259 Bard/Fattovich 2018, 187.

260 Sølver 1936, 442–446.

months for the return journey to the residence, of which a little more than a month would involve travel time at sea (**source 25**).²⁶¹ Interestingly, the travel times handed down by a Portuguese expedition in 1541 for approximately the same route (Safaga – Massawa) show a significantly shorter southern journey, while the journey to the north was longer in comparison. About three weeks (20–21 days) are recorded for the southern voyage in May and 30 days for the voyage back north, which took place between mid-February to mid-April. For the heavily loaded and sometimes upwind traveling Egyptian ships, Servajean and similarly Kitchen and Degas therefore assume a return voyage that is up to twice as long as the outward voyage.²⁶² Comparative data for the Roman period is provided by Pliny, who gives a travel time of about 30 days in the summer months for a comparable route, namely the 1500 km journey of Berenice to the Gulf of Aden.²⁶³

In sum, the contradictory data reflect the uncertainty that is a consequence of a meagre body of evidence. Depending on the chosen month of travel, the duration of the trip could vary significantly.²⁶⁴ According to the available data, the journey to Punt (approx. to Massawa) could probably be accomplished in one month under good conditions. For more reliable statements, especially for the return trip, a large number of well-documented sailings on the Red Sea would have to be evaluated and, ideally, extensive tests with ancient Egyptian replicas would have to be carried out.

6.4 Trade goods and their transport

While it was primarily metals, more precisely copper and its secondary minerals such as turquoise, malachite and azurite that were mined in the Sinai and at Timna,²⁶⁵ the goods imported from Punt were more diverse. Evidence suggests that myrrh resin, oils, ebony, ivory, gold, electrum, malachite and other minerals, fragrances and fumigants, eye paint, asphalt, leopard skins, but also live animals such as baboons, green monkeys, dogs and humans were brought back.²⁶⁶ These products

261 Blackman 1932, 47, l. 6 and 11 [168 and 174].

262 Kitchen 1971, 196; Servajean 2018, 147–152; Degas 1995, 230–234. Portuguese ships averaged about 70 km/day on the southern voyage and about 47 km/day on the northern voyage.

263 Plin. nat. 6.26.104. More generally on the duration of sea voyages in antiquity, see Wawrzinek 2016, 157–160.

264 Compare, for example, the duration of individual sections of the voyage of Joos van Ghistele (1482–1483) listed by Servajean (2018, 147–150), which in part differs greatly from that of the Portuguese.

265 Hikade 2001, 3–10.

266 Sethe 1906, 328, l. 17 – 329, l. 12; P.Harris I, 33b, 12; P.Harris I, 77, 11 (Grandet 1994, 338); Sethe 1933, 246, l. 4–5; Wilkinson 2000, 168–171. For further sources, see the overview at

and animals appear to have come from a wider geographic area and were probably traded in part to trading posts on the coast where the Egyptian fleet moored.²⁶⁷ It is noteworthy that boxes were discovered on the coast of the Red Sea, which, according to the inscriptions found on them, were used to transport goods from Punt.²⁶⁸

The surviving expedition inscriptions do not enumerate the specific quantities of the imported goods. Several tombs do provide evidence of the quantities of myrrh supplied for a particular regnal year²⁶⁹ but as it is unclear through which traders and routes these quantities came to Egypt, they cannot be tied exclusively to the Punt expeditions. Carl Sølver estimated the cargo capacity of the Hatshepsut ships to be about 80 tons, probably referring to the whole fleet.²⁷⁰ Servajeau assumes about 45 t per ship,²⁷¹ while the approximately 20 m long “Min of the Desert” has a loading capacity of just 17 t.²⁷²

As far as the depictions of the goods and their transport by ship are concerned, the reliefs from Hatshepsut’s temple at Deir el-Bahari are the most illustrative source, although here again the conventions of Egyptian art must be kept in mind. In these scenes, the trade goods are carried onto the deck, where they are stacked high on top of each other. This circumstance was interpreted early on by Sølver as a mere representational convention.²⁷³ In his opinion, the cargo was actually transported below deck. Others after him, however, evaluated the representation as an indication that the cargo was transported at least partially on deck.²⁷⁴ Given that the ships may have had shallow hulls that limited their cargo capacity below deck, this idea is not completely unreasonable at first glance. Indeed, the transport of goods on deck is possible on the Nile; but the situation is completely different for sea travel. During the test run of the “Min of the Desert” on the Red Sea, the crew had to deal with waves up to 3 m high, some of which even washed over deck. The effects that such a swell would have had on any cargo stacked on the deck can be understood by watching the associated TV documentary.²⁷⁵

Breyer 2016, 417–424; Baumann 2018, 317–318.

267 Moreno García, 2021, 23; Baumann 2018, 321.

268 For this in detail Breyer 2016, 410–411; Bard/Fattovich 2018, 25–26, 74–75, 96–98.

269 Hikade 2001, 77–78; Säve-Söderbergh 1946, 19–21.

270 Sølver 1936, 454.

271 Servajeau 2018, 152–155.

272 See above chap. 5.3.1.

273 Sølver 1936, 434.

274 Faulkner 1941, 8; Gil-Artagnan 1994, 48; Wachsmann 2009, 29; Servajeau 2016, 210; Partridge 1996, 60; Partridge 2010, 378; Breyer 2016, 168.

275 Hilton/Abita/Begoin 2010.

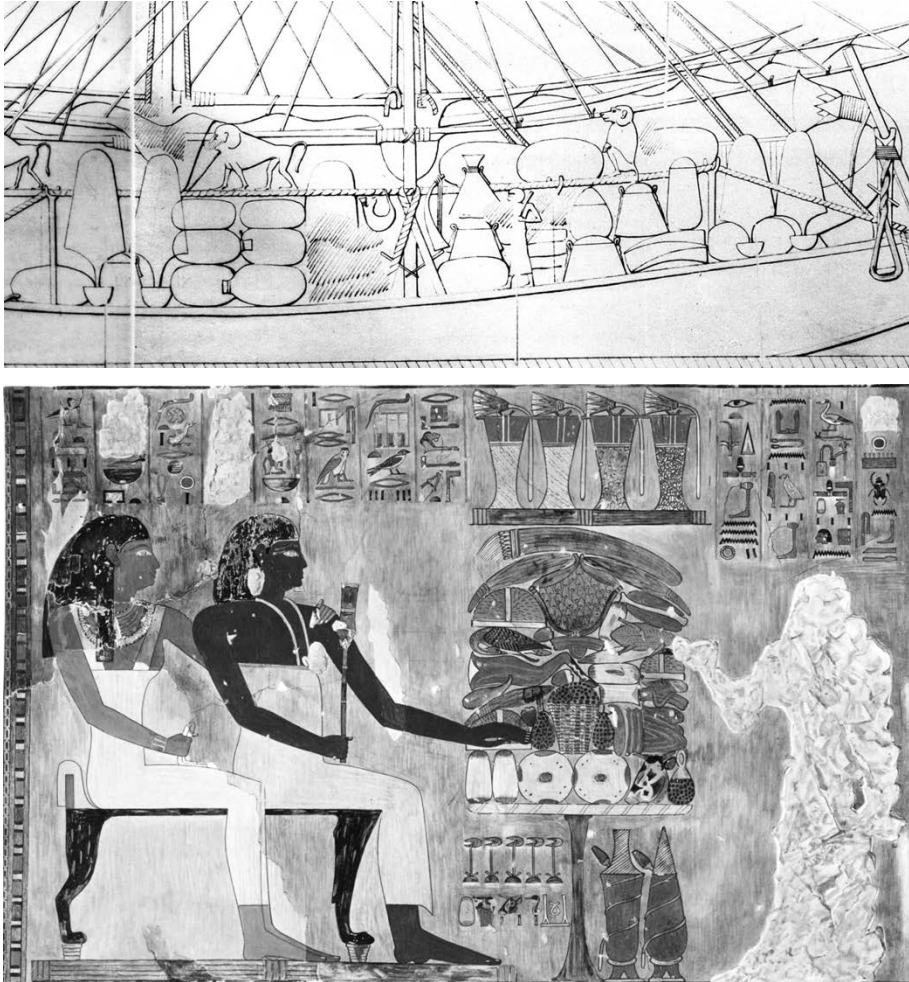


Fig. 10: Juxtaposition of objects on the ship (after Naville 1898, pl. 74);
with offerings piled up (after Davies 1935, pl. 19).

Aside from these practicalities that speak against transportation on deck, there are the Egyptian artist's intentions to consider. A closer look at the scenes reveals that the goods seem to hover above the deck. By presenting the goods like this, the artist is following the conventions established for scenes that depict for instance tributes or offerings²⁷⁶ – the idea is to express an abundance of richness (fig. 10). In the case of Deir el-Bahari, this visual message finds its counterpart in the epigraph, which claims that the ships are loaded “over and over” (*r ʒ.t wr.t*).²⁷⁷

276 Robins 1994, 11.

277 Sethe 1906, 328, l. 17.

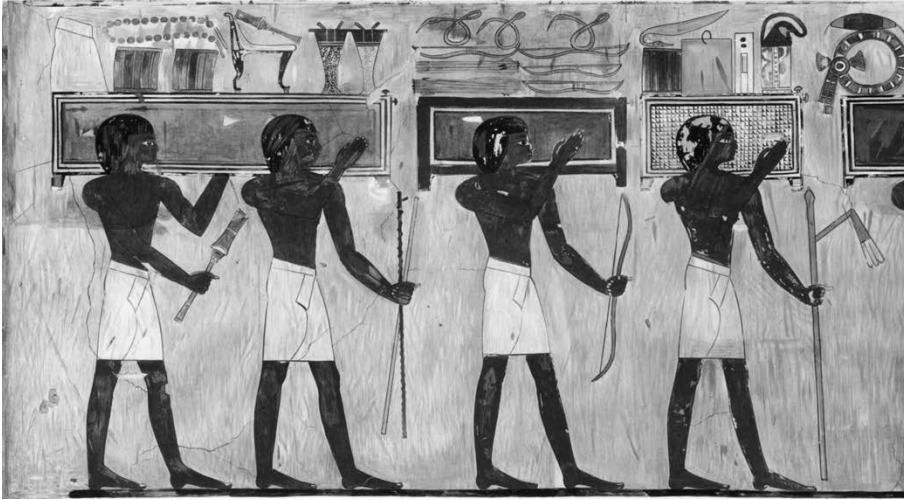


Fig. 11: Boxes with burial objects. The content is depicted above the container (after Davies 1935, 18).

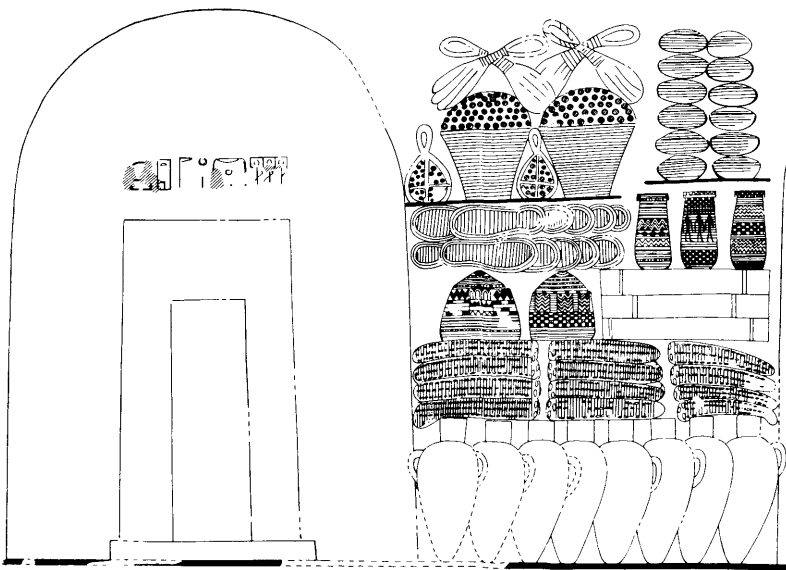


Fig. 12: Objects depicted beside the building (after Davies 1973, pl. 49).

Moreover, the scene could be associated with the common convention in Egyptian art of depicting objects that were stored in containers either above or occasionally next to the container (figs. 11-12).²⁷⁸ In these cases, the underlying intention is to

²⁷⁸ Robins 1994, 2-3.

show the quantity and also to make the individual objects and the diversity of the goods clearly recognizable. Thus, the manner in which the cargo is depicted on the ships has little to do with real conditions.

6.5 *Size and composition of the expedition fleets*

There are still many questions that remain unanswered regarding the expedition participants. Studies to date show that the success of an expedition across the Red Sea depended on a variety of experts in different fields. Among them were soldiers, boat builders and other craftsmen, prospectors, sailors and civil servants, to name just a few.²⁷⁹ Expedition members often state in their inscriptions that they were chosen to participate because of their expertise.²⁸⁰ Such statements should not be dismissed as mere self-praise. As an example, the papyrus finds from Wadi el-Jarf suggest that the experienced boat crew that transported stones on the Nile for the construction of the Pyramid of Cheops was also used for the voyages on the Red Sea.²⁸¹

Inscriptions sometimes mention the number of participants for the expeditions as ranging from several hundred to several thousand people,²⁸² but it is seldom specified which specialized groups made up this troop. Above all, it is not completely clear which tasks the bulk of the particularly large expeditionary force was assigned to. Assuming that the numbers are not topoi,²⁸³ the majority of the people could have been used to transport ships²⁸⁴ or they may have been miners, who moved on to the Sinai,²⁸⁵ possibly on foot.²⁸⁶

With regard to the size of the ship crews and the fleet, two sources are of particular relevance.²⁸⁷ The first is the fragmentary inscription of Ankhu (**source 22**).

279 For the various personnel, see Hikade 2001, 23–24; Breyer 2016, 312–338.

280 E.g. Breyer 2018, 605–606, 609 and 613.

281 Tallet 2015, 50–51. For the edition, see Tallet 2017. Cf. also the report of Khui, who probably went to Punt several times. See above chap. 3.1 (**source 19**) and Breasted 1906a, 164, § 361.

282 Tallet 2015, 56–57; Bard/Fattovich 2018, 8–9.

283 Cf. Vinson 1998, 16; Breyer 2016, 313; Fattovich/Bard 2012, 29.

284 Bard/Fattovich 2018, 73.

285 Bard/Fattovich 2018, 9.

286 Cf. Marcus 2007, 157, and the expedition to Timna under Ramesses III (see chap. 3.3). On the expedition members, see also Seyfried 1981, 244–245.

287 For both, cf. Bard/Fattovich 2018, 72–74 and Breyer 2016, 312. For the ship's crew in general, see Fabre 2005, 143–152; Säve-Söderbergh 1946, 71–94; Vinson 1998, 15–21; Breyer 2016, 403–406.

It names 400 recruits (*nfr.w*) who may represent the ship's crew.²⁸⁸ The second source is the inscription of Intef-iker (Antefoker) (**source 23**). According to this text, a 3,756-strong expeditionary force was made up of two groups: one comprising 3,200, the other, which is considered to be the expeditionary force proper, of 500 men. Kitchen assumes that the latter group is the crew for ten ships of 50 men each.²⁸⁹ Others, like Bard and Fattovich, consider such a large number of ships to be excessive. They consider half the number of ships to be a more realistic size of an expedition fleet and point to the expedition under Hatshepsut as a reference.²⁹⁰ This reference value, however, is based on taking the number of ships depicted in the Deir el-Bahari reliefs literally (see below). Fabre interprets these relief scenes in a similarly uncritical manner and calculates a crew of 42 men for each of the five ships and thus an expedition strength of 210 people.²⁹¹

Further calculations of a ship's crew strength to be viewed equally critically are those based on the *Tale of the Shipwrecked Sailor*. The story tells of a man, who travelled on a ship with a length of 120 cubits and a crew of 120 men (**source 25**). Breyer admits that these figures are exaggerated, but after deducting 20% as "sailor's yarn," considers a ship's crew of 100 to be realistic.²⁹² Faulkner and Servajean extract from this narrative the ratio of 1 seaman per cubit as a reliable value.²⁹³ Since Servajean assumes a length of 39 cubits for Hatshepsut's ships (see above), such a ship should also have had a crew of 39 men on board. However, as Steve Vinson notes, the details in this fairy-tale narrative are not necessarily to be taken literally.²⁹⁴

Now to the issue of the size of the fleet. Based on the depictions in the temple of Deir el-Bahari, many believe that Hatshepsut's fleet consisted of five ships.²⁹⁵ At first glance, there are indeed five ships represented in each of the two registers. But as we have seen again and again, even though the numerous details suggest other-

288 From the depictions of the Sahure's causeway, which show military training and a rowing race, Samuel Mark (2013, 284) concludes that the expedition members received military training, at least in the Old Kingdom. According to Vinson (1998, 16), rowers were in any case mainly soldiers.

289 Kitchen 1993b: 591.

290 Bard/Fattovich 2018, 72–74 and 94.

291 Fabre 2005, 144. Cf. the calculation of Kitchen (1971, 203, n. 150), who assumes at least 40 persons/ship. Partridge (2010, 378) also considers the depicted number of oarsmen to be the current crew.

292 Breyer 2016, 313.

293 Faulkner 1941, 7; Servajean 2016, 206–207.

294 Vinson 2009, 4; Vinson 1997, 71.

295 Köster 1923, 130; Sølvér 1936, 454; Säve-Söderbergh 1946, 29; Kitchen 1971, 193; Gil-Artagnan 1994, 47; Ward 2012b: 222; Bard/Fattovich 2018, 72–74 and 94.

wise to the uninformed modern viewer, the reliefs cannot be interpreted as a realistic snapshot. For a correct interpretation of the scenes, the rules of Egyptian visual language concerning time and space have to be observed (see chap. 3.3); only then can we truly appreciate the genius behind these images. It makes no sense to assume, for instance, that the partial scenes depicted in each register took place simultaneously or to rack one's brains over whether it was possible that fleet units in an expedition were travelling so far apart that some of the ships were already unloading their cargo when the rest of the fleet was only arriving.²⁹⁶ Remaining in the sphere of ship depictions, an example from the Old Kingdom (5th Dynasty, ca. 2400 BC) may be cited as a comparison,²⁹⁷ which also combines two temporally different phases in one scene. The depiction is from the double tomb of Nefer and Ka-hay in Sakkara and shows a small boat in a shipyard. The first phase involves stretching the hogging truss, while the second phase involves launching the ship with the help of ropes (fig. 13).²⁹⁸ A second example is the sea battle scene of Ramesses III and the Sea peoples at Medinet Habu, which combines several stages of the battle in one image.²⁹⁹



Fig. 13: Ship building scene from the tomb of Nefer and Ka-hay
(after Moussa/Altenmüller [1971], pl. 18–19).

Thus, all conclusions from the descriptions on the actual circumstances of Hatshepsut's expedition to Punt must be drawn with caution. This also applies to the size of the fleet. It may well be that the artists wanted to refer to the actual size of the fleet by virtue of the seemingly simultaneous nature of the events. But it could just as well be a symbolic number of ships, in which case the meaning behind it remains obscure to us today.³⁰⁰ A third possibility is that it is a purely artistic convention

296 Servajean 2016, 195–196 with n. 69.

297 Moussa/Altenmüller 1971, 18.

298 Moussa/Altenmüller 1971, 27 with pl. 19 and 23.

299 Baumann 2020, 355–356.

300 Even if, for example, the king's titlature consists of five parts, according to Hans Goedicke the symbolism behind this number is unclear (Goedicke 1986, 128–129).

with neither real nor symbolic reference.³⁰¹

In this context, it should also be noted that, strictly speaking, the reliefs show more than just five ships. In the upper register, the Egyptians who arrived in Punt are showed as loading their goods onto a smaller boat, which in design corresponds to Egyptian riverboats. It is thus likely that several of these small boats were brought from Egypt.³⁰² This is supported, among other things, by the description of the expedition to Punt under Ramesses III, which explicitly mentions that the large cargo ships were accompanied by other boats.³⁰³ Smaller boats were possibly carried in tow of the large sailing ships.³⁰⁴ Roman inscriptions and depictions of merchant ships illustrate that at coastal harbors, goods were transferred from large ships on smaller vessels. With these more manageable boats, it was possible to sail into rivers to distribute the goods brought.³⁰⁵ It is possible that this transshipment process is what is being depicted in the Deir el-Bahari Punt reliefs. In any case, in addition to the textual evidence practical reasons suggest that the boat depicted was brought by the Egyptians. Therefore, the reliefs show only the part of the fleet that was considered important for understanding the scene.

7. Closing remarks

Among the various sources for seafaring in pharaonic Egypt presented in this paper, the potential usefulness of the visual sources, above all, required clarification. Because they appeal directly to the viewer and are seemingly easy to interpret, the relief scenes depicting ships have been readily used by a broad group of scholars from various disciplines to construct their arguments. Regrettably, the depictions are far too often interpreted in a naïve, positivistic and purely associative manner, with little regard for the conventions of ancient Egyptian art. Egyptian reliefs do not have the function of modern reportage photography, which tries to capture the reality of an event through an image. On the contrary, they are composed with reference to different spatial and temporal levels, are highly symbolic and are shaped by artistic traditions. Only if we take into account the code behind this visual language can the sources begin to reveal something historical about the essence of an-

301 Wachsmann 2009, 23.

302 Contrary to Servajeau 2016, 192–195. Already Faulkner 1941, 9 had considered the interpretation as a tender. Cf. also Zazzaro 2007, 153.

303 P.Harris I, 77, 10 (Grandet 1994, 338); Maderna-Sieben 1991, 66–67.

304 In Egypt, towed ships are depicted only in funerary and religious contexts, see Landström 1970, 57 with fig. 166–168.

305 Bockius 2007, 85–86, 90 and fig. 90; Wawrzinek 2016, 142–160. See also Belov 2020, 107–110.

cient seafaring.

In recent decades, archaeological investigations on the Red Sea coast have focused more and more on the physical legacies of Pharaonic seafaring. In addition to information about the construction of seaworthy ships, these finds also provide insights into the organization and the execution of expeditions. Finally, based on these discoveries, it has been possible to actually reconstruct and test a ship on the Red Sea, which has further expanded our knowledge of ancient Egyptian seafaring. Remaining ambiguities concerning construction techniques can only be clarified by more such finds. This would also shed light on the much-debated question about the size of the ships that sailed across the Red Sea to the latitude of Eritrea.

In addition to the structure of the ships, many aspects about the course of expedition procedures still remain unclear. Although the discovery of several harbors has drastically increased our knowledge about this topic, there must have been other such facilities. Provided that they have not been destroyed by modern buildings, their discovery will help to complete our picture of the infrastructure that supported state-run sea expeditions. Other open questions concerning the expedition system include, for example, the size of the fleets and the crew strength. Also, the exact location and number of ports of call during the long-distance trade voyages to Punt remain uncertain.

Because of their remoteness from Egyptian territory, these long journeys to Punt were particularly risky. Given the special nautical conditions, expeditions in the Red Sea were likewise a dangerous endeavor, for which particularly experienced captains and ship crews were selected. Official Egyptian sources are generally silent about failed ventures. No Egyptian wreck has been discovered yet, but it can be assumed that some ships did not make it through the voyages or that entire expedition teams were lost due to storms, attacks or other misfortunes. The stelae erected on the Red Sea coast bear witness to these losses, even if they do not specify the cause of death itself.³⁰⁶ That shipwrecks were indeed a concern is attested to by the *Tale of the Shipwrecked Sailor*. In any case, the successful completion of an expedition was not a foregone conclusion, which explains why, among other things, successful expeditions are highlighted in such detail in royal inscriptions.

Even if the Egyptian sources do not provide information on each and every aspect, overall, they allow us a great deal of insight into navigation on the Red Sea. The drive to acquire valuable resources and luxury goods led to the emergence of a sophisticated maritime expeditionary system that was compatible with the challenging geographic conditions and that made full use of the available resources.

306 For two such stelae from Mersa Gawasis (stele 2 and 5), see Bard/Fattovich 2018, 64–66; 146–147; Breyer 2016, 603–606 (Dok. 9–10).

Both practical and economical, this system proved to be successful over the course of several millennia.

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Quellen/Sources*

1) Sargon 11,1–13 (sum.) & 1–16 (akk.); ähnl. Sargon 12,1–4' (nur akk.)

¹⁾ [šar-um-GI ²⁾ lugal- ³⁾ KIŠ ⁴⁾ 34 (x)] SAḪAR-ra ⁵⁾ [TUN₃-KA]RA₂ bi₂-si₃ ⁶⁾ bad₃-bi ⁷⁾ i₃-gul-gul ⁸⁾ za₂-a-ab-ba-ka-še₃ ⁹⁾ ma₂-me-luḫ-ḫa^{ki} ¹⁰⁾ ma₂-ma₂-gan^{ki} ¹¹⁾ ma₂-tilmun^{ki} ¹²⁾ kar-ag-ge-de₃^{ki}-ka ¹³⁾ bi₂-keš₂

¹⁾ [šar-ru-GI ²⁾ LUGAL ³⁾ KIŠ ⁴⁾ 34 REC169¹ ⁵⁾ iš₁₁-ar ⁶⁾ BAD₃-BAD₃ ⁷⁾ I₃-GUL-GUL ⁸⁾ a-di₃-ma ⁹⁾ pu-ti ¹⁰⁾ ti-a-am-tim ¹¹⁾ MA₂ me-luḫ-ḫa ¹²⁾ MA₂ ma₂-gan^{ki} ¹³⁾ MA₂ tilmun^{ki} ¹⁴⁾ in ka₃-ri₂-im ¹⁵⁾ ši a-ka₃-de₃^{ki} ¹⁶⁾ ir₃-ku-us (Umschr. Frayne 1993, 28)

Sargon, der König des Alls, hat 34 Kämpfe siegreich bestanden; Mauern hat er geschleift bis hin zum Ufer des Meeres. Schiffe aus Meluḫḫa, Schiffe aus Makkan (und) Schiffe aus Tilmun hat er am Kai von Akkade festmachen lassen. (Übers. Gelb/Kienast 1990, 166)

2) Rīmuš 8,1–27 (Nippur)

<ri₂-mu-uš₂ LUGAL KIŠ in REC169> ¹⁾ a-ba-al-ga-maš ²⁾ LUGAL pa₂-ra-aḫ-šum^{ki} ³⁾ iš₁₁-ar ⁴⁾ u₃ za-ḫa-ar^{ki} ⁵⁾ u₃ NIM^{ki} ⁶⁾ [u₃] [g]u-pi-in^{ki} ⁷⁾ [u₃] [me]-luḫ-ḫa^{ki} ⁸⁾ i[n qa]b₂-

* Die hier versammelten Quellentexte und die beigegebenen Übersetzungen sind nach der Reihenfolge ihrer Behandlung innerhalb der Beiträge dieses Bandes geordnet. Zeichnet einer der Herausgeber bzw. die Herausgeberin oder einer der Autoren für eine der hier angefügten Übersetzungen verantwortlich, wurden die jeweiligen Initialen angegeben. Die Sprache dieser Übersetzungen richtet sich nach der Sprache des zugehörigen Beitrages. Die Sprache der Überschriften zu den einzelnen Quellen sowie deren Abkürzung richten sich ebenfalls nach dem Beitrag, der sich auf diese Quellen bezieht. Die Umschriften der altorientalischen literarischen Kompositionen folgen in der Regel dem *Electronic Text Corpus of Sumerian Literature* (<https://etcsl.orinst.ox.ac.uk/>). Sie sind nach ETCSL-Nummer und Zeilen zitiert. Die Übersetzungen werden stets gesondert angeführt. Für eine leichtere Zugänglichkeit wurde bei den altägyptischen Texten versucht, englischsprachige Übersetzungen abzudrucken. In den Fällen, in denen Umschrift und Übersetzung von verschiedenen Bearbeitern stammen, kann es dabei zu leichten Abweichungen kommen. Eine eigenständige texteditorische Bearbeitung der Quellentexte würde jedoch den Rahmen dieses Buchprojektes sprengen. Wo immer möglich, wurden Datierungen vermerkt und für die dokumentarischen Quellen außerdem deren Fundorte angegeben.

1) Obwohl das Zeichen REC169 noch keine allgemein anerkannte Lesung besitzt, ist die Bedeutung „Schlacht, Kampf“ gut belegt, siehe die ausführliche Diskussion in Sommerfeld 1999, 125–128 mit Literatur.

li₂⁹⁾ pa₂-[ra-aḥ]-šum^{ki} 10) Ṛa¹-[na] REC169 ip-ḥu-ru-ni-im-ma (Umschr. Frayne 1993, 57f.)

<Rimuš der König des Alls,> hat im Kampf Abalgamaš, den König von Parahšum (= Marḥaši), besiegt. Und zwar hatten sich Zaḥar und Elam und Kupaḥpin und Meluḥḥa inmitten von Parahšum versammelt. Zwischen Awan und Susa am Flusse Qablītum hat er Sidga’u, den Statthalter von Parahšum ... gefangengenommen. Und er hat Leichenhügel inmitten der Stadt über sie aufgehäuft. Und die Wurzeln von Parahšum im Lande Elam hat er ausgerissen, denn Rīmuš, der König des Alls, beherrscht (nun) Elam. (Übers. Gelb/Kienast 1990, 217f. mit leichten Änderungen d. NK)

3) Fluch über Akkade, 42–53

⁴²⁾ bad₃-bi ḥur-saḡ-gin₇ an-ne₂ im-us₂ ⁴³⁾ abul-a-ba ^{id₂}idigna a-ab-ba-še₃ du-u₃-gin₇ ⁴⁴⁾ kù ^{d₁}inana-ke₄ ka-bi ḡal₂ bi₂-in-taka₄ ⁴⁵⁾ ki-en-gi-ra niḡ₂-gur₁₁ ni₂-ba-ta ^{ḡeš}ma₂ im-da-gid₂-de₃ ⁴⁶⁾ mar-tu kur-ra lu₂ še nu-zu ⁴⁷⁾ gud du₇ maš₂ du₇-da mu-un-na-da-an-ku₄-ku₄ ⁴⁸⁾ me-luḥ-ḥa^{ki} lu₂ kur gig₂-ga-ke₄ ⁴⁹⁾ niḡ₂-šu kur₂-kur₂-ra mu-un-na-ra-ab-ed₃-de₃ ⁵⁰⁾ elam^{ki} su-bir^{ki} anše barag la₂-gin₇ niḡ₂ mu-na-ab-la₂-la₂ ⁵¹⁾ ensi₂-ensi₂ saḡḡa-e-ne ⁵²⁾ saḡ-tun₃ gu₂-edin-na-ke₄-ne ⁵³⁾ nidba itid-da zag-mu-bi si am₃-sa₂-e-ne (Umschr. ETCSL 2.1.5)

Die Mauern ragten Bergen gleich zum Himmel, (aber) die Öffnung der Stadttore weitete die glanzvolle Inana strombreit, wie der Tigris, wenn er ins Meer mündet. Von Sumer ließen sich die Güter wie von selbst auf Kähnen treideln. Martu des Fremdlandes, die Getreide nicht kennen, kamen mit vollkommenen Rindern und Böcken für sie (Inana?) herein. Meluḥḥa, die des schwarzen Berglandes, ließen für sie alle fremdländischen Güter herunterkommen. Für sie luden sich Elam und Subartu Lasten wie Päckesel auf den Rücken. Die Statthalter, die Tempelverwalter und die Landvermesser des Steppenrandes richteten für sie monatliche Abgaben und festliche Abgaben aus. (Übers. Cavigneaux 2015, 323 mit leichten Änderungen d. NK)

4) Gudea Zyl. A, xv 6–10 (Ĝirsu)

⁶⁾ elam elam-ta mu-na-ḡen ⁷⁾ šušin ki šušin-ta mu-na-ḡen ⁸⁾ ma₂-gan me-luḥ-ḥa kur-bi-ta gu₂ ḡeš mu-na-ab-ḡal₂ ⁹⁾ e₂ ^{d₁}nin-ḡir₂-su-ka du₃-de₃ ¹⁰⁾ gu₃-de₂-a iri-ni ḡir₂-su^{ki}-še₃ gu₂ mu-na-si-si (Umschr. ETCSL 2.1.7, 392–396)

Elam kam für ihn von Elam. Susa kam für ihn vom Ort Susa. Makkan und Meluḥḥa legten von ihrem Bergland Holz für ihn auf den Nacken. Um das

Haus Ninĝirsus zu bauen, versammelten sie sich für ihn, Gudea, bei seiner Stadt Ĝirsu. (Übers. Heimpel 2015, 133 mit leichten Änderungen d. NK)

5) Gudea Zyl. A, xvi 10–24 (Ĝirsu)

¹⁰⁾ niĝ₂-gur₁₁ ma₂ še gana₂ de₆-a-gin₇ ¹¹⁾ gu₃-de₂-a en ^dnin-ĝir₂-su-ra ¹²⁾ im-ma-na-us₂ ¹³⁾ ensi₂ e₂-ninnu du₃-ra ¹⁴⁾ niĝ₂ gal-gal-e šu mu-na-ab-il₂ ¹⁵⁾ ħur-saĝ urud-ke₄ ki-maš-ta ¹⁶⁾ ni₂-bi mu-na-ab-pad₃ ¹⁷⁾ urud-bi gi-dirig-ba mu-ni-ba-al ¹⁸⁾ lu₂ e₂ lugal-na du₃-dam ¹⁹⁾ ensi₂-ra ku₃-sig₁₇ kur-bi-ta ²⁰⁾ saĥar-ba mu-na-tum₃ ²¹⁾ gu₃-de₂-a ku₃ NE-a kur-bi-ta mu-na-ta-ed₃-de₃ ²²⁾ gug gi-rin-e meluĥ-ĥa-ta ²³⁾ šu mu-na-peš-e ²⁴⁾ kur nu₁₁-ta nu₁₁ mu-na-ta-ed₃-de₃ (Umschr. ETCSL 2.1.7, 431–445)

Habe, gleich dem Getreide, das in Booten von den Äckern gebracht wird, ließ Gudea dem Herren Ninĝirsu aufeinander folgen. Für den das Eninnu bauenden Stadtfürsten trugen sich große Dinge zu. Von Kimaš aus bezeugte ihm das Kupfergebirge Ehrfurcht. Sein Kupfer wurde dort aus seinem Lager gegraben. Gold wurde dem Stadtfürsten, dem, der das Haus seines Gebieters bauen würde, in seiner Erde aus seinem Land gebracht. Gleichzeitig kam zu ihm, Gudea, geläutertes Silber von seinem (des Silbers) Land herauf. Leuchtender Karneol aus Meluĥĥa kam zu ihm in Menge, und aus dem Land des Alabasters kam Alabaster zu ihm herunter. (Übers. Heimpel 2015, 134f. mit leichten Änderungen d. NK)

6) Gudea St. B, vi 26–28 (Ĝirsu)

²⁶⁾ kur-me-luh-ha ²⁷⁾ ĝeš₃ esi im-ta-e₁₁ ²⁸⁾ mu-na-du₃ (Umschr. Edzard 1997, 34)

(Aus) dem Bergland Meluĥĥa hat er Ebenholz herabgebracht (und) hat (es) für ihn zum Bauen verwendet. (Übers. Steible 1991a, 167)

7) Gudea St. B, vi 38–42 (Ĝirsu)

³⁸⁾ ku₃-sig₁₇(GI) saĥar-ba ³⁹⁾ kur me-luĥ-ĥa-ta ⁴⁰⁾ im-ta-en ⁴¹⁾ e₂-mar-uru₅-še₃ ⁴²⁾ mu-na-dim₂ (Umschr. Edzard 1997, 34)

Goldhaltige Erde hat er aus dem Bergland Meluĥĥa herabgebracht (und) hat (das daraus gewonnene Gold) ihm zu einem Köcher verarbeitet. (Übers. Steible 1991a, 167–169)

8) Gudea St. D, iv 2–14 (Ĝirsu)

²⁾ a₂-^dnanše-ta ³⁾ a₂-^dnin-gir₂-su-ka-ta ⁴⁾ gu₃-de₂-a ⁵⁾ ĝidri-sum-ma ⁶⁾ ^dnin-gir₂-su-a-ra ⁷⁾ ma₂-gan^{ki} ⁸⁾ me-luḥ-ḥa^{ki} ⁹⁾ gu-bi^{ki} ¹⁰⁾ kur-dilmun^{ki} ¹¹⁾ gu₂-ĝeš mu-na-gal₂-la-am₃ ¹²⁾ ma₂-ĝeš-du₃-a-bi ¹³⁾ lagas^{ki}-še₃ ¹⁴⁾ mu-na-DU (Umschr. Edzard 1997, 42)

Durch die Macht von Nanše und durch die Macht von Ninĝirsu war es so, dass sich für den von Ninĝirsu mit dem Szepter begabten Gudea Makkan, Meluḥḥa, Kup(p)i(n) und das Gebirgsland Tilmun Holz auf den Nacken gelegt hatten; Schiffe brachten ihm all dieses Holz nach Lagaš. (Übers. Wilcke 2011, 45 mit leichten Änderungen d. NK)

9) Gudea Bilingue CUSAS 17, 022 (MS 2814), iii 2' – iv 2 (sum.)

^{iii 2')} u₄ ^rd^l[Nin-ĝir₂-su] ^{3')} lugal ḡ[^{eš}tukul-ke₄] ^{7')} a-a-ni du₃-di₃ [()] ^{8')} a₂-bi mu-da-ni-a[^ḡ₂] ^{11')} e^rla-at^l AG₃ ka₃-^rar^l AG-š[e₃] ^{12')} ḥa-ba₂-ni-ĝar ^{15')} kur e-lam ^{16')} ḤU:LU:Uḥ₂-lam ^{19')} nam-ri_x(ERIM₂)-eš₂ ^{20')} ḥu-^rla^l-a ^{23')} kur ma₂-gan-na ^ran^l-ta ^{24')} za! ḥi-in-ta-A-A ^{iv 1)} kur me-luḥ-ḥa-t[a] ²⁾ i-si im-ku₄-ku₄ (Umschr. Wilcke 2011, 39f.)

Als [Nin-ĝirsu], der Herr [der Waffe], sein Haus zu bauen, mir auftrug, und die feindlichen Truppen vernichtend geschlagen hat und das Land Elam – ganz schlimm und falsch ist es – als Beute vernichtet war, habe ich von oben aus dem Gebirgsland von Makkan – von (dessen Herrscher) – kostbare Steine herabgebracht. Und aus dem Gebirgsland von Meluḥḥa kam zugleich Ebenholz herein. (Übers. Wilcke 2011, 39f.)

10) Enki und die Weltordnung, 219–237

²¹⁹⁾ kur me-luḥ-ḥa^{ki} nam-mi-ib₂-dib ²²⁰⁾ ^den-ki lugal abzu-ke₄ nam nam-mi-ib₂-tar-^rre^l ²²¹⁾ kur ḡi₆ ḡeš-zu ḡeš gal ḥe₂-em ḡeš^{tir}-^r zu meš₃^l kur-ra ḥe₂-em ²²²⁾ ḡeš^{gu}-za-bi e₂-gal lugal-la-ke₄ [me]-^rte ḥe₂-em^l-mi-ib-ḡal₂ ²²³⁾ gi-zu gi gal ḥe₂-em gi [... ḥe₂-em] ²²⁴⁾ ur-saḡ-e ki me₃-ka ḡeš^{tukul} [...] ²²⁵⁾ gud-zu gud gal ḥe₂-em gud kur-[ra ḥe₂-em] ²²⁶⁾ gu₃-bi gu₃ am kur-ra-ka [ḥe₂-em] ²²⁷⁾ me gal diḡir-re-e-ne-ke₄ šu ḥe₂-[em-mi-du₇] ²²⁸⁾ dar^{mušen}-dar^{mušen} kur-ra sun₄ ^{naa}r^{gug}^l [ḥe₂-em-la₂] ²²⁹⁾ mušen-zu ^dḥa-ia₃^{mušen} [ḥe₂]-^rem^l ²³⁰⁾ mu₇-mu₇-bi e₂-gal lugal-la-ka [me-te ḥe₂]-^rem^l-mi-ib-ḡal₂ ²³¹⁾ ku₃-zu ku₃-sig₁₇ ḥe₂-em ²³²⁾ urud-zu nagga zabar-^rra^l [ḥe₂-em] ²³³⁾ kur niḡ₂-nam-zu ḥe₂-[ḡal₂ ḥe₂-em] ²³⁴⁾ nam-lu₂-ulu₃-zu ḥe₂-x [...] ²³⁵⁾ [nitaḥ₂]-zu nitaḥ₂ tab-ba-ni-ir gud-gin₇ ḥe₂-en-ed₂-de₃

236) [x x] KI A iri^{ki} AN x-na-ke₄ 237) [x x] TU-gin₇ HAR ba-an-ak (Umschr. ETCSL 1.1.3)

Zum Fremdland Meluhḫa ging er, ihm entscheidet Enki, der Herr des Abzu, das Geschick: „Schwarzes Fremdland, deine Bäume seien große Bäume, deine Wälder seien mes-Bäume des Gebirges, die daraus gefertigten Sessel seien im Palast des Königs vorhanden, dein Rohr sei langes Rohr, dein [...] -Rohr [sei ...], die Helden [mögen] am Ort der Schlacht die [daraus gefertigten] Lanzen [schwingen]! Deine Stiere seien große Rinder, seien Gebirgsrinder, ihre Stimme sei die von Wildstieren des Gebirges! Die großen ‚göttlichen Kräfte‘ der Götter mögen voll[endet sein], die Frankoline des Fremdlandes mögen einen ‚Bart aus Ka[rneol‘ tragen], dein Vogel sei der Haja-Vogel, sein Rufen sei im Palast des Königs zu vernehmen. Dein Edelmetall sei Gold, dein Kupfer sei Zinn der Bronze, Fremdland, alles was du hast, sei [...], deine Menschen mögen ..[...], dein [Man]n möge gegen seinen Genossen wie ein Stier herauskommen!“ (Übers. Falkenstein 1964, 104f. mit leichten Änderungen d. NK)

11) Enki und Ninḫursaġa, UET 6/1, Nr. 1 (U 07754) ii 1–15 (Ur)

1) kur tu-¹uk-ri-iš^{1ki} ku₃-sig¹⁷ ḫa¹-ra-¹li¹ 2) na⁴ za¹-gin₃ x x x-ga ḫu-mu-ra-bal-bal-[...] 3) kur me-luḫ-ḫa^{ki} na⁴gug niġ₂ al di kal-¹la¹ 4) ḡeš^{mes} ša₃-gan ḡeš-ab-ba sig₅-ga 5) ma₂ gal-gal ḫu-mu-ra-ab-¹sa₂ 6) kur mar-ḫa-ši^{ki} na₄ kal-la na⁴du₈-[ši-a] 7) gaba ḫu-mu-ra-ab-[x] 8) kur ma₂-gan^{ki} uruda niġ₂-kal-ga a₂-¹kal¹ [...] 9) na⁴esi na⁴U na⁴šu-min₃ ḫu-¹mu¹-[...] 10) kur ab-ba^{ki}-ke₄ ḡeš^{esi} me-te-¹bi¹ [x] | lugal-la ḫu-mu-ra-ab-[x (x)] 11) kur za-lam-ġar^{ki} gukkal¹ sa₆-ga-[...] ḫu-mu-ra-ab-[x] 12) kur elam^{ki}-ma¹ siki¹ igi saġ₅ gu₂-un¹-[gu₂-un] ḫu-mu-ra-ab-bal-e 13) eš₃ uri₂^{ki} barag nam-lugal-la iri^{ki} [...] 14) še-i₃-ḡeš tug₂ maḫ tug₂ sig₅ ma₂ gal-[gal] ḫu-mu-ra-ab-[sa₂] 15) a-ab-ba dagal-la ḫe₂-ġal₂-bi ḫu-¹mu¹-[...] (Umschr. ETCSL 1.1.1, 49a-p mit Koll. gukkal statt siki gun₃ in Z. 11 [Peterson 2015, 4])

Möge dir das Land Tukriš Gold aus Ḫarali, Lapislazuli und ... übergeben, möge das Land Meluhḫa begehrten und kostbaren Karneol, mes-Holz aus Makkan und schöne „Meeresbäume“ auf großen Schiffen zu dir gelangen lassen, möge dir das Land Marḫaši wertvolle Steine und Türkis ... [...], möge [dir] das Land Makkan hartes und festes Kupfer, Diorit, steinerne Hämmer und Ambosse [...], möge dir das Seeland Ebenholz, Zierde ... [...] des Königs [...], möge dir das „Zeltland“ gute Fettschwanzschafe [...], möge dir das Land Elam ausgewählte Wolle [als] Tribut übergeben, möge das Heiligtum Ur,

der Hochsitz des Königtums, die [...] Stadt, Gerste, Sesamöl, riesige und schöne Stoffe auf großen Schiffen zu dir [gelangen lassen]! Möge der Überfluss des weiten Meeres [zu dir kommen]! (Übers. Attinger 2015, 9f. mit leichten Änderungen d. NK)

12) Ninurta G, 131–154 (Nippur)

¹³⁶⁾ ud-ba ku₆-ze-en ħa-ra-li-¹³⁷⁾ ta¹ en-na-tum₃ im-me-¹³⁸⁾ en¹ na⁴gug na⁴za-
gin₃ kur me-luĥ-¹³⁹⁾ ħa^{ki}-ta en-na-¹⁴⁰⁾ tum₃ im-me-en na⁴du₈-¹⁴¹⁾ ši-a kur mar-
ħa-¹⁴²⁾ ši^{ki}-ta en-na-kam im-me-en ku₃-babbar iri¹⁴³⁾ 15-ta en-na-kam
[im-me]-en ¹⁴⁴⁾ urud nagga [ma₂-gan^{ki}-na-ta] ¹⁴⁵⁾ en-na-[kam im-me-en]
¹⁴⁶⁾ za¹bar ¹⁴⁷⁾ [...-ta] ¹⁴⁸⁾ [en-na-x im-me-en] ¹⁴⁹⁾ ku₃-babbar dilmun^{ki}-na-¹⁵⁰⁾ ta¹
en-na-tum₃ im-me-en ¹⁵¹⁾ im-kalag-ga ka ħur-saġ-¹⁵²⁾ ġa₂-ta en-na-kam
im-me-en ¹⁵³⁾ im-babbar-ra ħur-saġ dadag-ga-<ta> ¹⁵⁴⁾ en-na-kam im-me-en
(Umschr. ETCSL 4.27.07)

Du bist seit (damals) Ennatum über Gold aus Ĥarali, du bist Ennatum über Karneol und Lapislazuli aus dem Fremdland Meluĥħa, du bist Ennakam über „Grünstein“² aus dem Fremdland Marħaši, du bist Ennakam über Silber aus den 15 Städten, du bist Ennakam über Kupfer und Zinn aus Makkan, du bist Enna... über Bronze aus ..., du bist Ennatum über Tilmun-Silber, du bist Ennakam über „Hartlehm“³ aus dem Mund des Gebirges, du bist Ennakam über Gips des hellen Gebirges. (Übers. NK)

13) Ibbisîn 4,1–10 (Ur)

¹⁾ d^{na}nanna amar-ban₃-da-an-na ²⁾ en dumu-sag-^den-lil₂-la₂ ³⁾ lugal-a-ni-ir ⁴⁾ dⁱ-
bi₂-^dEN-ZU ⁵⁾ diġir-kalam-ma-na ⁶⁾ lugal-kala-ga ⁷⁾ lugal-uri₅ ^{ki}l₁-ma ⁸⁾ lugal-
an-ub-d[a]-limmu₂-ba-ke₄ ⁹⁾ ur-GUN₃ ¹a-me-luĥ-^{ki}ħa ¹⁰⁾ m[ar-ħ]a-^{ki}ši^{ki}(DI)-

-
- 2 ^{na}du₈-^{ši}-a ist nicht eindeutig identifizierbar, die verfügbaren Quellen lassen als Eigenschaften jedoch gelb-grünliche Färbung und geringe Härte erkennen. Dies würde grob zur Identifizierung von ^{na}du₈-^{ši}-a als „Chlorit, Steatit“ durch Schuster-Brandis 2008, 407–409 sub 27 (& 27a) passen. Im oben gebrachten Textzeugen aus Ur zu *Enki und Ninĥursaġa* übersetzt Attinger denselben Begriff in ii 6 (= ETCSL 1.1.1, 49–50) als „Türkis“.
- 3 Die spezielle Tonerde im-kalag-ga ist neben dieser Stelle leider nur in lexikalischen Listen belegt, daher ist keine über die sumerischen Lexeme im „Lehm, Ton“ und kalag „stark“ hinausgehende und die spezifischen Qualitäten dieser Lehmsorte besser spiegelnde Übersetzung möglich. Die hier gebotene Übersetzung „Hartlehm“ orientiert sich am ebenso mit kalag gebildeten Lexem ^{na}kalag „Hartstein“, siehe Simkó 2018, 278 *et passim*.

[ta] ¹¹⁾ Ṛgu₂ l-un-še₃ mu-na-ab-tum₂-ma-ni ¹²⁾ Ṛtam l-si-lum-bi ¹³⁾ Ṛmu l-dim₂ ¹⁴⁾ nam-ti-l[a-n]i-še₃ ¹⁵⁾ a mu-na-[r]u (Umschr. Frayne 1997, 373f.)

Nanna, dem ungestümen Jungstier des An, dem Herrn, dem erst(geborenen) Sohn des Enlil, seinem Herrn, hat Ibbisîn, der Gott seines Landes, der mächtige König, der König von Ur, der König der vier Weltgegenden, (von) seinem ‚gefleckten Hund‘ aus Meluḥḥa, der ihm [aus] M[arḥ]aši als Tribut gebracht worden war, dieses Bildnis angefertigt (und) für [se]in Leben geweiht. (Übers. Steible 1991b, 293f. mit leichten Änderungen d. NK)

14) Palermo Stone (unknown; ca. 2400 BCE or a copy of ca. 700 BCE)⁴

[nswt-bitī Sḥw-Rḥ ir.n.fm] mnw.fn [...] Rḥ imnt m Tḥ-Mḥw Šmḥ ;[ḥ]t [st:t] [...] Ḥwt-Ḥr [...] pr nswt² st:t 2(00²) + 4 [...] ḥt nb[t]

int m mfk:t ḥmt² 6000² Pwnt ḥntiw 80,000 ḍ:m [...] 6000² wḥḍ-šsmt 2900 [...] dw 23,020² [...]

[The dual king Sahura: he made as] his endowment for: Ra of the western region: in Lower Egypt and Upper Egypt [...] [arouras of] arable land [...] Hathor [...] [...] the king's estate² 204² arouras (of arable land in L.E. and U.E.) [...] everything what was brought from: (the land of²) turquoise: 6000² measures of copper² [...]

Punt: 80,000 (measures of) myrrh; 6000² (measures of) electrum; 2900 (measures of) malachite; 23,020 (measures of) [...]. (transc. and transl. after Wilkinson 2000, 168)

15) Reliefs of Sahure's Punt expedition (Abusir; ca. 2400 BCE)⁵

See fig. 3 Baumann.

16) Letter from Pepi II to Harkhuf (Aswan, Qubbet el-Hawa; ca. 2250 BCE)⁶

(3) jw sj:(w) mdt nt mḍ:t.k tn jrj.tnk ḥr njswt r jst r rdjt rḥ.tw wnt.k ḥ:t (4) m ḥtp m Jm ḥnḥ mšḥ ntj ḥnḥ.k ḍḍ.nk [r] mḍ:t.k tn wnt jnj.nk (5) jnw nb 3 nfr rdj.n Ḥwt-Ḥrw

4 Breasted 1906a, 70, § 161; Sethe 1933, 246, l. 1–5; Breyer 2016, 594–595 (Dok. 1); Wilkinson 2000, 23–24; 168–171 and fig. 3.

5 El Awady 2010, 155–170 and pl. 5; El Awady 2009.

6 Sethe 1903, 128, l. 17 – 129, l. 1; Breasted 1906a, 160; Lichtheim 1973, 25–26; Eichler 1991,

nbt Jm;w n k; n (6) njswt bjt (Nfr-k;R:w)| 'nh dt r nhh dd.nk r md;t.k tn wnt jnj.nk dng jb(7);w ntr m t;htjw mjtw dng jnj.n (8) sd;wtj-ntr Wr-Dd-B;w (?) m Pwnt m rk (Jssj)| (transc. after Edel 2008, 627)

(3) Note has been taken of the content of this letter of yours which you composed for the attention of the king at the palace, to let it be known that you have come back successfully (4) from Iam with the expedition which was with you. What you have said in this letter of yours is that you have brought back (5) all sorts of great and wonderful tribute which Hathor, mistress of Imaau, has given to the ka of (6) the king of Upper and Lower Egypt Neferkare, may he live for ever and for eternity. What you have (also) said in this letter of yours is that you have brought back a pygmy who dances (7) for the god from the land of the Horizon-dwellers, just like the pygmy which (8) the seal-bearer of the god Werdjedeba brought back from the land of Punt in the time of Izezi. (transl. Strudwick 2005, 332)

17) Inscription of gallery G6 at Ayn Sukhna (Ayn Sukhna; ca. 2400 BCE)⁷

(3) (...) [...] *mrt jm=sn* (4) [...] *wnh=tw² kbnt jgr t;st jm=sn* (5) [...] *r (?) m B;t w;rt Jnt* (6) [...] *kt tn r dr=s* (...)

(...) (3) (...) [...] un équipage-meret à leur bord (4) [...] que soient préparés (?) des bateaux-kebenet, avec un équipage-tjeset à leur bord (5) [...] (?) dans Bat, dans le district de la Vallée (Inet) (6) [...] a été accompli ce travail tout entier (...). (transc. and transl. Tallet 2012b, 223)

18) Inscription of gallery G1 at Ayn Sukhna (Ayn Sukhna; ca. 2400 BCE)⁸

(1) [...] *sp 7;bd 4 šmw sw 4 wpt jrt n jmy-r mš; Sd-htp r Htjw mfk;t* (2-3) [...] (4) *nswt bjty J[ss]j m [...]* (5) *jmyw-r nw mš; wnw hrp s[rw²...] [...]* *m B;t [...]* *'pr-wj; jmy-jrty Ptḥ[...]* *jmy-r š [...]* [...] *nswt [shd²] srw Jd[w]?* ... (6-7) *'prw* (6) *skd Wnn-jr=f-nn* (7) [...] *mrwt Hs[...]*

(1) [Année de la/après la] 7^e occurrence <du recensement> 4^e mois de la saison-Shemou, jour 4, mission qu'a effectuée le directeur de la troupe

152–155; Strudwick 2005, 332; Edel 2008, 626–628, 654; fig. 8 and pl. 28; Breyer 2016, 596–597 (Dok. 3).

7 Tallet 2010; Tallet 2012a, 150–151; Tallet 2012b, 222–226, no. 249.

8 Tallet 2010; Tallet 2012a, 150–151; Tallet 2012b, 226–229, no. 250.

Sedhotep vers les Terrasses de la Turquoise (2–3) [...] (4) [...] le roi de Haute et Basse Égypte Is[es]i, dans [...] (5) Les directeurs de la troupe qui ont été les administrateurs [des notables? ...] [...] dans Bat [...] L'amiral Ptah [...] l'officier de transport [...]; le [connu?] du roi, l'[inspecteur des notables Id[ou]

(6–7) Équipages: (6) le rameur Ounenirefne (7) [...] des équipages-merout (?) Hes[...] ? [...]. (transc. and transl. Tallet 2012b, 227)

19) Funerary inscription of Khui (Ḥwi) (Aswan, Qubbet el-Hawa; ca. 2200 BCE)⁹

*ḥrp šḥ Ḥnmw-ḥtp dd jw pr.kwj ḥn nb <wj?> ḥ:tj-ḥ sd:wtj ntr Ttj <ḥ:tj-ḥ sd:wtj ntr>
Ḥwj r Kbn Pwnt r Rtnw(?) n sp.jw jj.kwj m ḥtp jrj.nj ḥ:swt (j)ptn* (transc. Edel 2008, 466).

The Director of the Kiosk, Khnemḥotpe, says: I went forth with my lord, the Noble (ḥ:tj-ḥ), the Treasurer of the God, Tjetji/Khui to Byblos/Pwenet I was brought back (?) in safety after visiting those countries. (transl. Newberry 1938, 182)

20) Inscription of Pepi-nakht (Aswan, Qubbet el-Hawa; ca. 2200 BCE)¹⁰

(20) *jw gr ḥ:b.n wj ḥm n nb(j) r ḥ:st ʿm(.w)* (21) *r jnt n.f smr-wtj mdḥ Nḥn Kz(j)-pr(.w) <smr-wtj> jmj-r ʿw ʿnḥ.t(j)* (22) *wn ḥr spt kbnt jm r Pwnt* (23) *sk sm:n sw ʿmw n(j)w Ḥrjw-šj ḥn ʿtst nt mš ʿntj ḥn.f [...]* (28) [...] ʿmw [p]f (29) *sbḥ:ij sm:w jm.sn ḥn ʿtst nt mš(j) ntj ḥn(j)* (transc. after Edel 2008, 684).

(...) The majesty of my lord sent me to the land of the Aamu to bring back (the body of) the sole companion, controller of Nekhen, Kaaper's son the overseer of foreigners Ankhti¹¹. He had been building a reed¹² boat there to travel to Punt when the Aamu and Sand-dwellers killed him and the armed

9 Sethe 1903, 140, 17–141, 1; Breasted 1906a, 164, § 361; Sølver 1936, 453; Newberry 1938, 182–183; Edel 2008, 466–468 Cf. also Breyer 2016, 598 (Dok. 5).

10 Sethe 1903, 134, 13–17; Breasted, 1906a, 163–164, § 360; Lichtheim 1988, 16; Strudwick 2005, 335; Edel 2008, 686; Breyer 2016, 597–598 (Dok. 4).

11 This is Strudwick's rendering of the official's name usually read Anankhet, see Ranke 1935, 61, no. 19.

12 The boat was definitely made of wood. Strudwick's interpretation is surely based on the verb *sp* – “to bind”. However, this is a technical term that referred to assembling wooden ships as well. See the commentary of Breyer 2016, 598, n. 15.

division of the expedition which accompanied him. [... missing text probably indicated he attacked] ... those Aamu. Using the military wing of the expedition which was with me, I drove the murderers among them away. (...). (transl. Strudwick 2005, 335)

21) Rock inscription of Henu (Ḥnw) (FO Wadi Hammamat; ca. 2200 BCE)¹³

(10) *hstn.ti bit smr w.ti (i)m(.i) -r; pr(.w) Ḥn(n)w dd iw ḥꜥb[.n w(i) nb=i ḥn(.w) wꜥ(.w)] snb(.w) r sbi.t kbn.yt r Pwn.t r in.i.t n=f ḥntiw wꜥd m-(.w) ḥkꜥ.w ḥr(.iw) -tp dšr.t n snd.w=f ḥt ḥꜥs.wt ḥꜥ.n pri.kw m Gbtiw (11) ḥr mtw wꜥd.w.n n<=i> ḥm ḥ mšꜥ.w ḥn<=i> n(.i) Šmꜥ.w m [pr(.w)w] wꜥbw Wꜥs.t šꜥ im(.w) r iw -mitrw ph.wi ir(.i)t r šꜥb.t iꜥ.t nb.t n(.i) t nsw n; m nꜥ.w.t dmd(.w) iwi(w) m-sꜥ<=i> smn.ti sꜥw.w pr(.w)w 4 ḥr dšr wꜥ.wt (12) ḥr-ḥꜥ.t ḥr šhr.t sbi.w ḥr nsw nw.w msi.ww ḥꜥs.wt di.w m sꜥ-ḥꜥ.w dꜥdꜥ.wt nb.(w)t n(.iw)t ḥm=f di.w ḥr s.t<=i> ḥr smi<t>=sn n<=n> wꜥpw.ti.w m wꜥd wꜥ.w sꜥdm n=f ḥḥ pri.n<=i> m mšꜥ n(.i) s.i 3000 (13) iri.n<=i> mtw m itrw tꜥ-dšr m ꜥd n(.i) šḥ.t iw gr(.t) di.n<=i> šꜥdw stꜥt {d} <d>s 2 n(.i) mw tꜥ 20 n wꜥ.w im(.w) nb rꜥ(.w) nb iꜥ.w pw ꜥtp(.w) ḥr ḥb.wt fdꜥkw rd ky(.i) ḥꜥ.w iw gr.t iri.n <=i> ḥnmw.t 12 m Bꜥ.t (14) ḥnm.(w)t 2 m idꜥh.t ḥt mḥ 20m wꜥ(.w)t ḥt 1 mḥ 30 m k(.i)t(i) iri.n m iꜥhtb mḥ 10 r 10 ḥr=s nb {n}<m> sm; n(.i) bꜥḥ? ḥꜥ.n ph.n<=i> wꜥd-wr ḥꜥ.n iri.n<=i> (ꜥ)ḥꜥ.w pn sbi.n<=i> sw m iḥ.t nb.t iri.n<=i> n=f ꜥb.t wr.t m kꜥ.w m iwꜥ.w m (15) ḥn.t ḥr-ḥt iwi.t m wꜥd-wr iri.n<=i> wꜥd.t.n=ḥm=f ini.n<=i> n=f inw nb gmi.n<=i> ḥr idb.w Tꜥ-ntr ḥꜥi.n<=i> ḥr wꜥg rꜥ-hnw ini.n<=i> n=f inr.w šꜥs.w r tw.wt n(.iw)t ḥw.t-ntr (transc. after Breyer 2018, 600–602)*

(...) The Royal Treasurer the Sole Companion, (10) the Steward Henu who says: [My lord] sent [me] to conduct seagoing ships to Punt, to bring him fresh myrrh from the chiefs ruling the land. Then I set out from Coptos (11) on the way his majesty had commanded me, with me being an army of Upper Egypt from the wꜥbw -garrisons of the Theban nome, from Imyotru to Shabet. All royal offices from town and country were assembled and followed me, and four companies of police cleared the way (12) before me, smiting any who rebelled against the king. Hunters, natives of the deserts, were employed as body-guards, and all his majesty's councilors were placed under my control to announce messengers to me, the sole commander whom millions obey.

13 Couyat/Montet 1912, 81–84, pl. 31, no. 114; Schenkel 1965, 253–258; Seyfried 1981, 243–245; Lichtheim 1988, 52–54; Breyer 2016, 599–602 (Dok. 7).

Setting out with an army of 3000 men (13) I made the road into a river, the desert into a field border. For I gave a water skin and a bread bag, with two Ds-measures of water and twenty loaves, to every one of them every day. Donkeys were laden with sandals; when a foot became unshod another (sandal) was ready.

I also made twelve wells on the valley floor (14) and two wells in Idahet, one measuring twenty cubits, the other thirty. I made another in Yahetep of 10 by 10 cubits at all water levels. **Then I reached the sea, and then I built this fleet.** I loaded it with everything when I had made for it a great sacrifice of cattle and goats.

When I had returned from the sea I had done what his majesty had commanded me, bringing for him all kinds of gifts that I had found on the shores of god's land. I descended from Wag and Rahenu, bringing him precious stone blocks for temple statues (...). (transl. Lichtheim 1988, 53–54)

22) Shrine of Ankhu (𓂏𓂏) (Mersa/Wadi Gawasis; ca. 1950 BCE)¹⁴

Text of the eastern jamb

(...) (5) [...] *dp.wt* [...] *dmi n(i) Siww m sp:t Gbtiw r ph* (6) [...] *r; [...] h'w pn mi* [...]; *iri.t* [...] *r dr* [...] (7) [...] (transc. after Breyer 2018, 613)

(...) (5) [...] ships [...] I reached Suu of the Coptite nome in order to complete/ finish [...] (6) [...] ... [...] this ship like [...] doing [...] to place [on land?] (7) [...] (...). (transl. Cruz-Urbe 2018, 87)

Text of the central block

(1) [...] *24 ;bd 1 pr.t* [...] [*im.i-r;*] (2) *h' hrp pr(w) im.i-r; h'nwti* [...] [*Pw*](3)*n.t hntyt r ph* [...] (4) *hn' d:m(w) n(i) nfr(w)* (5) *s;b 'd-mr Nnw im.i-r; h'nwti.w im.i-r; nbw* [...] (8) *nfr.w 400 dmd.w 400 [+ x ...]* (...) (transc. after Breyer 2018, 613–614).

(1) [...] 24, first month of winter [...] [overseer of] (2) boats, controller of the crew, overseer of [...] [I sailed to Pu](3)nt, having sailed south to the end [...] (4) together with the crew of recruits [...] (5) senior governor of the ocean, overseer [...] (6) Senior one of the scribes of the granary, scribes of [...] (7) overseer of the records(?), overseer of necklaces [...] (8) recruits 400, total 400 [...] (...). (transl. Cruz-Urbe 2018, 87–88)

14 Sayed 1977, 157–163; Cruz-Urbe 2018, 86–89; Breyer 2016, 612–615 (Dok. 17).

23) Stele of Intef-iker (Antefoker) (ꜥn-ꜥt.f-ꜥkr) (Mersa/Wadi Gawasis; ca. 1950 BCE)¹⁵

(1) [...] dꜥy-ꜥnh mi Rꜥ(.w) [dd] (2) [...] nsw bit Hꜥpr-kꜥ-Rꜥ(.w) ꜥnh(.w) dd [...] [...] wd
 dd.n=f n (i)r(i)-pꜥ(t) hꜥ.ti-ꜥ(.w) (3) [...] tꜥti [...] im.i-rꜥ-srs.t-hꜥw.wt Inꜥ-ꜥti=f-ꜥkr(.w)
 mꜥdh (ꜥ)hꜥ.w pn [mꜥ?] (4) whꜥr.wt n(i) Gbtw sbi biꜥ Pwn.t r ph m hꜥtp(.w) r iwꜥ.t m
 hꜥtp(.w) (5) ꜥpr kꜥ.t=sn nb.t n-mrw.t mnꜥh(.w) rwd(.w) r ihꜥ.t nb.t iri.yt m tꜥ pn dr-bꜥh
 (6) iri.n=f mnꜥh.w sp 2 mi wd.wt n=f m hm n(i) stꜥ-sꜥ (i)s=k whꜥm.w Mnꜥ(7)w-hꜥtp(.w)
 sꜥ Imn(.w)y hr idb n(i) wꜥd-wr hr mꜥdh nn n(i) (ꜥ)hꜥ.w (8) hnꜥ dꜥdꜥ.t wr(t) tp-rsi tꜥ-
 wr wn.tꜥtꜥ<w> hnꜥ=f ꜥnh.w wn.w hr idb n(i) wꜥd-wr (9) mꜥ mꜥꜥ.w hnꜥ whꜥm.w
 (10) šmsw.w n(i) Hꜥr(.w) ꜥnh(.w) wdꜥ(.w) snb(.w) s.i 50
 im.i-rꜥ pr(.w) n(i) dꜥdꜥ.t s.i 1
 ꜥnh.w n(i) tꜥt n(i) nb Hꜥr(.w) ꜥnh(.w) wdꜥ(.w) s.i 500
 shꜥ.w n(i) dꜥdꜥ.t ꜥ.t s.i 5 ꜥnh.w n(i) nꜥw.t s.i 3200
 (transc. after Breyer 2018, 615–617)

(1) given life like Rea ... (2) ... King of Upper and Lower Egypt, Kheperkarea, may he live forever ... His Majesty ordered to the hereditary prince, mayor ... governor of the town ... (3) ... vizier ... overseer of the six law courts, *ꜥntf-ꜥkr*, (to) build these ships of (?) (4) the dock-yards of Koptos, to travel (or “to send (them)”) to “the Mine of Punt”, in order to reach (it) in peace (and) to return in peace, (5) to provide all their workmanship in order that (it) may be excellent and firm more than anything done in this land before. (6) He (*ꜥntf-ꜥkr*) accomplished his task (litt. “acted”) very magnificently, as it was ordered (to him) in the Majesty of the palace.

Lo, the herald (7) Ameni, son of Menthotpe was on the shore of the Great Green building these ships (8) together with the magistrates of the Thinite nome of the south. There were (litt. “being”) with him the persons (litt. “living ones”) who were on the Great Green shore (9) ... the soldiers together with the heralds.

(10) Followers of the king (litt. “the lord”) L.P.H.	50 men
Overseer of the house of the magistrates	1 man
Sailors of the Lord L.P.H.	500 men
Scribes of the great council of magistrates	5 men
Soldiers	3,200 men

(transl. Sayed 1977, 170)

15 Sayed 1977, 169–173; Sayed 1983, 29–30; Bard/Fattovich 2018, 85; Breyer 2016, 615–617 (Dok. 18).

24) Stele of Khnumhotep (Hnmw-ḥtp) (Mersa/Wadi Gawasis; 1846 BCE)¹⁶

Lower Register

*rnp.t-sp 4² smnh mnw=f m T3-ntr (1) [?.] mi Dhwti imu.i-r ḥnwti Hnmw-ḥtp(.w)
 (2) Hr(.w) nb t3.wi s:r šnyt n nsw (3) w.w n(.i) N.t ḥpr m ḥ dw3² n (4) h3i² tp-rd n(.i)
 ḥ tp{t}-r3 stp-s; (5) w3.wt n(.iw)t mnḥ sw tm (6) rḥ hp.w šs; m ir.wt<=f> (7) rḥ nsw
 [?.] mri.y=f n(.i) s.t-ib=f (8) ḥtm.ti nṯr*

Regierungsjahr 4²: das Errichten seines Monuments im Gottesland. [?.] wie Thot, der Vostehar der Protokollmeister Chnumhotep, der den Hofstaat beim König präsentiert, dem Horus, Herr der beiden Länder Einziger der Roten Krone, der aufgewachsen ist im Palast, der preist? der herabstieg² (gemäß) der Anweisung des Palastes, dem Ausspruch des Palastes ihm gehören alle Wege der Trefflichkeit, der die Vorschriften kennt, erfahren in <seinem> Beruf, Bekannter des Königs, [?.], sein Geliebter in der Stelle seines Herzens, der ist im Herzen seines Herrn, der Gottessiegler (transc. and transl. after Breyer 2018, 609)

25) Tale of the Shipwrecked Sailor (unknown; ca. 1950–1750 BCE)¹⁷

*ḏḏ=j n=f jnk pw hj.kwj (90) r bj; m wpw.t jtj m dp.t nt mh 120 m 3w=s mh 40 m shw=s
 sqdw 120 jm=s m stpw n Km.t (95) m3=sn p.t m3=sn t3 m3k3 jb=sn r mjw sr=sn ḏḏ n
 jjt=f nšnj n ḥprt=f w3 jm nb m3k3 jb=f (100) nḥt 3f r sn.nw=f nn wh3; m ḥrj-jb=sn ḏḏ
 pr(w) jw=n m w3ḏ-wr tp-3 sḥ=n t3 fj.t t3w jrj=f whmj.t nwj.t (195) jm=fnt mh 8 jn ḥt
 ḥwj --?-- ḥ3n dp.t mwt.t(j) ntjw jm=s n sp w3 jm ḥr ḥw=j mk wj r gs=k ḥ3n jnj.kwj r
 jw pn (110) jn w3w n w3ḏ-wr ḏḏ.jn=f n=j m snd m (sic) sp-2 nds m jtw ḥr=k ph.n=k
 wj mk nṯr rdj.n=f nḥ=k jrj=f tw r jw pn n k3 (115) nn ntt nn st m ḥnw=f jw=f mh ḥr
 nfrw.t nb(w).t mk tw r jrj.t jbd ḥr jbd r kmt=k jbd 4 m ḥnw n jw pn jw (120) dp.t r
 jj.t m ḥnw sqdw jm=s rḥ.n=k šm=k ḥn3=sn r ḥnw mwt=k m nw.t=k (...) ḥpr.n rdj.tw=j
 ḥr ḥ.t=j r dw3-nṯr n=f ḥ3n ḏḏ.n=f n=j mk tw r spr r ḥnw n jbd 2 mh=k qnj=k m ḥrdw=k
 rnpj=k m ḥnw <r(?)> qrs.t=k ḥ3n hj.kwj r mrj.t (170) m h3w dp.t tn ḥ3n=j ḥr jš n
 mš3 ntj m dp.t tn rdj.n=j ḥknw ḥr mrj.t n nb n jw pn ntjw jm=s r mjt.t jrj nj.t pw
 jrj.n=n m ḥd r ḥnw n jtj spr.n=n r ḥnw ḥr jbd 2 mj ḏḏ.t.n=f nb.t ḥ3n 3q.kwj ḥr jtj
 (175) ms.n=j n=f jnw pn jnj.n=j m ḥnw n jw pn ḥ3n dw3-nṯr n=f n=j ḥft-ḥr qnb.wt t3*

16 Nibbi 1976, 50 and pl. 10; Sayed 1977, 139, pl. 8a; Bard/Fattovich 2018, 62–63; Breyer 2016, 608–609 (Dok. 12).

17 P.Leningrad 1115; Blackman 1932, 41–48; Burkard 1993; Burkard/Thissen 2003, 142; Lichtheim 1973, 211–215; Breyer 2016, 620–621 (Dok. 27).

r-ḡr=f ḥ·n rdj.kwj r šmsw s;ḥ.kwj m tpw 200 (transc. Burkard 1993, 69–76, 95–98).

I said to him: “I had set out (90) to the mines on a mission of the king in a ship of a hundred and twenty cubits in length and forty cubits in width. One hundred and twenty sailors were in it of the pick of Egypt. (95) Looked they at sky, looked they at land, their hearts were stouter than lions. They could foretell a storm before it came, a tempest before it struck. Each of them – his heart was stouter, (100) his arm stronger than his mate’s. There was no fool among them. A storm came up while we were at sea, before we could reach land. As we sailed it made a ¹swell, and in it a wave (105) eight cubits tall. The mast – it struck (it). Then the ship died. Of those in it not one remained, except myself who is here with you. I was brought to this island (110) by a wave of the sea.” Then he said to me: “Don’t be afraid, don’t be afraid, fellow; don’t be pale-faced, now that you have come to me. It is god who has let you live and brought you to this island of the ka. (115) There is nothing that is not in it; it is full of all good things. You shall pass month upon month until you have completed four months in this island. Then (120) a ship will come from home with sailors in it whom you know. You shall go home with them, you shall die in your town.” (...) Then I put myself on my belly to thank him and he said to me “You will reach home in two months. You will embrace your children. You will flourish at home, you will be buried.” I went down to the shore (170) near the ship, I hailed the crew which was in the ship I gave praise on the shore to the lord of the island, those in the ship did the same. We sailed north to the king’s residence. We reached the residence in two months, all as he had said. I went in to the king; (175) I presented to him the gifts I had brought from the island. He praised god for me in the presence of the councilors of the whole land. I was made an attendant and endowed with 200 people. (transl. after Lichtheim 1973, 213–214)

26) Hatshepsut's naval expedition depicted in her mortuary temple (Deir el-Bahari; ca. 1460 BCE)¹⁸

Departure from Egypt (lower register, right side)

Command

iri hr tꜣ-wr (transcr. Breyer 2018, 622)

To the port side! (transl. Naville 1898, 14, pl. 73)

Arrival in Punt (lower register, left side)

(1) *sk̄di{w}.t m wꜣd-wr* (2) *šsp tp wꜣ:t nfr.t r Tꜣ-ntr dw r tꜣ* (3) *m ḥtp(.w) r ḥꜣs.t Pwn.t*
in (4) *mšꜣ n(.i) nb-tꜣ.wi ḥft tp.it-r;* (5) *n nb ntr.w Imn(.w) nb ns.wt tꜣ.wi ḥn.ti [Ip.t]-*
sw.t (6) *r in̄.it n-f bī.it* (7) *ḥꜣs.t nb.t n ʿt n(.it) mrr=f* (8) [*šꜣ:t=f Mꜣ:t-kꜣ-R(.w)*] [*r*
nsw(.w)] (9) *tp.iw-(.w)*] [*nn ḥpr.t is*] (10) *pw r k(i).w(i) bi(11)t.w ḥpr.w* (12) *m tꜣ pn*
 (13) *d.t* (Transcr. Breyer 2018, 622-623)

The navigation on the sea, the starting on the good journey to the Divine Land, the landing happily in the Land of Punt by the soldiers of the king, according to the prescription of the lord of the gods, Amon, lord of the thrones of the two lands, in order to bring the precious products of the whole land, because of his great love towards [here the name of Hatshepsut is erased with some signs which followed, and it has been replaced by the name of Rameses II.] ... (never did such a thing happen) to the kings who were in this land eternally. (transl. Naville 1898, 14, pl. 72)

Departure from Punt (upper register, left side)

(1) *ꜣtp ḥꜣw r ʿt wr.t m bī.it* (2) *ḥꜣs.t Pwn.t ḥꜣw nb nfr n(.i) Tꜣ-ntr ḥꜣ.w m km.yt*
 (3) *n(.i)t ʿntiw m h.wt n(.i)t ʿntiw wꜣd* (4) *m ḥbni hr ꜣbw wꜣb m nbw wꜣd* (5) *n(.i) mw*
m ti-šps (6) *ḥs(i)y.t m i-h-mw.t* (7) *sntr msdm.t* (8) *m iꜣn.w* (9) *gif.w* (10) *ṯsm[.w]*
 (11) *m in(12)m.w* (13) *n(.i)w ꜣby-šmꜣ* (14) *m mryt ḥnꜣ* (15) *msw.w=sn n-sp*
in.t<(t)w> (16) *m̄i.tn nn n nsw nb ḥpr dr pꜣ:t tꜣ* (Transcr. Breyer 2018, 628).

The loading of the cargo-boats with great quantities of products (lit. marvels) of the land of Punt, with all the good woods of the divine land, heaps of gum of anti, and trees of green anti, with ebony, with pure ivory, with green (pure) gold of the land of Amu, with cinnamon wood, khesit

18 Mariette 1877, pl. 6; Naville 1898, 14–16 and pl. 72–75; Sethe 1906, 322–323 and 328–330; Säve-Söderbergh 1946, 14, fig. 1; Pirelli 1993; Breyer 2016, 622–642 (Dok. 28); cf. fig. 4 Baumann.

wood, with balsam, resin, antimony, with cynocephalo, monkeys, greyhounds, with skins of panthers of the south, with inhabitants of the country and their children. Never were brought such things to any king, since the world was. (transl. Naville 1898, 15, pl. 74)

Arrival in Egypt (upper register, right side)

(1) *sdd.wt iy.t m ḥtp(.w) dw r t3* (2) *r ip.t-sw.t m ;w.t-ib in mš' n.(i) nb t3.wi* (3) *wr.w m-ḥt=sn n.(i) ḥ3s.t {t}⟨t⟩n in3.n=sn n.(i)t.t n in3* (4) *tw=mi.ti.t=sn n k(i).w(i) bit.w* (5) *m bi.w* (6) *ḥ3s.t Pwn.t n 3.t n.(i) b3w* (7) *ntr pn šps Imn(.w)-R(.w) nb ns.w t3.wi* (Transcr. Breyer 2018, 629).

The navigation, the arrival in peace, the landing at Thebes with joy by the soldiers of the king; with them are the chiefs of this land, they bring such things as never were brought to any king, in products of the land of Punt, through the great power of this venerable god Amon Ra, the lord of the thrones of the two lands. (transl. Naville 1898, 16, pl. 75)

27) Accounts on Ramesses' expeditions in the Historical section of P.Harris I (Deir el-Medina; ca. 1150 BCE)¹⁹

Expedition to Punt

mqḥ.j mnšw 3w b3ww r-ḥ3t.sn 3pr(.w) m ist qrw šmsw m tnw nj.sn (9) *ḥrjw pdwt n nšw jm.sn ḥr rdw ḥwtjw r sdbḥ.w 3tp(.w) m jḥt Kmt nn r3-3.sn jw.w m tnw nb mj db3w wd3w(.w) m p3 jm 3 n mw* (10) *qdj st spr r ḥ3swt nt Pwnt nn ḥ3m st ḏw wḏ3 ḥr ḥrjt 3tp n3 mnšw b3w m jḥt t3 ntr* (11) *m bj3t nb š3t nt ḥ3s.sn 3ntjw qnw nt Pwnt 3tp(.w) mj db3w nn r3-3.sn nj.sn msw wrw n t3 ntr jw(.w) r-ḥ3.t jnw.sn* (12) *m ḥrw r Kmt st spr(.w) jw.w swḏ3w sic r ḥ3st Gbtjw st mnj(.w) m ḥtp ḥrj jḥt jnj.n.w st 3tp(.w) m ḥrjt ḥr 3w ḥr rmt3 3tp(.w) r* (13) *ḥ3w ḥr jtrw mrjt Gbtj wḏj(.w) m ḥḏ n ḥr.w*

Ich ließ große Handelsschiffe und b3w-Schiffe, die vor ihnen waren, zimmern. Sie wurden mit vielen Truppen und einem zahlreichen Gefolge ausgestattet. Ihre (9) Truppenoberste der Handelsschiffe waren auf ihnen, versehen mit Vertretern und Hauptmännern, um sie zu versorgen. Sie wurden mit unzähligen Dingen von Ägypten beladen, indem sie in jeder Zahl zu Hunderttausenden waren. Sie wurden auf das große Meer des umgekehrten Wassers (Euphrat) (10) ausgesandt. Sie gelangten zu den Ländern

19 Breasted 1906c, 203–204, § 407; P.Harris I, 77,8–78,1; Erichsen 1933, 94–95; Grandet 1994, 338; Bongrani 1997; Maderna-Sieben 1991, 66–67; Fabre 2005, 84–86; Breyer 2016, 650–652 (Dok. 38).

von Punt, ohne daß ihnen das Schlechte nahe kam und geschützt vor Schrecken. Die Handelsschiffe und die *b:w*-Schiffe wurden mit den Erzeugnissen des Gotteslandes (11) beladen, bestehend aus allem geheimnisvollen Staunenswertem von ihrem Land und viel Myrrer von Punt, indem sie zu unzähligen Zehntausenden geladen wurden. Ihre Fürstenkinder des Gotteslandes gingen vor ihren Abgaben (12) mit dem Gesicht nach Ägypten. Sie erreichten, indem sie wohlbehalten waren, das Land Coptos. Sie landeten in Frieden im Besitz der Dinge, die sie herbeigeholt hatten. Sie wurden auf der Landreise auf Eseln und Menschen geladen, auf (13) Transportschiffe auf dem Fluß <beim> Hafen von Coptos geladen (und) nordwärts vorwärts gesandt. (P.Harris I, 77,8–13; transc. and transl. Maderna-Sieben 1991, 66–67)

Expedition to Atika

wdj.j n; j pwtj (2) r ḥst ṯtk; r n; ḥwt bj; ṯw ntj m st pn jw nj.sn mnšw ṯp(.w) ḥr.w ktḥw m ḥrtj ḥr nj.w (3) ṯw sdn-f dr- dr nswjw gmt nj.sn ḥwt ṯp(.w) ḥrj bj; ṯp(.w) mj dbw r nj.sn mnšw (4) wd(.w) ḥr.w r Kmt spr(.w) wd; f;(.w) jr.w m sjd ḥrj p; sšd m dbwt bj; qnw mj ḥfnw jw.w m jwn (5) nbw sp 3 dj.j m; sn bw-nb mj bjjt

Ich sand meine Beauftragten (2) zu dem Land Atika zu den großen Kupferminen, die an diesem Ort sind, wobei ihre Lastschiffe mit ihnen beladen wurden, (und) andere auf dem Landweg auf ihren (3) Eseln waren. Nicht wurde solches seit Generationen gehört. Ihre Minen wurden gefunden, indem sie voller Kupfer waren. Es wurde zu Zehntausenden auf ihre Schiffe geladen. (4) Es wurde nach Ägypten gesandt und kam unversehrt an. Es wurde herbeigetragen und zu einem Haufen unter dem Erscheinungsfenster aufgehäuft, der aus Blöcken von Kupfer bestand, viel wie Hunderttausende, indem sie die Farbe (5) von Gold besaßen, dreimal. Ich veranlaßte, daß sie von jedermann gesehen wurden als wäre es ein Wunder. (P.Harris I, 78,1–5; transc. and transl. Maderna-Sieben 1991, 68–69)

28) Plin. HN 7.(2.)27 = Isigonus FGrH 1659 F 18

Aristoteles in cavernis vivere Pygmaeos tradit, cetera de iis ut reliquit. Cynros Indorum genus Isigonus annis centenis quadragenis vivere, item Aethiopas Macrobios et Seras existimat et qui Athon montem incolant, hos quidem, quia viperinis carnibus alantur; itaque nec capiti nec vestibis eorum noxia corpori inesse animalia.

Aristotle says that the Pygmies live in caves, but in the rest of his statement about them he agrees with the other authorities. The Indian race of Cynri

according to Isigonus live to 140; and he holds that the same is true of the Long-lived Ethiopians, the Chinese and the inhabitants of Mount Athos – in the last case because of their diet of snakes' flesh, which causes their head and clothes to be free from creatures harmful to the body. (transl. Rackham 1942)

29) Flor. 2.34 = 4.12.61–64

Omnibus ad occasum et meridiem pacatis gentibus ad septentrionem quoque, dumtaxat intra Rhenum atque Danuvium, item ad orientem intra Cyrum et Euphraten, illi quoque reliqui, qui immunes imperii erant, sentiebant tamen magnitudinem et victorem gentium populum Romanum reverebantur. (62) Nam et Scythae misere legatos et Sarmatae amicitiam petentes. Seres etiam habitantesque sub ipso sole Indi, cum gemmis et margaritis elephantos quoque inter munera trahentes, nihil magis quam longinquitatem viae inputabant – quadriennium inpleverant; et tamen ipse hominum color ab alio venire caelo fatebatur. (63) Parthi quoque, quasi victoriae paeniteret, rapta clade Crassiana signa ultro rettulere. (64) Sic ubique certa atque continua totius generis humanis aut pax fuit aut pactio, aususque tandem Caesar Augustus septingentesimo ab urbe condita anno Ianum geminum cludere, bis ante se clusum sub Numa rege et victa primum Carthagine.

Now that all the races of the west and south were subjugated and also the races of the north those at least between the Rhine and the Danube. and of the east between the Cyrus and Euphrates the other nations too, who were not under the rule of the empire, yet felt the greatness of Rome and revered its people as the conqueror of the world. (62) For the Scythians and the Sarmatians sent ambassadors seeking friendship; the Seres too and the Indians, who live immediately beneath the sun, though they brought elephants amongst their gifts as well as precious stones and pearls, regarded their long journey, in the accomplishment of which they had spent four years, as the greatest tribute which they rendered; and indeed their complexion proved that they came from beneath another sky. (63) The Parthians too, as though they repented of their victory, voluntarily returned the standards which they had won at the time of Crassus' defeat. (64) Thus everywhere throughout the inhabited world there was firmly established and uninterrupted peace or truce, and Caesar Augustus ventured at last, in the seven hundredth year since the foundation of the city close the double doors of the temple of Janus, which had previously been shut on two occa-

sions only, in the reign of Numa and after the first defeat of Carthage. (transl. Forster 1929)

30) Hor. Od. 1.12.53–57

*ille seu Parthos Latio imminentis | egerit iusto domitos triumpho | sive subiectos
Orientis orae | Seras et Indos, | te minor laetum [or: latum] reget aequos orbem.*

Whether it be the Parthians (now a threat to Latium) that he conquers and leads in a justified triumph, or the Chinese and Indians who live close to the region of the rising sun, he will rule in fairness over a happy world, so long as he is subordinated to you. (transl. Rudd 2004)

31) Verg. Georg. 2,114–130

*aspice et extremis domitum cultoribus orbem | Eoasque domos Arabum pictosque
Gelonos: | diuisae arboribus patriae. sola India nigrum | fert hebenum, solis est tu-
rea uirga Sabaeis. | quid tibi odorato referam sudantia ligno | balsamaque et bacas
semper frondentis acanthi? | quid nemora Aethiopum molli canentia lana, | uel-
leraue ut foliis depectant tenuia Seres? | aut quos Oceano propior gerit India lucos,
| extremi sinus orbis, ubi aëra uincere summum | arboris haud ullae iactu potuere
sagittae? | et gens illa quidem sumptis non tarda pharetris. | Media fert tristis sucos
tardumque saporem | felicitis mali, quo non praesentius ullum, | pocula si quando
saeuae infecere nouercae | [miscueruntque herbas et non innoxia uerba], | auxilium
uenit ac membris agit atra uenena.*

See, too, earth's farthest bounds, conquered by tillage – the Arabs' eastern homes, and the painted Gelonians: trees have their allotted climes. India alone bears black ebony; to the Sabaeans alone belongs the frankincense bough. Why should I tell you of the balsams that drip from the fragrant wood, or of the pods of the ever-blooming acanthus. Why tell of the Aethiopian groves, all white with downy wool, or how the Seres comb from leaves their fine fleeces. Or, nearer the Ocean, of the jungles which India rears, that nook at the world's end where no arrows can surmount the air at the tree-top. And yet not slow is that race in handling the quiver. Media bears the tart juices and lingering flavour of the health-giving citron-tree, which, if cruel stepdames have ever drugged the cups [mixing herbs and baleful spells], comes as help most potent, and from the limbs drives the deadly venom. (transl. H. Rusthon Fairclough 1935)

32) AE 2001, 2051 = O.Ber. 2/120²⁰ (Sikêt; 76/77 n.Chr.)

Anno VIII Imp(eratoris) | Caesar(is) Aug(usti) Vespasiani | L(ucius) Iulius Ursus pr(aefectus) Aegy(pti) (vac.) rediens a | Bern(icide) hoc (vac.) loco (h)ydreuma quaeri praecepit | hoc cum esset inventum praesidium et | lacus aedificari iussit cura(m) agente | M(arco) Trebonio Valente (vac.) pr(aefecto) mont<i>s | Bernicidis.

Im 9. Jahr des Imperator Caesar Augustus Vespasianus hat Lucius Iulius Ursus, der Statthalter von Ägypten, als er von Berenike zurückkehrte, die Anweisung erteilt, ein *hydreuma* an diesem Ort zu suchen. Als es gefunden wurde, befahl er, einen Stützpunkt und eine Zisterne zu bauen, unter der Aufsicht des Marcus Trebonius Valens, des Befehlshabers der Wüsten-/Bergregion um Berenike. (Übers. PR)

33) I.Did. 1 (Didymoi; 76/77 n.Chr.)²¹

[A]nno V[III Imp(eratoris)] Ve[s]pasi[a]ni [Caesa]ris Aug[usti] | [L(ucius) Iul]ius Ur[sus praef(ectus) Aegy(pti) re]dien[s] a B[ern(icide)] hoc | [loco] hyd[reuma quaeri praecepit hoc] cum e[sset in]ventum p[raesidium et lacu]s a[edifica]ri i[ussit curam] | agente [M(arco) Trebonio Valente praef(ecto) montis Bernicidis] | [

Übers. vgl. Nr. 32.

34) I.Did. 2 (Didymoi; 88/89–91/92 n.Chr.)²²

[Anno²³ ... Imp(eratoris) Domitiani] | [Caesa]ris Aug(usti) [- ca. 3 -] | [perm]issu | [M(arci) Me]tti Rufi | [praef(ecti)] Aegy(pti) | [- ca. 3 -]us Constans | [- ca. 3 -] cur(a)tor lacum | [magn]u<m> fecit.

Im Jahr ... des Imperator Domitianus Caesar Augustus ... hat, angewiesen von Marcus Mettius Rufus, dem Statthalter von Ägypten, -us Constans, der *curator* (von Didymoi), eine große Zisterne errichtet. (Übers. PR)

20 Reinard 2020, Nr. 109; Pfeiffer 2015, Nr. 59; AE 2002, 86; AE 2005, 1626 u. 1630.

21 Reinard 2020, Nr. 111.

22 Reinard 2020, Nr. 112.

23 Marcus Mettius Rufus hat zwischen 88/89 und 91 n. Chr. als *praefectus Aegypti et Alexandriae* amtiert; vgl. Faoro 2015, Nr. 33. Daraus ergibt sich nicht nur die Datierung der Inschrift, sondern man kann auch erwägen, dass in der Lücke am Anfang *Anno VIII* bis *Anno X* zu ergänzen sein könnte. Des Weiteren ist nicht auszuschließen, dass in der zweitletzten Zeile eventuell *[pro]cur(ator)* zu erwägen ist; vgl. Reinard 2020, 202, Anm. 213.

35) I.Pan.Deser. 68 = AE 1956, 57²⁴ (Aphrodito; 71/72 n.Chr. o. kurz danach)

Anno IIII [- ca. 3^e -] | L(ucius) Iulius Ursus [praef(ectus) Aeg(ypti) - ca. 3 -] hoc | loco hydreuma [ampl]iavit et cum esset | in[secur]um praesidium [forti]us aedificari iussit | curam agente operis M(arco) Trebonio Valente praef(ecto) Bernic(idis).

Im 4. (?) Jahr (des Vespasian?) hat Lucius Iulius Ursus, der Statthalter von Ägypten, an diesem Ort das *hydreuma* erweitert und befohlen, den Stützpunkt, weil er unsicher gewesen ist, stärker zu bauen; ausgeführt wurden die Arbeiten unter Marcus Trebonius Valens, dem Befehlshaber der Wüsten-/Bergregion um Berenike. (Übers. PR)

36) CIL III 6627 = CIL III 14147 = ILS 2483²⁵ (Mons Claudianus; Ende 1. Jh. / trajanisch) (Auszug)

... lac(c)i aedificati et dedicati sunt | Apollonos Hydreum (!) a(n)te septimum K(alendas) Ianuarias | Compasi K(alendis) Augustis || Berenicide [ante] decimum octavum K(alendas) Ianuar(ias) | Myos Hormi Id[ib]us Ianuar(iis) castra{m} aedificaverunt et refecerunt.

... Sie (= Soldaten) haben ... die Zisterne gebaut und geweiht; (in) Apollonos Hydreuma sieben Tage vor den Kalenden des Januar (= 24. Dezember), (in) Compasi an den Kalenden des August (= 30. Juli); (in) Berenike achtzehn Tage vor den Kalenden des Januar (= 13. Dezember); (in) Myos Hormos haben sie an den Iden des Januar (= 11. Januar) ein Lager gebaut und wiedererrichtet. (Übers. PR)

37) AE 2010, 1751 (Dios; 114/115 n.Chr.)

Imp(eratori) Nervae Traiano Optimo | Caesari Aug(usto) Germ(anico) Dacico pont(ifici) | max(imo) trib(unicia) pot(estate) p(atri) p(atriciae) anno XIX | M(arcus) Rutilius Lupus praef(ectus) Aegypti | per L(ucium) Cassium Taurinum p[rae]f(ectum) mont(is) | praesidium ex fund(ament)o [- ca. 3 -]buit

Dem Imperator Nerva Traianus Optimus Caesar Augustus Germanicus Dacicus, dem Pontifex Maximus, (Inhaber) der tribunizischen Gewalt, dem Vater des Vaterlandes, im 19. Jahr (seiner Herrschaft) hat Marcus Rutilius Lupus, der Statthalter von Ägypten, durch Lucius Cassius Taurinus, den Be-

24 AE 2001, 2047; AE 2005, 1627.

25 IGLAlexa. 179; AE 2001, 2048.

fehlshaber der Wüstenregion, den Stützpunkt von Grund auf erneuert/erichtet (?). (Übers. PR)

38) Plin. nat. hist. 6,102–103

a Copto camelis itur, aquationum ratione mansionibus dispositis, prima appellatur Hydreuma XXXII, secunda in monte diei itinere, tertia in altero Hydreumate a Copto LXXXV, deinde in monte; mox ad Hydreuma Apollinis a Copto CLXXXIII, rursus in monte; mox ad Novum Hydreuma a Copto CCXXXVI. est et aliud Hydreuma Vetus – Trogodyticum nominatur –, ubi praesidium excubat deverticulo duum milium; distat a Novo Hydreumate VII. inde Berenice oppidum, ubi portus Rubri maris, a Copto CCLVII p. sed quia maior pars itineris conficitur noctibus propter aestus et stativis dies absumuntur, totum a Copto Berenicen iter duodecimo die preagatur.

Von Koptos unternimmt man die Reise mit Kamelen, wobei die Rastplätze gemäß der Wasserverfügbarkeit angelegt sind: Der erste (Rastplatz) wird Hydreuma genannt, 32 (Meilen entfernt); der zweite ist an einem Berg, eine Tagesreise entfernt; der dritte an einem weiteren Hydreuma, von Koptos 85 (Meilen entfernt); dann (ein Rastplatz) an einem Berg; bald (folgt) das Hydreuma des Apollo, von Koptos 184 (Meilen entfernt); dann nochmals (ein Rastplatz) an einem Berg; bald (folgt) Novum Hydreuma, von Koptos 236 (Meilen entfernt). Es gibt auch ein anderes (Hydreuma, nämlich) Alt-Hyreuma – es wird das Trogodytische genannt –, dort wacht in einem Stützpunkt eine Truppe von 2000 Mann; von Novum Hydreuma ist es 7 (Meilen entfernt). Dann (folgt) die Stadt Berenike, wo ein Hafen im Roten Meer ist, von Koptos 257 (Meilen entfernt). Weil aber der größte Teil des Reiseweges aufgrund der Hitze während der Nächte absolviert wird und die Tage in den Lagern verbracht werden, vollendet man die Reise von Koptos nach Berenike erst am zwölften Tag. (Übers. PR, angelehnt an die Übers. v. Brodersen 1996 u. Strack 1968)

39) Plin. nat. hist. 6,84

nobis diligentior notitia Claudi principatu contigit legatis etiam ex ea insula advectis. id accidit hoc modo. Anni Plocami, qui maris Rubri vectigal a fisco redemerat, libertus circa Arabiam navigans aquilonibus raptus praeter Carmaniam, XV die Hippuros portum eius invectus, hospitali regis clementia sex mensum tempore inbutus adloquio percunctanti postea narravit Romanos et Caesarem.

Genauere Kenntnisse sind uns in der Zeit des Prinzipats des Claudius bekannt geworden durch Gesandte, die von jener Insel nach Rom geschickt wurden. Dies geschah auf folgende Art und Weise: Ein Freigelassener des Annius Plocamus, der den Zoll des Roten Meeres vom Fiscus gepachtet hatte, war bei seiner Umfahrung von Arabia von Nordwinden an Karmania vorbeigetrieben worden und fuhr nach 15 Tagen in den Hafen jener (Insel namens) Hippuros ein. Nachdem ihn der König (der Insel) sechs Monate lang des Umgangs gewürdigt hatte, berichtete er (= der Freigelassene) diesem (König) auf Nachfragen von den Römern und dem Caesar. (Übers. PR, angelehnt an die Übers. v. Brodersen 1968)

40) O.Ber. 1/94 (Berenike; Mitte 1. Jh. n.Chr.)

Πλούταρχος Ἀμμωνίου | ἔμπορος²⁶ πάρες Πausεῖρι[ο]ς | ὄρου οἴνου
ἰταλικά δέ[κα] καὶ λαδικηνὰ οἴνου δέ[κα] , ἑλαίου ἡμικάδια δέ[κα].

Plutarchos, Sohn des Ammonios, Händler. Lasst Pausiris, Sohn des Horos, passieren, mit zehn *italika*-Gefäßen Wein, und zehn *ladikena*-Gefäßen Wein, (und) zehn *hemikadia* Öl. (Übers. PR)

41) O.Ber. 3/267 Col. I (Berenike; 65/66 n.Chr.)

παντοπωλῶν | ἔτο[υ]ς ἰβ Νέρωνος τοῦ κυρίου | Θῶθ ε | Φαῶφι ε | Ἀθῶρ ε |
Χοιάχ ε | Τῦβι ε.

Von den Gesamtwarenhändlern, (im) 12. Jahr Neros, des Herrn; Thoth, 5; Phaophi, 5; Hathyr, 5; Choiak, 5; Tybi, 5. (Übers. PR)

42) O.Did. 238 (Didymoi; vor ca. 220–250 n.Chr.)

[Σ]αραπ[- ca. ? -] | [- ca. ? -] ἔμπορ[ος].

Sarap(ion?) Händler.

43) I.Portes 67 = I.Prose 59²⁷ (Koptos; 90 n.Chr.)

ἔξ ἐπιταγῆς [[Μ[ε]τ[ί]ου [Ῥού]φ[ου, ἐπάρχου Αἰγύπτου]], ὅσα δεῖ τοὺς
μισθωτάς τοῦ ἐν Κόπτῳ ὑποπέιπτον|τος τῆι ἀραβαρχία ἀποστολίῳ
πράσσειν κατὰ τὸν γνώμονα τῆδε τῆ | στήλῃ ἐνκεχάρακται διὰ Λουκίου |

26 Auf der Scherbe steht ἔμπορος.

27 Pfeiffer 2015, Nr. 62; SB 5/8904; OGIS 2/674; IGRR 1/1183.

Ἄντιστίου Ἀσιατικοῦ, ἐπάρχου | ὄρους Βερενείκης | κυβερνήτου Ἐρυθραϊκοῦ δραχμὰς ὀκτώ, | πρωρέως δραχμὰς δέκα, | [φυλ]άκου δραχμὰς δέκα, | [να]ύτου δραχμὰς πέντε, | [θερα]πεύτου ναυπηγοῦ δραχμὰς | [πέ]ντε, χειροτέχνου δραχμὰς | ὀκτώ, γυναικῶν πρὸς ἑταιρισιμον δραχμὰς ἑκατὸν ὀκτώ, | <γ>υναικῶν εἰσπλευουσῶν δραχμὰς εἴκοσι, γυναικῶν στρατιωτῶν δραχμὰς εἴκοσι, | πιττακίου καμήλων ὀβολὸν ἕνα, | σφραγιμοῦ πιττακίου ὀβολοὺς δύο, | πορείας ἐξερχομένης ἑκάστου | πιττακίου τοῦ ἀνδρὸς ἀναβαίνοντος δραχμὴν μίαν, γυναικῶν | πασῶν ἀνα(βαινουσῶν) δραχμὰς τέσσαρες, | ὄνου ὀβολοὺς δύο, ἀμάξης ἐχούσης τετράγωνον δραχμὰς τέσσαρες, | ἴστοῦ δραχμὰς εἴκοσι, κέρατος δραχμὰς τέσσαρες, ταφῆς ἀναφερομένης καὶ καταφερομένης δραχμὴν μίαν τετρώβολον (ἔτους) θ' Αὐτοκράτορος | Κα[σαρ]ος [[Δομιτιανοῦ]] Σεβαστοῦ [[Γερμαν(ικοῦ)]], Παχῶν ιε'.

Auf Anordnung des Mettius Rufus, des Statthalters von Ägypten: Wieviel die Steuerpächter der an die Arabarchie in Koptos abzuführenden *apostolion*-Abgabe eintreiben dürfen gemäß dem *gnomon*, wurde auf dieser Stele eingemeißelt durch Lucius Antistius Asiaticus, den Befehlshaber der Wüstenregion von Berenike: Für eine Steuermann auf dem Roten Meer: acht Drachmen; für einen Untersteuermann: zehn Drachmen; für einen Wächter: zehn Drachmen; für einen Seefahrer: zehn Drachmen; für einen Hilfsarbeiter beim Schiffsbau: fünf Drachmen; für eine Handwerker: acht Drachmen; für eine Prostituierte: hundertacht Drachmen; für Frauen, die (auf Schiffen) hereinsegeln: zwanzig Drachmen; für Frauen von Soldaten: zwanzig Drachmen; für Reisescheine/Passierscheine für Kamele: eine Obole; für das Versiegeln der Reisescheine/Passierscheine: zwei Obolen; wenn die Reise beginnt, für jeden Reiseschein/Passierschein pro Mann, der in die Wüste geht: eine Drachme; (und) pro für alle Frauen (pro Reiseschein/Passierschein): je vier Drachmen; für einen Esel: zwei Obolen; für einen Wagen, der ein viereckiges Verdeck aufweist: vier Drachmen; für einen Mastbaum: zwanzig Drachmen; für eine Segelstange: vier Drachmen; für das Hinauf- und Hinabbringen einer Mumie: eine Drachme (und) vier Obolen. Im 9. Regierungsjahr des Imperator Caesar Domitianus Augustus Germanicus, 15. Tag (des Monats) Pachon. (Übers. PR, angelehnt an die Übers. v. Pfeiffer 2015)

44) Itin. Anton. 172²⁸ (3. Jh. n.Chr.)

Item a Copto Beronicem – CCLVIII (258 Meilen); Poeniconon (= Phoinikon) – XXIII (24 Meilen); Dydime (= Didymoi) – XXIII (24 Meilen); Afrodito (= Aphrodites) – XX (20 Meilen); Compasi – XXII (22 Meilen); Iovis (= Dios) – XXIII (23 Meilen); Aristonis – XXV (25 Meilen); Falacro (= Phalacro) – XXV (25 Meilen); Apollonos – XXIII (23 Meilen); Cabalsi – XXVII (27 Meilen); Cenon hydreuma – XXVII (27 Meilen); Beronicen (= Berenike) – XVIII (18 Meilen).

45) Plin. nat. hist. 6,101

Secuta aetas propiorem cursum tutioremque iudicavit, si ab eodem promunturio Sigerum portum Indiae peteret, diuque ita navigatum est, donec compendia invenit mercator lucroque India admota est: quippe omnibus annis navigatur, sagittariorum cohortibus inpositis; etenim piratae maxime infestabant. nec pigebit totum cursum ab Aegypto exponere, nunc primum certa notitia patescente: digna res, nullo anno minus HS <D> imperii nostri exhauriente India et merces remittente, quae apud nos centuplicato veneant.

Die spätere Zeit hat als noch nähere und sicherere Route befunden, wenn man von demselben Vorgebirge zum indischen Hafen Zigeros steuert, und lange ist man so gefahren, bis ein Kaufmann noch weitere Abkürzungen fand und so durch seine Gewinnsucht Indien [uns] noch näher gebracht worden ist: Man fährt nämlich jetzt das ganze Jahr hindurch, wobei man Kohorten von Bogenschützen [auf den Schiffen] mitnimmt, denn Seeräuber machten die Fahrt ganz unsicher. Es wird nicht unangebracht sein, die ganze Route von Ägypten aus anzugeben, von der uns jetzt erst sichere Kunde vorliegt: Die Sache verdient es, da Indien unserem Reich in keinem Jahr weniger als 50.000.000 Sesterzen entzieht und Waren dafür gibt, die freilich bei uns für das Hundertfache verkauft werden. (Übers. Brodersen 1996, leicht adaptiert d. KDK)

46) SEG 8/703 = SB 5/7539 (Medamūd; 2. [oder 3.?] Jh.)

Λητοῖ θεᾶ μεγίστη | Αἰλία Ἰσιδώρα καὶ Αἰλί[α] | Ὀλυμπιάς ματρῶναι | στολᾶται ναύκληροι κα[ὶ] | [ἔμπο]ροι Ἐρυθραϊκά ἄμ[α] | [--- ±8 ---

28 Wiedergabe n. Löhberg ²2010, Bd. I, 160.

Ἄπολιναρίῳ | ἐπάρχῳ [--- ±6 ---] ἰσουλῶν καὶ [--- ±8 ---] | ἀμφοτέρων
[--- ±6 ---] | ἀνέθηκάν [--- ±7 ---].

Für die größte Göttin Leto haben Aelia Isidora und Aelia Olympias, *matronai stolatai*, Schiffseignerinnen und Kauffrauen auf dem Roten Meer mit [...] Apolinarios, Präfekt [...] der Olympias und [...] der beiden [...] diesen Stein gesetzt [...]. (Übers. KDK)

47) I.Portes 62 = SEG 34/1594 (Koptos; claudisch)

Υπὲρ [Τιβερίου] Κλαυδίου Καίσαρος | Σεβαστοῦ Γερμανικοῦ Αὐτοκράτορος |
Ἴσιδι θεᾶ μεγίστη [ἐκ τῆς ἰδί]ας | Δα[πάνης] - - - - - Ἄδα[ν] | ἰτης ἔμπορος
ἀνέθηκεν | ἔτους - - - - - Φαωφί τῆ

Für das Wohl des Tiberius Claudius Caesar Augustus Germanicus Imperator hat Dapanes, Kaufmann aus Aden der Isis, der größten Göttin auf eigene Kosten (dies) geweiht im ... Jahr ... am 16. Phaophi. (Übers. KDK)

48) AE 1999, 1723 = SEG 46/2176 (Wâdi Menîh el-Hêr; 25. Februar – 26. März 2 v.Chr.)

C(aius) Numidius | Eros ex{s} India | redie(n)s hic fuit | anno XXIIIX | Caesaris m(e-
nos) Pamen(oth)

Gaius Numidius Eros war hier, als er aus Indien zurückkam, im 28. Jahr des
Caesars im Monat Pamenoth (Übers. KDK)

49) I.Pan.Deser. 65 = AE 1954, 121 = SEG 13/614 (Wâdi Menîh el-Hêr; 2. bzw. 5. Juli 6 n.Chr.)

Λυσᾶς Ποπλίου Ἀννίου Πλοκάμου | ἠκωι ἔτους λε Καίσαρος Ἐπειφ ἦ || Lysa
P(ublîi) Anni Plocami veni anno XXXV | III Non(as) Iul(ias)

Lysas, Sklave des Poplios Annios Plokamos war hier am 8. Epeiph (= 2. Juli)
des 35. Jahres Caesars || Lysas, Sklave des Publius Annius Plocamus war hier
im 35. Jahr am dritten Tag vor den Nonen des Juli (= 5. Juli) (Übers. KDK)

50) Plin. nat. hist. 6,41

*Namque Persarum regna, quae nunc Parthorum intellegimus, inter duo maria Per-
sicum et Hyrcanium Caucasi iugis attolluntur. utrimque per devexa laterum Arme-
niae Maiori a frontis parte, quae vergit in Commagenen, Cephena, ut diximus, co-*

pulatur eique Adiabene, Assyriorum initium, cuius pars est Arbilitis, ubi Darium Alexander debellavit, proxime Syriae.

Denn die Reiche der Perser, die bekanntlich jetzt die der Parther sind, ziehen sich zwischen dem Persischen und dem Hyrkanischen Meer bis zu den Höhen des Kaukasos hinauf. Auf beiden Seiten hängt durch die Abdachung der Seitenflächen mit Armenia Maior an der Vorderseite, die sich bis Kommagene hinzieht, Kephenia zusammen, wie wir (oben schon) gesagt haben, und mit diesem wiederum (hängt) Adiabene (zusammen), der Anfang des Assyrer-(Gebietes), dessen Teil (hier) Arbelitis (genannt wird), wo Alexander den Dareios völlig besiegte, ganz nah an Syria. (Übers. PR, angelehnt an d. Übers. v. Brodersen 1996)

51) Plin. nat. hist. 6,145

a Petra incoluere Omani ad Characen usque, oppidis quondam claris ab Samiramide conditis Abaesamide et Soractia; nunc sunt solitudines. deinde est oppidum quod Characenorum regi paret in Pasitigris ripa, Forat nomine, in quod a Petra conveniunt, Characemque inde XII p. secundo aestu navigant, e Parthico autem regno navigantibus vicus Teredon. infra confluentem Euphratis et Tigris laeva fluminis Chaldaei optinent, dextra Nomades Scenitae.

Von Petra bis nach Charax haben die Omaner gewohnt mit den einst berühmten Städten Abaisamis und Soraktia, die von Samiramis gegründet wurden; jetzt sind das Einöden. Dann folgt eine Stadt, die dem König der Charakener unterworfen ist, am Ufer des Pasitigris; Forat ist ihr Namen, wo man von Petra aus zusammenkommt und dann zu Schiff mit günstiger Strömung in das 12 Meilen entfernten Charax fahren kann; für die Leute, die aus dem parthischen Reich kommen, (ist) der Ort Teredon (zweckdienlich). Unterhalb des Zusammenflusses von Euphrat und Tigris haben das linke Flußufer die Chaldaier, das rechte Skeniter, die Nomaden sind, inne. (Übers. PR, angelehnt an d. Übers. v. Brodersen 1996)

52) Plin. nat. hist. 6,147

Nunc a Charace dicemus oram, Epiphani primum exquisitam. locus ubi Euphratis ostium fuit, flumen Salsum, promunturium Caldane, voragini similium quam mari aestuarium per L orae, flumen Achenum, deserta C p. usque ad insulam Icarum, sinus Capeus, quem accolunt Gaulopes et Gattaei, sinus Gerraëicus, oppidum Gerra, V p. amplitudine; turres habet ex salis quadratis molibus.

Jetzt wollen wir von Charax aus die Küste besprechen, die erstmals von Epiphanes untersucht worden ist. Der Ort, wo die Mündung des Euphrat war, der Fluß Saison, das Vorgebirge Kaldone, ein Mündungsgebiet von 50 Küsten(-Meilen), das einem Abgrund ähnlicher ist als einem Meer, der Fluß Achenon, 100 Meilen weit Wüsten bis zur Insel Ikaros, der Meerbusen Kapaios, an dem die Gaulopen und Gattaiar leben, der Gerrhäische Meerbusen und die Stadt Gerrha mit 5 Meilen Umfang; sie hat Türme aus viereckig gehauenen Steinsalz. (Übers. PR, angelehnt an d. Übers. v. Brodersen 1996)

53) Plin. nat. hist. 6,149

ultra navigationem inconpertam ab eo latere propter scopulos tradit Iuba praetermissa mentione oppidi Omanorum Batrasavaves et Omanae, quod priores celeberrimum Carmaniae fecere, item Homnae et Attanae, quae nunc oppida maxime celebrari a Persico mari nostri negotiatores dicunt.

Daß dahinter die Schifffahrt an dieser Seite wegen Klippen nicht versucht worden sei, überliefert Iuba, unterläßt es aber, die Stadt der Omaner, Batrasaves, zu erwähnen, ebenso Omana selbst, das ältere (Autoren) zu einem berühmten Hafen (namens) Karmanias gemacht haben, sowie Homna und Attana, die jetzt besonders berühmte Städte am Persischen Meer sein sollen, wie unsere Kaufleute sagen. (Übers. PR, angelehnt an d. Übers. v. Brodersen 1996)

54) O.Did. 71 (Didymoi; late 2nd / early 3rd cent. AD)

[Παλ]μυρηνοί | (*hand 2*) [.]ερης (ἑκατοντάρχης) | (*hand 1*) Ἰούλις Ἀντίοχος (*vac.?*) (*hand 2*) β | (*hand 1*) Κρόνις Διογένης | Ἰσίδωρος Ποσειδώνις | Κρόνις Ψενόσιρις | Ἀθηνόδωρος Ἀλλαιμου²⁹ | ἰς Ἀνουβίων | Σάλμησ | Πετόσιρις

Palmyrenes: -eres, *centurio*; Iulius Antiochos, 2; Kronios, Son of Diogenes; Isidoros, son of Poseidonios; Kronios, son of Psenosiris; Athenodoros, son of Allaimou; -is, son of Anoubion; ... Salmes; ... Petosiris. (trans. PR)

55) O.Did. 39 (Didymoi; 3rd cent. AD)

[- ca. ? - τρι]||ακάδι. ἀξιῶ [- ca. ? -] | κιβάρια πέμψαι μὴ [- max. 3 -] | ὅτε ἐγγυὸς εἴσμεν <τοῦ> προ|θη τὸ ἔργον. παρὰ [. . .] Μεμνόνοῦ | κόψαι |

29 Zu diesem Namen vgl. O.Did. S. 136.

κουράτορο(ς) π(ραισιδίου) Διδύμου. δι βα[[σ]]σος | ἵππεὺς Παλμυρινὸς ἀνέβη εἰς Ἄφρο|δίδην μετὰ Κλασσικοῦ Θωθ β.

... the thirtieth. I request ... to send the food stuff, so that the work is not delayed when we are close to succeed. From Memnon, the curator of the *praesidium* (in) Didymos. ... Dibassus/Bassus (?), Palmyrenian horseman, went up to Aphrodite together with Classicus on Thoth 2. (trans. PR)

56) Phot. cod. 250,49 451b

Ὅτι τῆς ζωῆς ἡμῶν ἡμῖν ἐφεστῶσης ἔν τε τοῖς περιττοῖς καὶ τοῖς ἀναγκαίοις, τὰ εἰρημένα γένη τῶν ἰχθυοφάγων τὰ μὲν ἄχρηστα περιγεγράφασιν ἅπαντα, φησί, τῶν δὲ καθηκόντων οὐδὲν ἐλλείπουσι, τῇ θεῖα πρὸς τὸ ζῆν ὁδῶ βραβευόμενοι πάντες, οὐ τῇ παρασοφιζομένη ταῖς δόξαις τὴν φύσιν. Οὐ γὰρ ἀρχῆς ἰμειρόμενοι τυχεῖν ἀγωνία φιλονείκῳ καὶ δυστυχεῖ συνέχονται· οὐδὲ πλεονεξίας ἐρῶντες πολλὰ μὲν ἄλλους δρῶσι, πολλὰ δὲ πάσχουσι τῶν οὐκ ἀναγκαίων· οὐδὲ ἔχθρας ἐνιστάμενοι μείζους ἐπὶ βλάβῃ σώματος πολεμίου σφάλλονται ἐν ἀτυχίαις οἰκείων· οὐδὲ ναυτιλλόμενοι, κέρδους ἕνεκα τὸ ζῆν ὑπερτείναντες, προσπταίεσθαι τοῦ βίου μετροῦσι τὴν λύπην· ἀλλὰ μικρῶν δεόμενοι μικρὰ καὶ πενθοῦσι, τὸ μὲν ἀρκοῦν κτώμενοι, τὸ δὲ πλέον οὐ ζητοῦντες. Ἐνοχλεῖ δὲ ἕκαστον οὐ τὸ ἀγνοούμενον, εἰ μὴ πάρεστιν, ἀλλὰ τὸ βουλευτόν, ὅταν ὑστερίζη τοῦ καιροῦ τῆς ἐπιθυμίας σπευδούσης. Οὐκοῦν ἐκεῖνος, πάντ' ἔχων ἃ θέλει, εὐτυχῆσει κατὰ τὸν τῆς φύσεως λογισμόν, οὐ κατὰ τὸν τῆς δόξης. Νόμοις δὲ οὐ δικαιοῦνται· τί γὰρ δεῖ προστάγματι δουλεύειν τὸν χωρὶς γράμματος εὐγνωμονεῖν δυνάμενον;

While our way of life consists of both superfluities and necessities, the tribes of Fisheater just described have, he [i.e. Agatharchides] says, excluded all that is unnecessary but have omitted nothing that is appropriate since they all have chosen to follow the divine path to living, not that which attempts to improve on nature with opinions. For not wishing to gain office, they are not distressed by contentious and unfortunate rivalry. Since they are not greedy for riches, they do not inflict many evils on others and do not themselves suffer many unnecessary evils. Since they do not stir up serious quarrels in order to cause bodily harm to an enemy, they do not come to ruin because of the misfortunes of their kinsmen. As they do not go to sea and risk their life for gain, they do not measure distress by the accident of their life. But, since they have few needs, they also suffer little since they possess enough and do not seek more. Each is disturbed,

not by the unknown, if it is not present; but by what is desired when its satisfaction is later than the moment of the wish impelling him toward it. Thus, having everything he desires, he will be happy according to the calculation of nature, not that of opinion. They are not governed by laws, for why should a person who is able to act correctly without written law be a slave to decrees? (transl. Burstein 1989)

57) Diod. 3,40,8

τὰ δὲ σκάφη ταῦτα τῶν ἐπιβατῶν οἰκτρῶς στερηθέντα, καθάπερ τινὰ κενοτάφια, διαμένει πολὺν χρόνον πανταχόθεν περιχωννύμενα, τοὺς δ' ἴστοὺς καὶ τὰς κεραίας μετεώρους ἔχοντα πόρρωθεν τοὺς ὀρῶντας εἰς οἴκτον καὶ συμπάθειαν ἄγει τῶν ἀπολωλότων. πρόσταγμα γάρ ἐστι βασιλέως ἕαν τὰ τοιαῦτα συμπτώματα τοῖς πλέουσι διασημαίνειν τοὺς τὸν ὄλεθρον περιποιούντας τόπους.

As for the ships which have been stripped of their crews in this pitiable fashion, there they remain for many years, like a group of cenotaphs, embedded on every side in a heap of sand, their masts and yard-arms still standing aloft, and they move those who behold them from afar to pity and sympathy for the men who have perished. For it is the king's command to leave in place such evidences of disasters that they may give notice to sailors of the region which works their destruction. (transl. Oldfather 1961)

58) Phot. cod. 250,40 449a

Ἡ μὲν οὖν πρὸς τοῖς μετάλλοις ἀπώλεια τῶν πολλῶν σωμάτων πρὸς τὸ ῥηθὲν τέλος κομίζεται τὴν διέξοδον, σχεδὸν αὐτῆς τῆς φύσεως δεικνυούσης ὅτι τοῦ χρυσοῦ συμβέβηκεν ὑπάρχειν καὶ τὴν γένεσιν ἐπίπονον καὶ τὴν φυλακὴν σφαλερὰν καὶ τὴν σπουδὴν μεγίστην καὶ τὴν χρῆσιν ἡδονῆς καὶ λύπης ἀνὰ μέσον κειμένην.

The death of numerous men in the mines bring our exposition to the conclusion already stated, namely, that, as it is nature clearly demonstrates, the origin of gold is *laborious*, its preservation is uncertain, it is most zealously sought after, and its use lies between pleasure and pain. (transl. Burstein 1989)

59) Diod. 3,14,5

ἡ μὲν οὖν ἔργασία τοῦ χρυσοῦ περὶ τὰς ἔσχατιὰς τῆς Αἰγύπτου γινομένη μετὰ τοσοῦτων καὶ τηλικούτων πόνων συντελεῖται· αὐτὴ γὰρ ἡ φύσις, οἷμαι, ποιεῖ πρόδηλον ὡς ὁ χρυσοῦς γένεσιν μὲν ἐπίπονον ἔχει, φυλακὴν δὲ χαλεπὴν, σπουδὴν δὲ μεγίστην, χρῆσιν δὲ ἀνὰ μέσον ἡδονῆς τε καὶ λύπης.

This working of the gold, as it is carried on at the farthest borders of Egypt, is effected through all the extensive labours here described; for Nature herself, in my opinion, makes it clear that whereas the production of gold is laborious, the guarding of it is difficult, the zest for it very great, and that its use is half-way between pleasure and pain. (transl. Oldfather 1961)

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