

Funerary Boats and Boat Pits of the Old Kingdom*

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Introduction

The purpose of this study is to attempt to ascertain the meaning of the boat graves of the Old Kingdom. In order to arrive at a solution to the problem, two different kinds of sources are to be examined: on the one hand, the archaeological finds of boat graves in the royal domain, and, in default of pictorial representations from the royal domain, on the other hand the iconographic evidence from the wall decoration of non-royal tomb complexes of the early Old Kingdom. Three mayor questions shall be discussed: (1) the royal boat graves with the boats originally contained within them; (2) the representations of ships in non-royal monuments; and finally (3) the conclusions which are to be reached through the analysis of the boat graves and ship scenes from the Old Kingdom.

1. The Archaeological Finds

A summary of the archaeological finds concerning the boat graves of the Old Kingdom was competently put together by M. Verner in 1992,¹ who gives a extensive commented list of all royal and non-royal boat graves from the period of Khufu to the Sixth dynasty.

1.1 Royal boat graves

- Pyramid of Khufu, Giza (fig. 1):² There are 5 boat graves altogether: 2 ship graves south of the pyramid, both oriented east-west, 2 graves on the east side of the pyramid, both oriented north-south, as well as a fifth ship grave on the north side of the causeway, with an east-west orientation.

* My sincere thanks are due to S. A. Guss for reviewing the English text of this paper.

¹ Verner, "Funerary Boats of Neferirkare and Raneferef", in: U. Luft (ed.), *The Intellectual Heritage of Egypt. Studies presented to László Kákossy by Friends and Colleagues on the Occasion of his 60th Birthday* (SA 14), 1992, pp. 587-602.

² *PM III**, pp. 15 f.; Mohammad Zaki Nour, e.a., *The Cheops Boats I*, Cairo 1960, pp. 7-8; V. Margioglio and C. Rinaldi, *L'Architettura delle piramidi menfite IV*, Rapallo 1965, Testo, pp. 70-72 and Tavole, plate 1, 9-10 and M. Verner, *Die Pyramiden*, Hamburg 1998, p. 238.

The orientation of the ship found in the eastern boat grave at the south side of the pyramid is east-west. In this eastern pit stone mason's inscriptions were found, some of them with dates,³ the latest date being from the "11th (or 10th) time of (cattle) census".⁴ It is uncertain to which king this date belongs.⁵ Both graves of the southern row were situated under a huge wall, which in the late Old Kingdom was built in order to separate the royal from the private cemetery.

• Pyramid of Djedefra, Abu Roash:⁶ One boat grave to the east of the pyramid, south of the pyramid temple; the grave is oriented north to south. There are probably more boat graves in Abu Roash that have not yet been excavated.

• Pyramid of Khafra, Giza:⁷ As with the Khufu pyramid, five boat graves have been brought to light: two to the south and two to the north of the pyramid temple, both rows being oriented east to west. A further single grave lies on the east side of the pyramid. The orientation is north-south.

• Neferirkara, Abusir:⁸ In the Abusir-Papyri of Neferirkara, there is mention of at least four boats.⁹ The papyri indicate that two of these ships were situated in sealed rooms,¹⁰ and two other ships buried to the south and north of the pyramid.¹¹ A single ship to the south of the pyramid was brought to light by the excavation of M. Verner. The pit of this boat tomb is oriented east-west.

³ Abdel Moneim Abu Bakr and Ahmed Youssef Moustafa, "The Funerary Boat of Khufu", *Beiträge Bf 12* (1971) (= Festschrift Ricke), pp. 8-12.

⁴ *Op. cit.*, p. 11, figure 6.

⁵ The problems of this date have been discussed by M. Verner, "Archaeological Remarks on the 4th and 5th Dynasty Chronology", *ArOr* 69 (2001), p. 375. He and some other scholars attribute the date to the reign of Djedefra, while W. Helck, *Geschichte des Alten Ägypten*, 2nd ed., Leiden 1981, p. 54 n. 6 and A. Spalinger, "Dated Texts of the Old Kingdom", *SAK* 21 (1994), pp. 284-285 suppose that it could also belong to that of Khufu, if indeed an 11th or 10th time of census (= 21th or 19st regnal year) is his.

⁶ *PM III**, p. 1; E. Chassinat, "À propos d'une tête en grès rouge du roi Didoufré (IVe dynastie) conservée au Musée du Louvre", *Monuments Piot* 25 (1921-1922), pp. 56-57; V. Maragioglio and C. Rinaldi, *Notizie sulle piramidi di Zedefra, Zedkare Isesi, Teti*, Turin 1962, pp. 19-20 and plate 3; V. Maragioglio and C. Rinaldi, *L'Architettura delle piramidi menfite V*, Rapallo 1966, Testo, pp. 24-27 and Tavole, plate 4 [4-6] and M. Lehner, *The Complete Pyramids*, Cairo 1997, p. 120.

⁷ *PM III**, p. 26; S. Hassan, *Excavations at Giza VI.1*, Cairo 1946, pp. 56-66 and figures 19-22 and V. Maragioglio and C. Rinaldi, *L'Architettura delle piramidi menfite V*, Testo, pp. 70-72 and Tavole, plate 5, 11.

⁸ M. Verner, in: U. Luft (ed.), *Studies Kákosy*, pp. 587-592.

⁹ P. Posener-Kriéger and J.-L. De Cenival, *Hieratic Papyri in the British Museum, 5th Series, The Abu Sir Papyri*, London 1968, plates 31A (Cairo 58063) and 31B (BM 10735); P. Posener-Kriéger, *Les archives du temple funéraire de Néferirkarê-Kakaï (Les Papyrus d'Abousir). Traduction et Commentaire* (BdE 65.2), 1976, pp. 429-439 and M. Verner, in: U. Luft (ed.), *Studies Kákosy*, pp. 587-588.

¹⁰ P. Posener-Kriéger and J.-L. De Cenival, *The Abu Sir Papyri*, plates 31 A and 31 B, 1 and P. Posener-Kriéger, *Les archives du temple funéraire de Néferirkarê-Kakaï v.2*, pp. 430 and 439.

¹¹ P. Posener-Kriéger and J.-L. De Cenival, *The Abu Sir Papyri*, plates 31 B.3 and B.5 and P. Posener-Kriéger, *Les archives du temple funéraire de Néferirkarê-Kakaï v.2*, p. 509.

- Neferefra, Abusir:¹² The remains of two ships were found in a magazine of the pyramid temple of Neferefra. Both ships lay side by side in the room, and were oriented east to west. The stocking of the two ships in a magazine may be a substitute for two boat graves, although this is not quite certain. Two fragments of the Abusir-Papyri of Neferefra possibly mention these two ships, although the barques mentioned in the papyrus are of a different type.¹³
- Causeway of king Unas, Saqqara:¹⁴ south of the Unas causeway were discovered two boat graves. Both boat pits lie side by side and are oriented east to west.

1.2 Non-royal boat graves

Next to these royal boat graves, some boat pits or boat burials are known from the private domain.

- In the southern part of the funerary complex of the vizier Ptahshepses in Abusir, in a room of their own, possibly two ship graves were dug.¹⁵ The determination of this room as a room for two ships has been established from the shape of the convex and tilted northern wall, which clearly imitates the side of a boat.¹⁶ The meaning of this “boat grave” inside the mastaba complex however remains unknown. The ships, if they existed, would lie next to each other and are oriented east to west.
- A similar situation is found in the tomb of the vizier Kagemni in Saqqara (fig. 2).¹⁷ In this tomb, two boat graves were installed on the top of the mastaba. The two ships lie side by side; their orientation is east-west.

¹² M. Verner, in: U. Luft (ed.), *Studies Kákosy*, pp. 592-594.

¹³ P. Posener-Kriéger, “Quelques pièces du matériel cultuel du temple funéraire de Rêneferref”, *MDAIK* 47 (1991) (= Festschrift Kaiser), pp. 293-304, esp. pp. 299-300 (k) with figure 1 [B.6], and p. 302 with figure 4 (Doc. II.4). It is striking that in the papyrus entry one ship is shown on a water surface, but not the other. Whether the difference is due to the fact, as discussed below, that one vessel is navigating celestial waters and the other earthly waters cannot be decided.

¹⁴ *PM III*², p. 420; G. Goyon, “Les navires de transport de la chaussée monumentale d’Ounas”, *BIFAO* 69 (1971), pp. 36-37, plate 2; U. Schweitzer, “Archäologischer Bericht aus Ägypten”, *Orientalia* 19 (1950), p. 120, plate 1 and J. Ph. Lauer and H. Altenmüller, “Architektur des Alten Reiches”, in: C. Vandersleyen (ed.), *Das alte Ägypten* (Propyläenkunstgeschichte 15), Berlin 1975, p. 145, figure 37.

¹⁵ M. Verner e.a., *Preliminary Report on Czechoslovak Excavations in the Mastaba of Ptahshepses at Abusir*, Praha 1976, pp. 51f and figure 2 and P. Jánosi, “The tombs of officials. Houses of Eternity”, in: Do. Arnold and C. Ziegler (eds.), *Egyptian Art in the Age of the Pyramids*, New York 2000, p. 33, figure 16.

¹⁶ J. Krejčí informs me that one of the walls of this “boat grave” shows traces of stairs leading to the top of the mastaba. Possibly the “boat grave” was installed on the roof of the mastaba, similar to the “boat grave” in the mastaba of Kagemni in Saqqara.

¹⁷ *PM III*², p. 521; B. Gunn and C. Firth, *Teti Pyramid Cemeteries I-II*, Cairo 1926, p. 21, plate 51; S. Hassan, *Excavations at Giza VI.1*, p. 88 and P. Jánosi, in: Do. Arnold and C. Ziegler (eds.), *Egyptian Art in the Age of the Pyramids*, p. 35, figure 17.

• We also find, in a similar context, single boat pits to the south of the pyramids G Ia and G Ib of the Queens of King Khufu¹⁸ and a another single boat pit to the southwest of the so-called pyramid of Khentkawes in Giza (LG 100).¹⁹ Concerning Khentkawes in Giza, it seems that the possibility of a second pit should not be set aside.

• Finally, also bearing relation to our subject, the boat grave of Queen Neith has to be mentioned. It holds sixteen model boats with accessories, among them four passenger boats for travelling in the Other World.²⁰

1.3 Some interpretations of the boat graves of the Old Kingdom

The meaning of the ships in the boat graves of the Old Kingdom is still disputed. The different theories are succinctly presented by M. Verner in his article on the funerary boats of Neferirkara and Neferefra.²¹ In the majority it is assumed that the ships have a multifunctional use. The views differ depending on whether the ships are seen as “Solar Barques”, as boats for use in the Other World, as transport ships for use during the king’s funeral, or as state barques during the king’s reign.

• The main theory put forward by S. Hassan expresses that the ships buried by the pyramid are “Solar Barques”.²² His comments however were not very convincing. Therefore his view did not find general acceptance.²³ This led to a constant reconsidering of the boat grave problem from different new angles. A few prominent theories are presented below.

¹⁸ *PM IIP*, p. 16; V. Maragioglio and C. Rinaldi, *L'Architettura delle piramidi menfite IV*, Testo, pp. 82-85 and Tavole, plates 11-13. G Ib: P. Jánosi, *Die Pyramidenanlagen der Königinnen* (Untersuchungen der Zweigstelle Kairo des Österreichischen Archäologischen Instituts, ÖAW 13), 1996, p. 9, figure 2.

¹⁹ *PM IIP*, p. 289; S. Hassan, *Excavations at Giza IV*, Cairo 1943, p. 33, figure 31; id., *Excavations at Giza VI.1*, pp. 68-69; V. Maragioglio and C. Rinaldi, *L'Architettura delle piramidi menfite VI*, Rapallo 1967, Testo, p. 178 and Tavole, plate 18.

²⁰ *PM IIP*, p. 432; G. Jéquier, *Les pyramides des reines Neit et Apouit*, Cairo 1933, pp. 33-40; figure 18 and plate 33.

²¹ M. Verner, in: U. Luft (ed.), *Studies Kákosy*, pp. 601-602.

²² S. Hassan, *Excavations at Giza VI.1*, p. xiv supposes “that the boats oriented east-west, whether occurring singly or in pairs, are easily recognized as being Solar-boats following the conventional course of the Sun-god’s journey”. From his conclusions on p. 55 [2] and [3] it appears that he considered the boats directed north-south as solar-boats: “The Day-solar-boat was said to take a southward course in order to reach the west, while the Night-boat travelled north in order to reach the east.”

²³ Compare with the controversial stand taken in: *Les grandes découvertes archéologiques de 1954, La Revue du Caire*, Numéro spécial, Cairo 1955 and J. Černý, “A Note on the recently discovered Boat of Kheops”, *JEA* 41 (1955), p. 75, n. 5 gives the following results: “The solar character of the boats is admitted by H. Stock (p. 97) and H. Ricke (p. 132); sceptical are J.-Ph. Lauer (p. 89), H. Kees (p. 102) and V. Vikentiev (p. 111, 122); definitely against are S. Sauneron (p. 105-106), Chr. Desroches-Noblecourt (p. 127).”

- J. Černý believes that the ships were used for the otherworldly voyage of the king. According to him, the four pits near the eastern and southern side of the Pyramid of Khufu originally contained the “four boats heading towards the four cardinal points of the sky, ready for the dead king whenever he chose to depart for any destination he liked. The fifth boat could then only be the actual boat which brought the body of the dead king from the valley”.²⁴
- Ahmed Fakhry deduces from the pyramid texts that the boats were used by the dead king in the Other World, and that only two of them “could accurately be called solar boats”.²⁵ Seeing that very little is certain about these boats, he prefers to call the vessels in a very broad sense ritual or funerary.
- A somewhat different view is taken by Abdel Moneim Abu Bakr and Ahmed Youssef Mustafa. Both scholars assume that all five of Khufu’s boats were used each for different purposes. They assume that three boats were necessary to visit important religious centers, such as Heliopolis, Sais and Buto, in the Other World. They further conjecture that the fourth boat of Khufu was used in coronation rites, and the fifth one either for the “Sons of Horus” who participated in the coronation rites, or for the transportation of the royal mummy from Memphis to the necropolis.²⁶
- A less detailed proposal for the explanation of the presence of boats in the vicinity of the Khufu pyramid was made by Zahi Hawass, who is inclined to connect the southern boats with “solar boats used by Khufu as the sun god Ra” and to explain the boats from the eastern boat pits as boats for “the living king whose activities are recorded in the reliefs of the upper temple”.²⁷
- Finally, M. Verner gave the last comment on the problem of the boat graves near the pyramids. By collecting and comparing all the facts, his proposition does the most justice to the problems involved. He concludes that the principal meaning of the boat burials was most likely “to provide the deceased with transportation in the Other World”.²⁸ Any farther-reaching conclusions are, in his opinion, problematic, since at different periods of the Old Kingdom, “different aspects of the meaning may have been emphasized ... in close dependence on the development of religious ideas”.²⁹

²⁴ J. Černý, *JEA* 41, pp. 77-78. Černý’s theory breaks down because the ship in the eastern boat pit at the south side of the pyramid is oriented to the west and not, as he supposed, to the east.

²⁵ Ahmed Fakhry, *The Pyramids*, Chicago 1961, pp. 106f.

²⁶ Abdel Moneim Abu Bakr and Ahmed Youssef Moustafa, *Beiträge Bf 12*, pp. 1-16.

²⁷ Z. Hawass, “The Pyramids and Temples of Gizeh. An Update”, in: W. M. Fl. Petrie and Z. Hawass, *The Pyramids and Temples of Gizeh*, London 1883-1990, pp. 111-115.

²⁸ In the same sense argues P. Posener-Kriéger, *Les archives du temple funéraire de Néferirkarê-Kakaï*, v. 2, p. 439: “Les noms de “barque Sud” et “barque Nord” ne nous renseignent pas beaucoup sur la destination de ces esquifs funéraires, mais invitent à les considérer comme des embarcations de pèlerinage ou des barques d’Etat.”

²⁹ M. Verner, in: U. Luft (ed.), *Studies Kákósy*, p. 602

1.4 Summary and questions

The cautious interpretation of the boat graves of the Old Kingdom by M. Verner is up to now the best and most satisfactory one. However, it might be possible to achieve, by studying the structure of the boat burials, a slightly more precise definition, on the base of the following observations:

- The ships present in the boat graves appear in pairs, or else, as in the case of Khufu and Khafra, come in the doubling of a pair, that is, in fours.³⁰ A doubling of the number two is also present in the boat models from the boat find near the pyramid of Queen Neith.
- The ships in the most ancient boat graves are, when they come in pairs, arranged one behind the other. This conspicuous arrangement is especially clear in the boat graves on the south side of the Khufu pyramid, and on the south and north sides of the Khafra pyramid temple. One can conclude from their arrangement that, at least in the case of Khufu and Khafra, we are in the presence of a convoy made up of two ships sailing one behind the other, an especially common configuration in the representations of convoys in the private tombs of the Old Kingdom. The only bothersome element is that with Khufu and Khafra the sum of the ships is in both cases five. To remove this difficulty we shall presumably have to divide the number 5 into $2 \times 2 + 1$, and interpret the extraneous ship as one for a different use than the two ships arranged in pairs.
- The boats in the magazine of the funerary temple of Neferefra and in the boat pits of the private individuals Unas, Ptahshepses and Kagemni also appear in pairs. However, they are not arranged one behind the other, but are lying side by side. In spite of this important difference, these double boat graves can in all probability be classified along with the other twin boat graves.
- Problematic remain the ship graves that originally held only one ship. To this category belong, besides the boat pit of Djedefra south of his pyramid temple in Abu Roash,³¹ especially the boat pits by the pyramids of Khufu's queens G1a and G1b in Giza and the pit southwest of Khentkawes' tomb complex in Giza (LG 100).

2. The Iconographic Material

An elucidation of the questions concerning the purpose and the meaning of the ships' voyage is to be expected from studying, as a complement to the

³⁰ This point of four ships was decisive for J. Černý, *JEA* 41, pp. 78-79, to suppose that the ships were destined to transport the deceased king to the four cardinal points of the sky.

³¹ It is not unlikely to suppose a second boat pit in some unexcavated places, such as in the funerary complex of Djedefra in Abu Roash or in the pyramid complex of Neferirkara, where a single boat pit has been found to the south of the pyramid, whereas a second, northern boat pit is known from the Abusir Papyri: P. Posener-Kriéger, *Les archives du temple funéraire de Néferirkarê-Kakaï*, v. 2, p. 439.

archaeological documentation, the representations of ships in the private tombs of the Old Kingdom. There, as well, ships appear mostly in pairs. Even more significant is the fact that they are mostly arranged in the same way as the ships of the boat pits of Khufu and Khafra, namely in a convoy in single file.

2.1 Henet-ship and Shabet-ship

The first important observation is that, in the ship scenes of the private tombs of the early Old Kingdom, a differentiation between two different ship types is possible. One type encompasses wooden ships with a prow bearing the head of a hedgehog twisted backwards,³² this ship is called Henet.³³ The other type is made up of wooden vessels whose hull imitates that of marsh ships built from papyrus stems,³⁴ this type of ship is named Shabet.³⁵ Both designations are documented starting from the early Fourth Dynasty, that is, from the time of Khufu and Djedefra.³⁶

The main particularities of the hedgehog-headed Henet-ship and the Shabet-ship can be easily discovered through examples of both vessels from the tomb of Seneb in Giza, which is probably to be dated in the early Fourth Dynasty.³⁷ In this early Giza tomb both ships are shown in a single relief field on the south wall of the southern outer post of the false door. In the top register, a Shabet-ship is being rowed; the inscription says: *hnt m š3bt*, “rowing in a Shabet-ship”. In the lower register, the representation of a Henet sailboat with a prow in the shape of the turned-back head of a hedgehog can be found. Its action is designated by the inscription as *š3jt t3w m hnt*, “sailing in a Henet-boat” (fig. 3).

³² V. von Droste zu Hülshoff, *Der Igel im alten Ägypten* (HÄB 11), 1980, passim and H. Altenmüller, “Die Nachtfahrt des Grabherrn im Alten Reich. Zur Frage der Schiffe mit Igelkopfbug”, *SAK* 28 (2000), pp. 1-26.

³³ H. Junker, *Giza V* (DAWW 71.2), 1941, p. 64 and H. Altenmüller, *SAK* 28, p. 19, n.54. cf. D. Jones, *A Glossary of Ancient Egyptian Nautical Titles and Terms*, London 1988, p. 142 [53] and N. Düring, *Materialien zum Schiffbau im alten Ägypten* (ADAIK 11), 1995, p. 143.

³⁴ J. Vandier, *Manuel d'archéologie V*, Paris 1969, p. 780 and N. Düring, *Materialien zum Schiffbau im alten Ägypten*, p. 143. An early example from the beginning of the Fourth Dynastie comes from the tombs of Meidum: W. M. Fl. Petrie, *Medum*, London 1892, plate 11 (Rahotep) and plate 25 (Nefermaat and Atet), and from the shiplist of the sarcophagus of Menu-khaef in Giza: W. St. Smith, “The Coffin of Prince Min-Khaf”, *JEA* 19 (1933), pp. 150-159 and plate 22.

³⁵ *Wb.* IV, 410,5; D. Jones, *A Glossary of Ancient Egyptian Nautical Titles and Terms*, p. 146 [71] and N. Düring, *Materialien zum Schiffbau im alten Ägypten*, p. 151.

³⁶ The Shabet being known not only from representations in the tombs of the officials at Giza and Saqqara but also from the early ship lists: W. St. Smith, *JEA* 19, p. 152 and plate 22. In these lists the Shabet-boat, first named, is followed by the Seket-boat, whose name recalls the name of the (me)sektet Night Barque.

³⁷ *PM III**, p. 101 (3c); H. Junker, *Giza V*, pp. 62-63, fig. 14 (a-b). For the early dating of this tomb: cf. N. Cherpion, “De quand date la tombe du nain Seneb?”, *BIFAO* 84 (1984), pp. 35-54 and plates 1-11 and M. Baud, *Famille royale et pouvoir sous l'Ancien Empire égyptien* (BdE 126.1), 1999, p. 35, n. 137.

Similar depictions of sailboats of the Henet type and of the oared Shabet boat type are to be found in other tombs in Giza of the Fourth and Fifth Dynasties, including the tomb of Merib (G 2100, Annex 1)³⁸ and that of Kaninisut (G 2155).³⁹ From there we can conclude:

All the scenes in which the hedgehog-headed ship of the Henet type and the Shabet-ship appear together in a single document show the Henet vessel as a sailboat and the Shabet vessel as oared.⁴⁰

However, a restriction must be made. For the typical sailboat of Henet type can also appear as an oared ship. The same inversion can be found with the Shabet-ship, for the typical oared ship of Shabet type can appear also as a sailing vessel. This case happens, however, only when the ships appear in a convoy of two or more ships and when the ship in question is in a second place. This means that the ship of Henet type can be an oared vessel when it is represented as being part of a convoy of two or more oared ships and when it takes a second position, as the Shabet-ship can appear as a sailing vessel in the back position of a sailing convoy which consists of two or more sailing ships.⁴¹

A fixed rule can be observed in the arrangement of the vessels. In a sailing convoy, the Henet-ship with the reversed hedgehog's head stands at the head, in an oared convoy the Shabet-ship takes over the lead. Each ship takes the lead for the technique in which it is specialised – the Henet-ship for sailing and the Shabet for rowing. A typical example for this sort of navigating is given by the sailing and oared convoys in the tomb of Fetekty in Abusir South (LS 1) from the Fifth Dynasty. There, the hedgehog-prowed ship leads the sailing vessels, while the Shabet-ship is leading the oared vessels (fig. 4).⁴²

A similar picture can be found in the tomb of Seshemnefer I from the end of the Fourth or the beginning of the Fifth Dynasties.⁴³ There, the Henet-ship with the hedgehog's head sails in front, a second vessel, possibly a Shabet-ship, follows behind.⁴⁴ The reverse appears in the oared convoys. An early example comes from the newly discovered tomb of Kapunesut Kai in the West-

³⁸ *PM III²*, p. 71(2); *LD II*, plate 22 (d) and E. Assmann, "Anhang zu Abschnitt IV", in: L. Borchardt, *Das Grabdenkmal des Königs Sahure II* (WVDOG 26), 1913, pp. 162-163 and figures 22-23.

³⁹ *PM III²*, p. 78 (3-4) and H. Junker, *Giza II* (DAWW), 1934, p. 156 and figure 22.

⁴⁰ The implications connected with the Henet- and Shabet-ships shall be discussed by the author in a study under the title "Day and Night as represented in the Reliefs of the Old Kingdom" [forthcoming].

⁴¹ A good example is given by the representations of ships in the tomb of Irukaptah in Saqqara from the end of the Fifth Dynasty, where a Shabet sailing ship and a Henet rowed ship each appear at the end of a convoy: *PM III²*, p. 639 (5-6) and A. McFarlane, *The Tomb of Irukaptah. The Unis Cemetery at Saqqara I* (ACE Reports 15), 2000, p. 51, plate 48.

⁴² *PM III²*, p. 351 (3); *LD II*, plate 96; *LD Ergän.*, plate 40d and M. Bárta, *Abusir V. The Cemeteries at Abusir South I*, Praha 2001, pp. 82-85 and plate 81.

⁴³ *PM III²*, p. 142 (2) and *LD II*, plate 28.

⁴⁴ This formation can still be seen in the Sixth Dynasty in the tomb of Pepiankh Heryib in Meir, where the Henet-ship takes the head of the sailing convoy: *PM IV*, p. 254 (12) and A. M. Blackman, *The Rock Tombs of Meir IV*, London 1924, pp. 44-45 and plate 16.

ern Cemetery at Giza from the middle of the Fourth Dynasty, where the leading Shabet-ship is followed by an oared Henet-ship.⁴⁵ Similar is an example from the tomb of Kakhent in El Hammamiya. There, a Shabet-ship bearing the princess Iufi rows ahead, while the hedgehog-headed vessel follows behind with the tomb owner Kakhent (fig. 5).⁴⁶

From the numerous references concerning the order of both boat types,⁴⁷ the following axiom can be concluded:

In a sailing convoy, the Henet-ship with the hedgehog-headed prow sails in the lead, with the Shabet-type ship in second place. In an oared convoy, it is the other way around: the ship of the Shabet-type takes the lead, with the Henet-ship in second place (cf. diagram 1).

Sailing:

Journey in sailing ships, Henet-ship is leading

Positioning of ships: \Leftarrow [¹ Henet-ship] + \Leftarrow [² Shabet-ship]

Rowing:

Journey in rowing ships, Shabet-ship is leading

Positioning of ships: \Rightarrow [Henet-ship ²] + \Rightarrow [Shabet-ship ¹]

Diagram 1: Convoy of sailing and rowing ships in a file.

The diagram makes it clear that, in principle, the position of the individual ships within the sequence, whether sailing or rowing, does not change. From there, the only conclusion is that in both cases a kind of ferrying motion is achieved, a perpetual to and fro between two destinations.

The same state of affairs can be shown in another mode of representations. Alternatively to the representation of a convoy the two vessels can be exhibited in two superimposed registers. This is especially popular with the oared vessels, which do not have an upraised mast and therefore are shown mostly as flat ships. Such a superimposed representation of a convoy can be seen with the oared ships in the Giza tombs of Seshemnefer I (G 4940),⁴⁸ Sekhemkara (LG 89),⁴⁹

⁴⁵ Z. Hawass, *Silent Images. Women in Pharaonic Egypt*, Cairo 1995, p. 67. Cf. H. Altenmüller, *SAK* 28, pp 10-11, Dok. 12.

⁴⁶ *PM V*, p. 8 (12-13) and A. El-Khouli and N. Kanawati, *The Old Kingdom Tombs of El-Hammamiya* (ACE Reports 2), 1990, plate 44.

⁴⁷ Similarly structured oared convoys are to be found in the tomb of Queen Meresankh III in Giza (G 7530 + 7540), in the tomb chapels of Akhtihotep at the Louvre, of Raemka at the Metropolitan Museum of Art (MMA 08.201.1), and in a fragment of unknown origin in Baltimore (WAG 22.87). In all these cases, the ship with the hedgehog prow takes the second position of the oared convoy.

⁴⁸ *PM III²*, p. 142 (2) and *LD II*, plate 28.

⁴⁹ *PM III²*, p. 234 (2) and *LD Ergänz.*, plate 37.

Imery (G 6020),⁵⁰ Khuuwer (LG 95),⁵¹ and in the tomb of Pepiankh Heryib at Meir.⁵² A similar arrangement can be observed with the sailing vessels too. For instance, in the Saqqara tomb of Shepsesra (LS 16)⁵³ two sailing ships are placed one above the other, the lower one probably being a sailing Shabet-ship with its oars laid down on the rim.⁵⁴

This superimposing of pairs of ships, sailing or rowing, can easily be explained as ships navigating side by side, one ship being on starboard and the other one on larboard. The main difference consists in the fact, that the convoy of sailing ships has the Henet-ship on its starboard side, while in the convoy of rowing boats the starboard side is taken by the Shabet-ship. The ferrying motion of the ships navigating in pairs is explained in diagram 2.

Sailing:

Journey in sailing ships, Henet-ship is leading

Positioning of ships: ⇌ [Henet-ship ¹], starboard
⇌ [Shabet-ship ²], larboard

Rowing:

Journey in rowing ships, Shabet-ship is leading

Positioning of ships: ⇒ [Henet-ship ²], larboard
⇒ [Shabet-ship ¹], starboard

Diagram 2: Convoy of sailing and rowing ships, side by side

2.2 The destination of the ferry's course

The direction in which the convoy goes is given by the ships' equipment. According to Ancient Egyptian understanding, navigating under sail means going upstream, from north to south; on the other hand, navigating in an oared boat, means going in the opposite direction, from south to north. What is annoying is the fact that the north-south or south-north direction of the navigation is not confirmed by the inscriptions. For according to the inscriptions, the sailing vessels under the leadership of the hedgehog-headed Henet-ship are sailing on the "Canal of the West" to the "Offering Field", obviously not to the south, while the oared vessels under the command of the Shabet-ship are rowing to the "Beautiful West" and evidently not to the north.

⁵⁰ *PM III²*, p. 172 (7); *LD Ergänzt.*, plate 7 and K.R. Weeks, *Mastabas of Cemetery G 6000* (Giza Mastabas 5), Boston 1994, p. 42, figure 34.

⁵¹ *PM III²*, p. 255 (5) and *LD II*, plate 43.

⁵² *PM IV*, p. 254 (12) and A. M. Blackman, *The Rock Tombs of Meir IV*, pp. 44-45 and plate 16.

⁵³ *PM III²*, p. 495 (9) and *LD II*, plate 64bis.

⁵⁴ A similar representation can be found in the tomb of Kapura from Saqqara: *PM III²*, p. 455 (1).

Because of the places named in the inscriptions, among which are “the Canal of the West”, the “Offering Field” and the “Beautiful West”, we can correctly assume that the ship scenes in the early Old Kingdom are representations of other world journeys. They take place not on earth, but in the sky.⁵⁵

The assumption that the ships are meant for heavenly journeys is corroborated by the placement of the ship scenes of the early Old Kingdom at the very top of the wall, right under the ceiling, many times over the entrance of the cult chapel.⁵⁶ For the same reason, and also as a further proof for a use of the ships for the tomb owner’s heavenly journey, the ship graves of Kagemni in the Sixth Dynasty were placed on the top of the mastaba.⁵⁷

If one translates the journey from the earth to the sky, and from the earthly to the heavenly surroundings, one also removes the contradiction which exists between the use of both sailing and oared ships in navigating from north to south (sailing) or from south to north (rowing) and the direction which is indicated by the inscriptions and which suppose a journey from west to east or from east to west. For, up there in the sky, another orientation obviously rules. This circumstance is clearly described in a Coffin Text of the Middle Kingdom, where it is said of the sun barque, which according to the reality of the sun’s course moves on an east-west route:

“You are sailing south in the Solar Night Barque (*hnt=k m (m)sktt*),
and you are rowing north in the Solar Day Barque (*hd=k m (m)ndt*)”

(CT I (44) 84g).

Apparently, the “heavenly Nile” is described as being, like the “earthly Nile”, traveled by sailing or oared vessels, from north to south and from south to north, with the essential difference that the routes navigated in the sky are in reality oriented parallel to the sun’s course. In this sense we can explain the ships under sail as sailing during the night from west to east, obviously not from north to south, and, following the sun’s course, being rowed during the day from east to west and not from south to north.

A similar conception must be valid for the ship scenes in the private tombs of the early Old Kingdom. Parallel to the Coffin Texts of the Middle Kingdom,

⁵⁵ Only in few cases are the places situated on earth. In the ship scene from the tomb of Kanisut in Giza (G 2155) one can distinguish between “sailing from Buto (P) to the “Offering field” and “rowing <from the Offering field> to Heliopolis (Jwnw)”. The two Delta localities mentioned in the inscriptions should be considered for Kanisut in their aspect as locations of the cult of Horus on the one hand (Buto) and Ra on the other (Heliopolis): *PM III*², p. 78 (3-4) and H. Junker, *Giza II*, p. 156, fig. 22. In the tomb of Kaemrehu in Saqqara (D 2) the convoy of rowing ships is navigating to the Delta: *PM III*², p. 486 (6) and M. Mogensen, *Le mastaba égyptien de la Glyptothèque Ny Carlsberg*, Copenhagen 1921, pp. 17-18 and plate 6.

⁵⁶ As is the case with the ship representations in the tombs of Merib (G 2100 Annex 1), Kanisut (G 2155), Uhemka (Giza, D 117), Meresankh III. (G 7530+7540), Seshemnefer I. (G 4940) and others.

⁵⁷ P. Jánosi, in: Do. Arnold and C. Ziegler (eds.), *Egyptian Art in the Age of the Pyramids*, p. 35, figure 17. A similar situation can be supposed for the ship grave in the mastaba of Ptahshepses in Abusir; cf. *supra* note 16.

it can be surmised that in the early Old Kingdom tombs, sailing from north to south corresponds to a night voyage of the tomb owner from west to east, and rowing from south to north to his day journey from east to west. For the night voyage, the sailing vessel is used, while for the day voyage, the oared one is employed. Keeping in mind the Henet-ship and Shabet-ship respectively as the lead vessels in each convoy, this result can be summarized as follows:

The Henet-ship, under sail, is the vessel meant for the tomb owner's nightly journey, and at night takes over the leadership of the two-vessel fleet composed of both Night Ship and Day Ship. The Shabet-ship, propelled by oars, is the vessel used during the tomb owner's daily journey, and goes at the head of the fleet during the day (cf. diagram 3)

Sailing (from "north" to "south"):

Henet-ship is leading

Navigation from "west" to "east" (night course)

Journey on the "Canal of the West" to the "Offering Field"

Positioning of ships: ⇌ [¹ Henet-ship] + ⇌ [² Shabet-ship]

Rowing (from "south" to "north"):

Shabet-ship is leading

Navigation from "east" to "west" (day course)

Journey to the "Beautiful West"

Positioning of ships: ⇒ [Henet-ship ²] + ⇒ [Shabet-ship ¹]

Diagram 3: Direction of the convoy of sailing and rowing ships, navigating in a file

In a similar way we have to explain the side by side navigating of the ships in the tomb decoration of the Old Kingdom. They too can be compared with the Solar Barques during their day and night journey which serve as their respective prototype. A couplet from Chapter 151 of the Book of the Dead⁵⁸ equates, in the context of a deification of the limbs of the deceased, the eyes of the deceased with both Solar Barques, navigating side by side:

"Thy right eye (*jrt wnmjt*) is the Solar Night Barque (*msktt*),
thy left eye (*jrt j3bjt*) is the Solar Day Barque (*m'ndt*)"

(Book of the Dead, ch. 151).

In this short statement we find an important assertion concerning the navigating of the Solar Barques during night and day. The right eye of the deceased

⁵⁸ E. Hornung, *Das Totenbuch der Ägypter*, Zürich-München 1979, p. 318 (Tb 151 v. 8-9) and T. G. Allen, *The Book of the Dead or Going forth by Day* (SAOC 37), 1974, p. 147 (S 2).

is equal to the Solar Night Barque, the left eye equal to the Solar Day Barque. The Night Barque follows a lane on the “west side” of the “heavenly Nile” (*wnmjt*; *jmnt*), while the Day Barque is in its company on its “eastern side” (*j3bjt*).

The traveling there and back of the Solar Barques (*msktt*) in the night from the “heavenly” north to the south and during the day from the south to the north of the sky, can be understood as being equal to the journey of the Henet and Shabet ships of the non royal tomb owner. The conception of the solar course by night and by day, here too, gives the general pattern for the heavenly journey of the private tomb owner (diagram 4).

Sailing (from “north” to “south”)

Henet-ship is leading

Navigation from “west” to “east” (night course)

Positioning of ships: ⇌ [¹ Henet-ship in the south], starboard

⇌ [² Shabet-ship in the north], larboard

Rowing (from “south to north”):

Shabet-ship is leading

Navigation from “east” to “west” (day course)

Positioning of ships: ⇒ [Henet-ship in the south ²], larboard

⇒ [Shabet-ship in the north ¹], starboard

Diagram 4: Direction of the convoy of sailing and rowing ships, navigating side by side

3 The Day and Night Journeys of the King

The result of the study of the ship scenes of the early Old Kingdom as represented in a non-royal context leads to the conclusion that a differentiation can be made between a night's journey of the tomb owner under sail and a day's journey under oar. This conception, which is ascertained from the ship scenes in the private sphere, has its repercussions on the royal sphere. Now it seems certain that the otherworldly voyage of the royal dead across the night and day skies must be viewed as happening in the same manner and according to the same system as that of the private citizen. The greatest difference may lie in the kind of ship used. The private citizen uses ships to the measure of his world, the king uses state barges that befit his royal status. With these basic assumptions in view, one can also find the same differences within the royal vessels meant either for daily or for nightly navigation.

As in the private domain, convoys of ships can also be found in the royal domain. The striking proof for the existence of ship convoys in the royal domain, consisting in a pair of ships, is delivered by the archaeological evidence of the twin boat pits. From there we can guess that the ships buried in the boat pits near the pyramids are to be differentiated through characteristic details, and so be identified as Day Barque or Night Barque, not for the sun god, but for the deceased king who crosses the night sky during the night and the day sky during the day.

The exact attribution of the two vessels to the day or night journey of the deceased king is made possible thanks to the famous “Khufu boat”, which was found in the eastern of two boat pits hewn in the bedrock to the south of the Great Pyramid. The vessel’s prow was, at the time of its discovery in its boat pit, facing west. The ship was placed to follow a route from east to west. It is characterized by its vertical hull and its turned-back stern (fig. 6).⁵⁹

Based on the position of the so called Khufu boat in the rear part of a convoy of two ships on a east-west route, the exact position of the ship within the deceased king’s daily and nightly journey can be computed. Taking into consideration the model deduced from non-royal representations concerning the order of the Henet-ship and Shabet-ship, the end result is – in my opinion, without any doubt – that the boat from the eastern boat grave on the south side of the great pyramid at Giza had the function of a Night Barque of the king. It is supposed to be on its day journey from east to west because it is a rowing ship and not a sailing vessel.

The second ship buried west of the first Khufu boat, of which photographs were taken in 1987 by a National Geographic team,⁶⁰ can, under these circumstances, only be the Day Barque of the king on its daily journey.⁶¹ The diagram 5 gives the data necessary for the elaboration of this conclusion:

⁵⁹ Mohammad Zaki Nour, e.a., *The Cheops Boats I*, pp. 7-8 and Z. Hawass, in: W. M. Fl. Petrie and Z. Hawass, *The Pyramids and Temples of Gizeh*, pp. 112-113: “the prow of the boat, a wooden column topped by a round wooden disk, was found in the extreme west of the pit.” Cf. M. Verner, in: U. Luft (ed.), *Studies Kákosy*, p. 596.

⁶⁰ Cf. Farouk El-Baz e.a., “Das Alte Ägypten”, *National Geographic Special 1/2001*, Hamburg 2001, pp. 52-58.

⁶¹ Z. Hawass, in: W. M. Fl. Petrie and Z. Hawass, *The Pyramids and Temples of Gizeh*, p. 115 concludes from the lacking of a sail in either boats of the boat pits to the south side of the Khufu pyramid that the Khufu-boats were not funerary boats. “A set of funerary boats would require that one have a sail for travelling north to south and the other would have oars for traveling south to north. Neither of the boats has a sail.” Our investigations show that this conclusion is not valid for the Khufu boats to the south of the Great Pyramid because both are destined for the day course of the kings journey and therefore are rowed. The Night Barque of king Sahure has such a sail and can therefore be interpreted as the Night Barque of the king on its nightly journey. The scene which comes from the Valley Temple of Sahure’s pyramid complex shows the night boat of the king named: *nṯrj b3 <S3hw-r>*, “Divine is the manifestation <of Sahure>”: *PM III*, p. 326 (1) and L. Borchardt, *Das Grabdenkmal des Königs Sahure II*, plate 9.

Oared vessels of king Khufu

Navigation from “east” to “west” (day course)

Positioning of the ships:

⇔ [1 Day Barque] + ⇔ [2 Night Barque]

Archaeological situation on the south side of the pyramid of Kheops

⇔ [western boat pit of 1987] + ⇔ [eastern boat pit of 1954]

Diagram 5: The convoy of Day and Night Barque on the south side of the Great Pyramid

A general idea about the appearance of the day and night ships in the royal domain can be deduced from the four ships of Queen Neith. These ships can be organized into two pairs (2 × 2).⁶² One ship of each pair has the form of a Shabet-ship, with a flat hull and stern, serving as the Day Barque of the queen. The other one is provided with a vertical hull in the shape of a wooden column and a turned back stern,⁶³ this type of ship being probably the Night Barque of the queen (fig. 7). One can imagine that the boat models from the boat pit of Queen Neith at Saqqara had the same shape as had once, in a greater scale, the Day and Night Barques of king Khufu.

4. Conclusion

Thanks to the grouping of different sources of the archaeological and the iconographical area, it is, in my opinion, possible to advance a new interpretation of the ship burials beside the pyramids of the Old Kingdom. The most important results are the following:

(1) The royal ships navigate in a convoy made up of two vessels, one being a Night Barque, the other a Day Barque. The order of ships is such that the ships are either following one behind the other in a convoy or they are navigating in a parallel lane side by side. Night Barque and Day Barque always appear together. When only one of the two boats has been discovered, the twin is still to be sought.

(2) The boats either are interred in boat pits by the pyramids or kept in a room of their own in the inner part of the cult complexes of the funerary temple of the king, as can be seen by the finds in the mortuary temple of king Neferefra. A similar situation can be discovered with the mastaba of the non-royal deceased.

(3) In the case of the queen's tombs, where usually only one ship was buried, it is to suppose, that the ships were in the retinue of the convoy following the king's ships.

⁶² PM III², p. 432; G. Jéquier, *Les pyramides des reines Neit et Apout*, pp. 33-40 and figure 18.

⁶³ The same shape of the Night Barque can be found with the Solar Ships in the Books of the Netherworld: E. Hornung, *Ägyptische Unterweltsbücher*, Zürich-München 1972, passim.

The role of the extraneous fifth ship of the boat pits of the pyramids of Khufu and Khafra however remains obscure, possibly this ship served once for the king's funeral.

(4) The ships were buried for the use of the deceased king who was supposed to travel in a barque of his own across the night and day sky. In the night, the convoy of ships was under sail, during the day the convoy of ships was thought to be rowed. Each convoy was lead by the ship, which was specialized for its particular journey. During the night the Night Barque was at the head of the convoy, during the day the Day Barque took over the lead of the naval convoy.⁶⁴

(5) An exact attribution of the boats interred in the boat graves either to daily or nightly navigation can be attempted for the ship burials of Khufu. The boat graves located to the south of the pyramid of this king contain two ships, both for the day journey. Both ships are oriented from east to west and are marked as oared ships. The western pit represents the pit of the leading ship and contains the Day Barque while the eastern pit contains the ship of the rear position, which is the Night Barque. The boat graves on the east side of the pyramid probably were intended for Khufu's night voyage with the southern ship as a Night Barque and the northern ship as the Day Barque.

According to the same model, the ship graves on the south and north sides of the pyramid temple of Khafra are to be understood as ships for the king's nightly and daily journeys. In the two southern pits, probably, lie both ships for the day's voyage of the king, in the pits to the north of the pyramid temple the ships for the king's night journey. A particularity of Khafra's boat pits consists in the fact that the western boat graves to the south and north of the pyramid temple are covered with large ceiling blocks, possibly a sign that this boat graves originally contained the flat Shabet-ship which once had the function of a Day Barque.

(6) The ship graves of Neferefra and Unas and those of the high officials Ptahshepses and Kagemni, which contained ships lying side by side, are also to be linked with the nightly and daily journeys of the deceased. From the general pattern of the boat graves near the pyramids of Giza can be concluded, that the southern pit contained once the Night Barque and the northern pit the Day Barque.

(7) The convoy of Night and Day Barques of the king has certainly the same meaning as the ship convoys in the private domain, which contain mostly a pair of ships, one being the Night Barque, the other one the Day Barque. In the tombs of the early Old Kingdom, it is the hedgehog-headed Henet-ship which represents the tomb owner's Night Barque, while the Shabet-ship is to be regarded as the tomb owner's Day Barque.

⁶⁴ In the tomb of Merib in Giza (G 2100 annex) the names of the Night and Day Barques of the royal convoy are preserved. Merib was "Sealer of the God" (*hmmwty ntr*) and in this function responsible for the night and day ships of his king (*PM III²*, p. 71; *LD II*, plates 18-22 and H. Junker, *Giza II*, pp. 121-135; cf. D. Jones, *A Glossary of Ancient Egyptian Nautical Titles and Terms*, p. 106 [243]).

• The ship names of the nightly convoy are: *b3 ntrw* (Night Barque: "(the king) is the (powerful) manifestation of the gods") and *dw3 t3.wj* (Day Barque: "(the king) is the praised one of the Two Lands").

• The ship names of the daily convoy are: *nb rhjt* (Day Barque: "(the king) is the lord of the Rechit-people") and *b^c ntrw* (Night Barque: "(the king) is the one honored (?) by the gods").

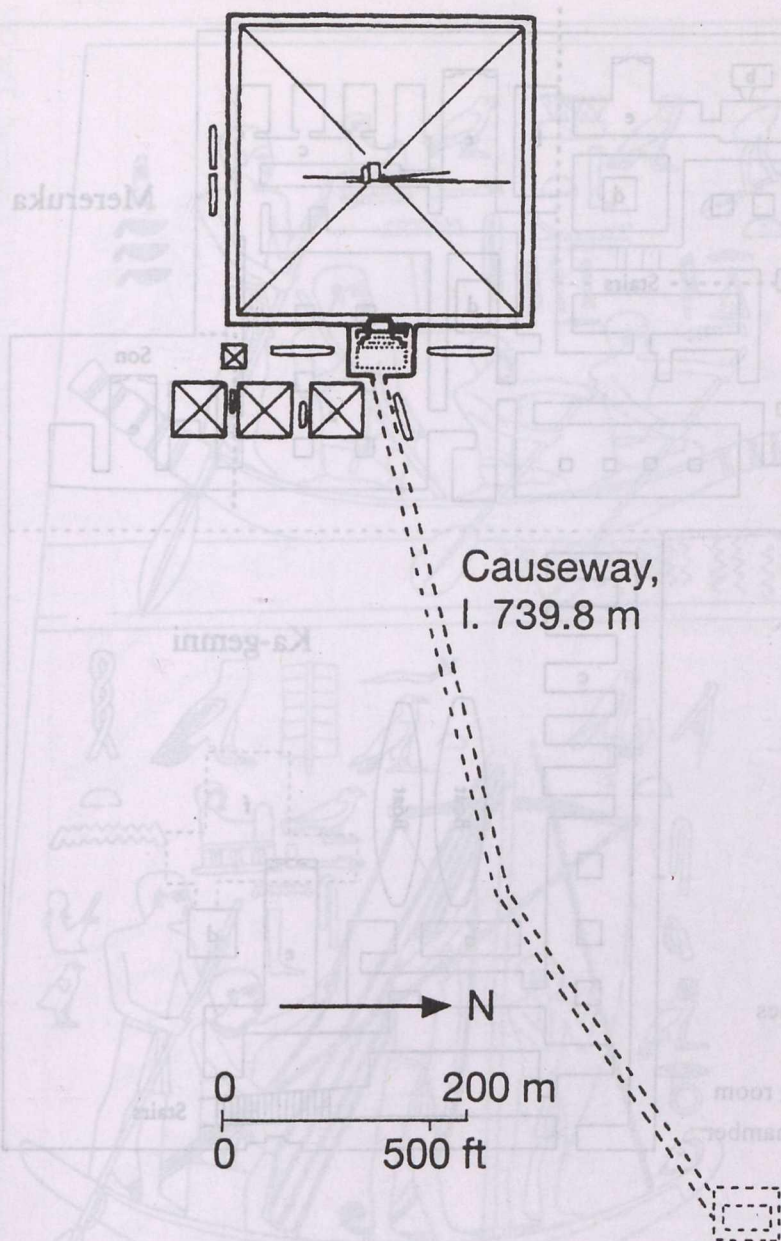


Fig. 1: Pyramid Complex of King Khufu at Giza (After M. Lehner, *The Complete Pyramids*, Cairo 1997, p. 109).

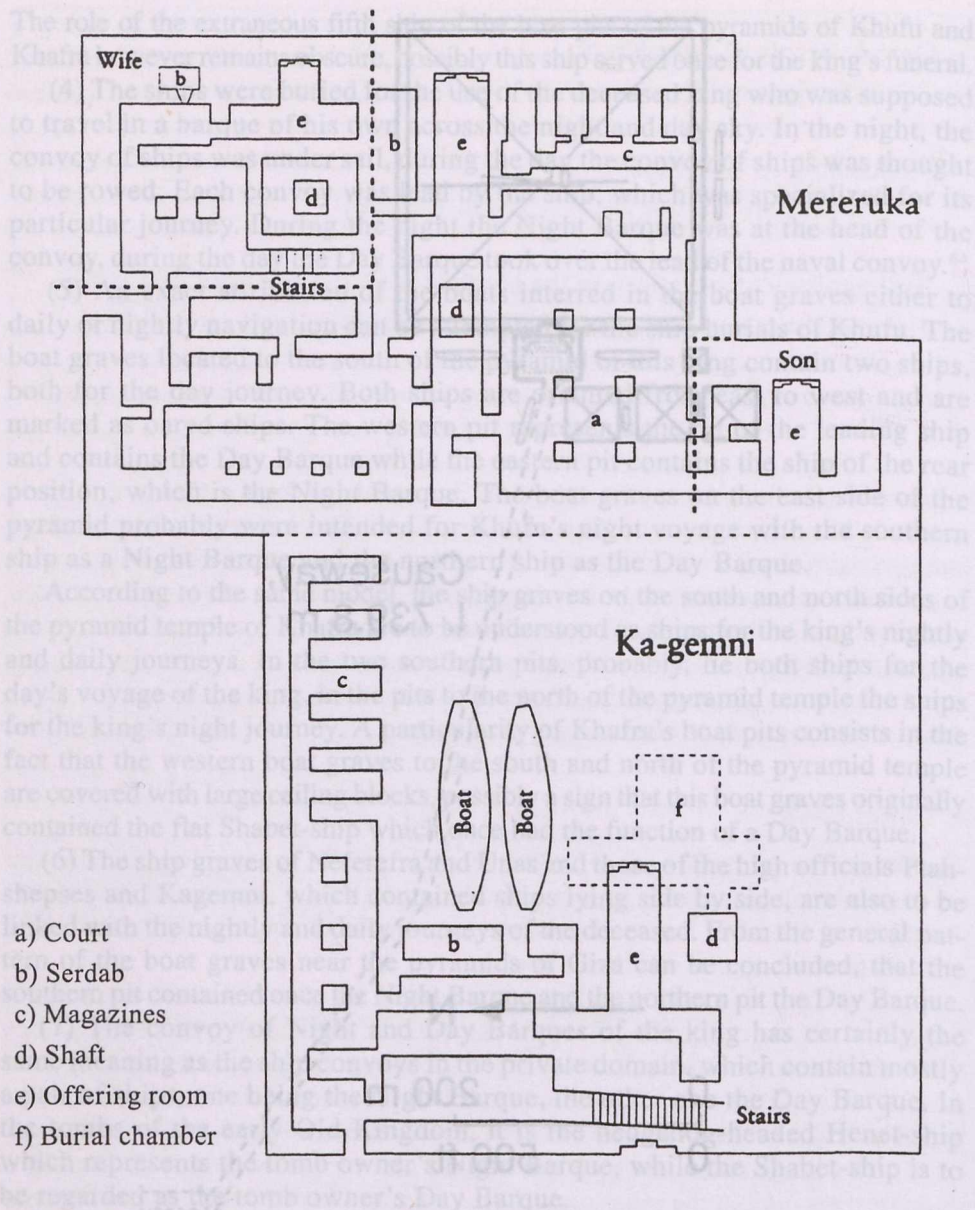


Fig. 2: Mastaba complex of Kagemni and Mereruka and the boat pits of Kagemni, Saqqara (From: P. Jánosi, "The Tombs of Officials. Houses of Eternity", in: Do. Arnold and C. Ziegler (eds.), *Egyptian Art in the Age of the Pyramids*, New York 2000, p. 35, figure 17).

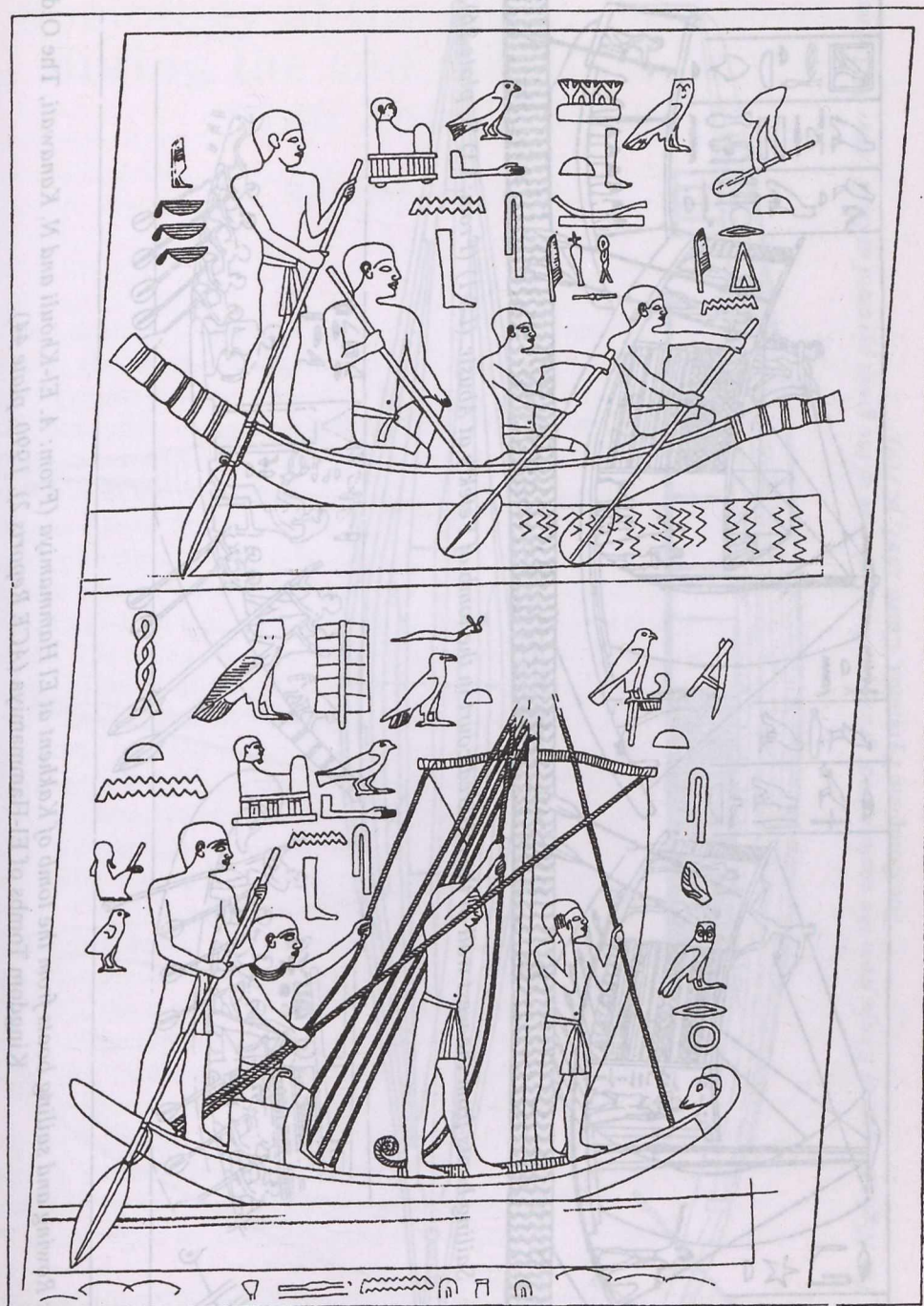


Fig. 3: Rowing and sailing boats from the tomb of Seneb, Giza (From: H. Junker, *Giza V* (DAWW 71.2), 1941, pp. 62-63, figure 14 (a-b).

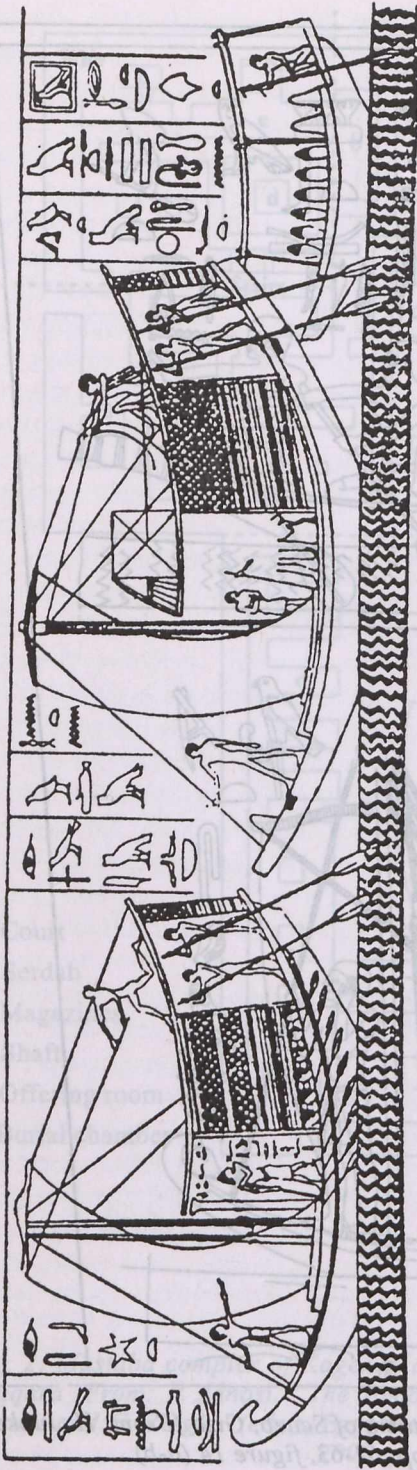


Fig. 4: Sailing boats from the west wall of the pillared court in the tomb of Fetekty at Abusir. (LS 1) (From: LD II, plate 96).

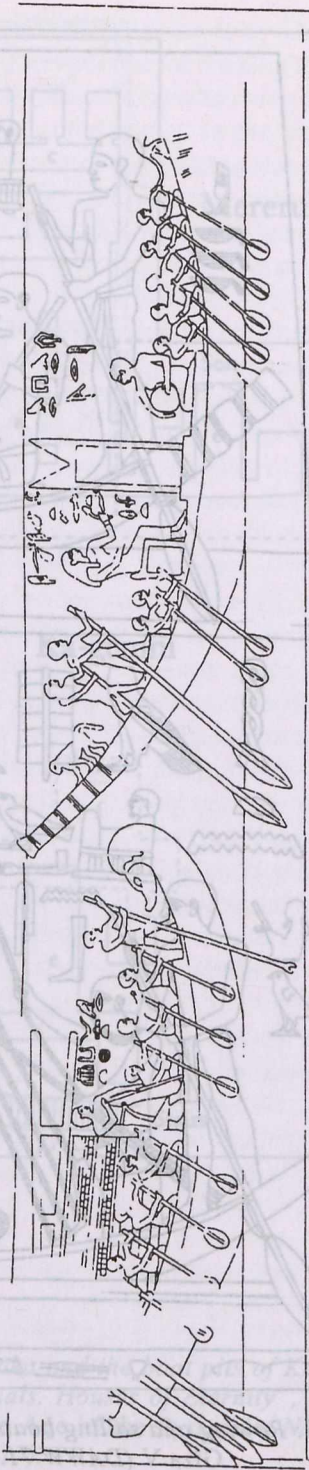


Fig. 5: Rowing and sailing boats from the tomb of Kakhent at El Hammamiya (From: A. El-Khouli and N. Kanawati, The Old Kingdom Tombs of El-Hammamiya (ACE Reports 2), 1990, plate 44).

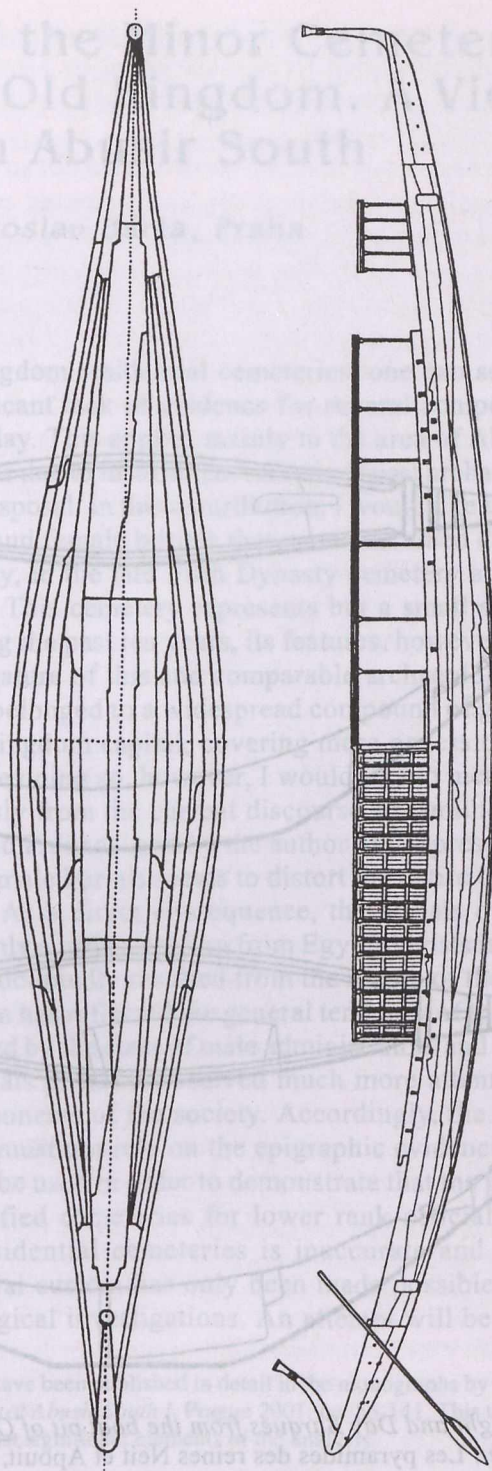


Fig. 6: The Night Barque of Khufu from the eastern boat grave on the south side of the great pyramid at Giza (After M. Lehner, *The Complete Pyramids*, Cairo 1997, p. 119).

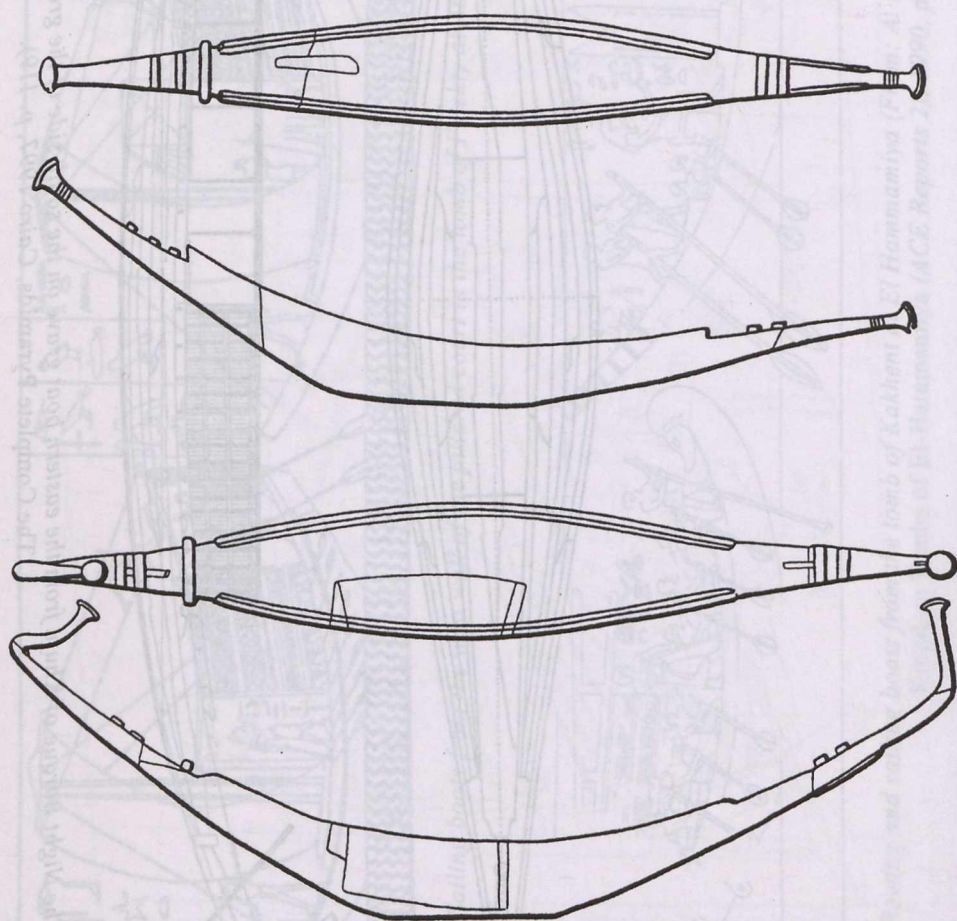


Fig. 7: Night and Day Barques from the boat pit of Queen Neith at Saqqara (From: G. Jéquier, *Les pyramides des reines Neit et Apouit*, Cairo 1933, p. 35, figure 18).