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The encounter between the sun and the moon on hypocephali

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Abstract

On many hypocephali one of the pictorial registers shows the meeting of the solar and lunar boats. The analysis of the cosmographic scheme of these funerary objects and the comparison of the scene with other astronomical depictions demonstrate that the encounter between the sun and the moon represents the situation when they are both dwelling in the liminal zones of the netherworld, close to the western and eastern horizons, respectively. The lunar boat is in fact a proxy playing the role of the morning barque of more traditional representations that show the two solar boats prow to prow.

Introduction

The hypocephalus, a circular object made from various materials and placed under the head of the deceased, appeared in Late Period Egypt as part of the funerary equipment of a narrow echelon of society who held elevated priestly offices in the localities of Thebes, Akhmim, Abydos, Hermopolis, and Memphis.¹ It was supposed to aid rebirth by magically inducing light and heat around the head, and this objective was achieved on the one hand by several inscriptions, notably among them excerpts from chapter 162 of the Book of Going Forth by Day,² and on the other by various illustrations that were arranged into registers and accompanied by either short captions or longer texts. The number of these pictorial registers shows some variation among the individual specimens but they never exceed four. The images may be different as well, although mostly within a limited repertoire, and in fact no two hypocephali have been found so far that are exactly the same.³ This paper focuses on the examination of one of the hypocephali found by W. M. F. Petrie in Abydos (fig. 1)⁴ which belongs to the category considered ‘standard’ in Egyptological literature.⁵ Generalisations will be made on the assumption that it fairly represents the overall message that these funerary objects were intended to convey.

¹ Varga 1998a: 29–31; 1998b: 13–14; Vallée 2009: 138–140; Mekis 2013: 9.

² Varga 1998a: 38–40; 1998b: 27–31; Wüthrich 2010: 52–53.

³ Mekis 2013: 12.

⁴ Petrie 1902: 49–51, pls. lxxvi–lxxvii.

⁵ Varga 1998a: 30; Vallée 2009: 140–141; Mekis 2013: 38.



Fig. 1: Hypocephalus from tomb G at Abydos (Petrie 1902: pl. lxxvi).



Fig. 2: Cosmographic scheme of the hypocephalus (after Petrie 1902: pl. lxxvi).

The first thing to be noted is that when there are four registers, they are split into two ‘hemispheres’ so that the depictions in them are arranged in a reverse fashion. Thus in two registers the figures stand upright while in the two remaining ones they are upside down. In other words, when the hypocephalus is rotated around its centre by 180 degrees, the upper registers will always appear upright. This arrangement of the registers no doubt reflects a cosmographic setting, inasmuch as two of them show the visible world (in temporal terms, daylight), while the opposing ones depict the hereafter (night; fig. 2).⁶ The same iconographic device of inversion to mark out the two distinct levels of existence, the here and the beyond, is not unprecedented and can also be seen in the well-known circular cosmographic drawing on Wereshnefer’s sarcophagus (end of 4th century BCE).⁷ In funerary literature the inverse nature of the netherworld is expressed by the frequently repeated wish of the deceased not to walk upside down.⁸ It is important to keep in mind this cosmography of the hypocephali, because it can help to properly understand what the depictions in the particular registers signify.

The images on the hypocephalus

In the hemisphere of the visible world the figures represent the diurnal journey of the sun across the sky.⁹ In the top register of depictions we see two images on the right. The upper one shows a boat in which Isis and Nephthys surround a falcon on a pedestal, a scene that corresponds to the rising of the sun in the east. The two goddesses are known from the New Kingdom onward to assist the birth of the sun god on the eastern horizon.¹⁰ The same message is repeated in the lower scene, where a goddess, a scarab, and a baboon are on board the boat. One of the glosses in chapter 17 of the Book of Going Forth by Day identifies Khepri (the scarab) in his boat as Re himself, while the baboon is mentioned in connection with Isis and Nephthys,¹¹ so a direct link with the top boat can be established,¹² and the two scenes on the right are really parallel images alluding to the cosmic event of sunrise. In the middle a double-faced figure, looking both ahead and behind, represents the sun at its zenith in the middle of the day,¹³ while the mummified falcon with spread wings (*ḥm*) on the left stands for the setting sun, Atum (often represented by a reclining ram, also read *ḥm*; see trigram in the upper netherworld register).¹⁴

In the other register of the same cosmographic sphere (i.e. the world of the living), the seated and duplicated anthropomorphic figure with four ram heads, that represents the unity of four bas in the god Amun-Re,¹⁵ depicts the creator god in its most powerful manifestation, and thus also the sun at the peak of its glory. Since on some hypocephali adoring baboons – sometimes wearing the lunar disc on their head – flank the deity on both sides,¹⁶ and accompanying inscriptions mention Khepri and the solar eyes, this could be the moment of sunrise in the morning,¹⁷ though as the image is placed in the middle of the register, just below the double-faced figure above, it could perhaps also be understood as the midday sun.

⁶ Miatello 2008: 285; Mekis 2013: 43.

⁷ Allen 2003: 28–29.

⁸ Assmann 2001: 204–205.

⁹ Miatello 2008: 287; Mekis 2013: 49–69.

¹⁰ Assmann 1969: 202–203.

¹¹ Allen 1974: 31.

¹² Mekis 2013: 52.

¹³ Miatello 2008: 287.

¹⁴ Darnell 2004: 73; Mekis 2013: 60–62.

¹⁵ Klotz 2006: 99; Koenig 2011: 247–250.

¹⁶ For examples, see Varga 1998a: 30–31 figs. 1–2 and Miatello 2008: 280 fig. 2.

¹⁷ Klotz 2006: 168; Miatello 2008: 286; Mekis 2013: 76.

To lend weight to this supposition, it might be added here that the midday sun indeed assumes the form of a ram with four heads in the listing of hours on the walls of the pronaos at Edfu and on the astronomical ceilings of the Dendera and Esna temples.¹⁸ From a more theoretical perspective, the four-headed figure in the centre of the register encompasses the totality of creation, including nature, and thus might refer to each and every aspect of the sun.

The sun god, together with a crew of divinities, also features in one of the netherworld registers travelling in his boat from left to right, that is, from west to east. This idea of the sun traversing the netherworld from the place of its setting in the west towards its place of rebirth at the opposite end of the compass is of course well-documented by the netherworld books of the New Kingdom.¹⁹ In this particular register of the hypocephali east is often signified on the right by the figure of Nut crouching over the scarab of Khepri, and this image is also reminiscent of the netherworld books in which the scarab – the hypostasis of the sun emerging from the duat – makes an appearance in the final hour of the night.²⁰ Opposing the solar boat, another barque is shown on the right, carrying a naos in which a squatting baboon can be seen and to whom another baboon offers the wedjat-eye. The boat in question without doubt transports the lunar god, as on some hypocephali the baboon in the naos wears the lunar disc on its head.²¹ In Ptolemaic orthography and temple scenes this image frequently identifies the preeminent lunar deity, Thoth, or the moon itself.²² The appearance of the moon on a funerary object that is principally associated with the warmth emanating from the sun may seem surprising, but it must not be forgotten that one variant of the text that forms the ideological antecedent to the hypocephali, Book of Going Forth by Day chapter 162,²³ besides evoking the sun god, Re, also makes references to Osiris, and explicitly mentions his lunar capacity (see below).²⁴ The two versions of spell 162 bear witness to and arise from two different strands of tradition. One equated the deceased, and especially their head, with the sun,²⁵ while the other – simultaneously with developments by which the lunar traits of Osiris became more pronounced – increasingly linked the rejuvenation of the dead with the constant renewal of the moon.²⁶

In the other, netherworldly, register of the hypocephali the depictions, though somewhat enigmatic, are certainly connected with the ideas outlined in chapter 162 of the Book of Going Forth by Day.²⁷ The Ihet cow that plays a crucial role in the text of the spell as the guarantor of the heat desired by the deceased is drawn in the middle, followed by a female figure whose head is replaced by the wedjat-eye inscribed into a disc and who holds a plant in her raised left arm. On the other side the cow is faced by the four sons of Horus, a trigram made up of a lotus, a lion, and a ram, signifying the sun god,²⁸ and three more manifestations of the sun, namely, a ram-headed naos, a squatting deity with solar disc on the head, and a scarab. In another scene on the left the ithyphallic Nehebkau offers the wedjat-eye to a seated deity who has wings on his back and in his raised left arm holds the flail like Min. The precise meaning of these depictions is elusive, though close parallels are found both on magical objects (Metternich stela),²⁹ and in funerary contexts (tomb of Petosiris in the Dakhleh

¹⁸ *Edfou* III, pl. lxxi; Cauville 2012: pl. vii; *Esna* IV, fig. 1, strip D.

¹⁹ Hornung 1999: 27.

²⁰ Hornung 1999: 53, 77, 95, 134; Minas-Nerpel 2006: 180–185, 197–199, 209–211, 230–235.

²¹ See Varga 1998a: 30 fig. 1; Miatello 2008: 280 fig. 2.

²² *Edfou* III, 213 (3); *Edfou* X, pl. cxxxv; Kurth 2007: 204.

²³ For a view doubting the close ties of hypocephali with chapter 162, see Vallée 2007: 1877–1879; 2009: 139.

²⁴ Allen 1974: 158–159; Allam 2006.

²⁵ Wallin 2002: 101; Mekis 2013: 21, especially n. 100.

²⁶ Wallin 2002: 67–70; Priskin 2013: 46–50.

²⁷ Varga 1998a: 38; Mekis 2013: 89–97.

²⁸ Koenig 2009: 315–317.

²⁹ Scott 1951: 208.

oasis).³⁰ It must nevertheless be noted that the spatial arrangement of the figures on the hypocephalus reinforces the orientation of the adjacent register, as on the right the symbol of the rising sun – the scarab of Khepri – appears, again making a reference to the east. The figure at the opposite extreme of the register, Nehebkau, is mentioned in connection with Min in chapter 149 of the Book of Going Forth by Day.³¹ This text enumerates the mounds of the Field of Reeds, a region that is most probably located in the eastern parts of the duat since the sun is said to rise from there in the morning.³² Nonetheless, within the Field of Reeds the two gods are associated with the mound of the west (*j3.t n.t jmn.t*), so their appearance on the left of the register may be an allusion to that cardinal direction.³³

The encounter between the solar and lunar boats

The encounter between the solar and lunar boats is the focus of the present paper. A well-attested Egyptian concept of close contact between the two celestial bodies is *snsn k3.wj*, that is the meeting of the two bulls of the sky in the middle of the month, when both the sun and the moon are displaying their powers to the full.³⁴ Ptolemaic texts explain that in nature this moment is observed when the sun sets on the western horizon, while almost simultaneously the full disc of the moon appears on the eastern horizon, mimicking at the beginning of the night the rising of the sun at dawn.³⁵ In astronomical terms this alignment of sun and full moon is called opposition. It has been conjectured that there were two instances of *snsn k3.wj* during the month: one at dusk, when the sun is in the west and the moon is in the east (supposedly lunar day fourteen), and one at dawn (sun in the east, moon in the west, day sixteen),³⁶ but the term itself, in its entirety, only occurs in connection with the first situation (i.e. the appearance of full moon). The text that allegedly describes the second occasion more likely refers to waning.³⁷

Another lunisolar encounter takes place at the end of the month when the waning crescent moves closer and closer to the rising sun so that eventually only the sun can be seen in the sky at dawn (conjunction, blacked-out moon). Egyptian texts refer to this period of lunar invisibility as *psdn.tjw*.³⁸ Since the starting point of the lunar month in ancient Egypt was defined by this very moment (the morning of last crescent invisibility),³⁹ the meeting of the sun and the moon at *psdn.tjw* was also evidently an important development. Its significance was already underlined by the monthly feast lists of the Old Kingdom.⁴⁰ In Ptolemaic Egypt, one of the greatest festivals of the country – *h3b shn nfr* ‘the beautiful embrace’, involving the sojourn of Hathor of Dendera with her counterpart, Horus of Edfu – was timed to commence on the day of *psdn.tjw* in the third month of the Shemu season (Epiphi).⁴¹

³⁰ Osing 1982: pl. 26.

³¹ Allen 1974: 142.

³² Taylor 2010: 243.

³³ Miatello 2008: 285.

³⁴ Wilson 1997: 870.

³⁵ *Urk.* VIII, 61b, 69h; *Edfou* III, 207 (13)–208 (3), 211 (11)–(15); Cauville 2011: 44, 48.

³⁶ Colin and Labrique 2002: 55.

³⁷ Cauville 2011: 44–45.

³⁸ Depuydt 1998: 71–73.

³⁹ Depuydt 1998: 72.

⁴⁰ Eaton 2011: 231–232.

⁴¹ *Edfou* V, 124 (8)–(12), 356 (8)–357 (3), 394 (12)–(14); *Dend.* VI, 158 (4)–(7).

As regards the two boats on the hypocephali, it has been suggested in a regrettably still unpublished paper that they depict the moment of *snsn k3.wj*.⁴² Here, however, I will propose an alternative interpretation and will claim that the boats are connected with conjunction, rather than opposition. My arguments to this effect stem from the analysis of three factors: the internal organisation of the pictorial registers on the hypocephali, the parallel depictions found elsewhere showing two opposing barques, and finally the comparison with scenes that can either be identified with almost absolute certainty to refer to the mid-month encounter of the two brightest lights of the sky, or link the sailing of the squatting baboon to the latter half of the lunar cycle.

As described above, *snsn k3.wj* is an event that takes place in the visible world at dusk when the setting sun is seen in the west and the rising full moon begins its ascent in the east. The meeting of the solar and lunar boats on the hypocephali is, however, shown in a register that definitely belongs to the netherworld. The directions in which the boats are heading are also quite revealing. On the right side of the register the figure of Nut arching over Khepri clearly establishes east, and while the full moon is of course moving away from east as the night progresses, there is no way that the setting sun – when it is conceived to be still above the western horizon – could be depicted as heading towards east. The scene can easily be made sense of, however, if it is understood as showing the meeting of the sun and the moon when they are both invisible. For the sun – represented here in its netherworldly form as a cryocephalic human – this state sets in every night, while the moon's behaviour is much more complex. In the first half of the month the waxing crescent is seen day by day at dusk and, before its setting on the western horizon, for incrementally longer periods during the night, while in the second half the waning crescent, emerging from the eastern horizon, is observed for gradually shorter periods before the rays of the rising sun start to cancel out its light at dawn. Waning eventually leads to the complete invisibility of the moon at the time of astronomical new moon (conjunction), when it is not seen at all in the sky for one or two days.⁴³

The sun fades out daily in the west and, according to Egyptian beliefs, after having crossed the netherworld from the west towards the east, re-emerges on the eastern horizon in the morning. The moon apparently runs a reverse course during its cycle. At the end of the waning period the last crescent is observed to rise slightly over the eastern horizon before dawn, then – after the one or two days of total invisibility – the moon reappears as the first crescent of the new month just above the western horizon immediately after sunset. Therefore we may surmise that in ancient Egypt the moon was thought to traverse the duat from east to west during its monthly absence from the sky. However, this idea seems to have never been elaborated in writing, unlike the vivid accounts of the nocturnal wanderings of the sun god in the New Kingdom netherworld books. In reality of course the invisible moon, being situated in front of the sun and orbiting simultaneously with it, still moves in a counterclockwise direction, and is not seen by an earthbound observer because the glare of the sun drowns it out. The description of a solar eclipse in Coffin Texts spell 160 demonstrates that the Egyptians were – already at the beginning of the 2nd millennium BCE – well aware of the interrelated movement of the sun and the moon at the time of conjunction.⁴⁴ Several Graeco-Roman texts (for some examples, see below), and the hieroglyphic sign for *psdn.tjw* (☉), introduced at the beginning of the New Kingdom and most probably showing the sun and the moon together, seem to confirm this understanding.⁴⁵

⁴² Schreiber (forthcoming).

⁴³ The new crescent appears on the evening of the third day, so the Egyptians conceptualized this period as lasting for three days, see my discussion in Priskin 2013: 36–37, 43.

⁴⁴ Priskin (forthcoming).

⁴⁵ Depuydt 1998: 74–76, 83–85.

Bearing in mind that the Egyptians did grasp the true behaviour of the moon at conjunction, we are prompted to take a look at the scene from an entirely different perspective. According to a well-documented iconographic tradition when two celestial boats are shown with their prows opposing each other, they represent the evening and morning barques of the sun god.⁴⁶ Within this scheme the evening boat (*msk.tjt*) moves from west to east, whereas the morning or day barque (*m^cnd.t*) sails from east to west.⁴⁷ Obviously, the two boats correspond to two different periods: evening/night and morning/day. The encounter between the sun and the moon on the hypocephali can be fitted into this pattern, but here the morning solar boat is not carrying one of the usual representatives of the rising sun. Instead, the emerging sun – rather innovatively – is marked by the presence of the baboon, a preeminent lunar symbol. This is only possible because, as expounded earlier, the moon at the end – for the Egyptians, at the beginning – of its cycle ‘boards the morning barque’, that is on the day of *psdn.tjw* it starts to move in unison with the rising sun, only of course invisibly to the naked eye. Nevertheless, to signify this merger of the two celestial bodies, the rising sun is still depicted right next to the boat in the form of the scarab beneath Nut.

A couple of inscriptions in the Ptolemaic temples also state that the moon joins the morning barque on the day of invisibility. Straightforward evidence for this comes from the first eastern Osiris chapel on the roof of the Dendera temple, where a line of hieroglyphs running above the frieze says: ‘[You are] the left eye in your name of Osiris-Moon. Your limbs rejoice over your secret form of the moon at the beginning of every thirty days as you rise in the morning barque and your image rejuvenates on the day of the blacked-out moon’ (*j3b.t m rn=k n Wsjr-J^ch h^c h^c.w=k tp hrw 30 m s3t3=k n jwn-h^c h^c=k m m^cnd.t rnpj s3m=k m hrw psdn.tjw*).⁴⁸ Similarly, on the eastern wall of the pronaos at Edfu, as part of the description of the new moon,⁴⁹ it is written: ‘It is in the Place of the Two Gods (= the Edfu temple) where Re and Horus, the sun and the moon shine forth. The eastern horizon jubilates in joy as the two luminaries rise in their barque ... Re completes his course with his radiance and his rays hide the light of the moon’ (*s.t ntr.wj pw ntj R^c Hr.w r^c j^ch psd m-hnt=sn 3h.t j3bt.t hnm m r3.wt h^c h3y.tj m wj3=sn ... mh.n=f sn=f m psd.w=f sdg.n psd.w=f m3w.t j^ch*).⁵⁰ The word ‘barque’ (*wj3*) is definitely in the singular in the text, so the logical inference is that the sun and the moon travel in the same boat.

From the above it can be concluded that on the hypocephalus the boats are poised at the two liminal zones of the netherworld: the solar boat on the left (west) represents the sun’s entry into it, while the lunar barque on the right (east) shows the emergence of the moon on the morning of lunar invisibility coinciding with the rising of the sun. If the boats are taken to represent the whole solar cycle, as can also be argued for on the basis of similar depictions,⁵¹ then the barque on the left stands for the night sun travelling in the duat from the western to the eastern horizon, while the one on the right describes the conjoined journey of the moon and the sun at *psdn.tjw* through the day sky from the eastern to the western horizon.

This interpretation is strongly supported by the existence of two hypocephali that – in place of the encounter between the solar and lunar boats – do in fact show the two solar barques prow to prow (fig. 3).⁵² Though these specimens lack the neat cosmographic setting of the standard four-register hypocephali, the correspondence of the nautical scenes on the different types can hardly be doubted. Here the conventional and undisputed representation of

⁴⁶ Thomas 1956: 69–74.

⁴⁷ Thomas 1956: 65–66.

⁴⁸ *Dend.* X/1, 68 (7)–(9). See also Depuydt 1998: 84.

⁴⁹ Cauville 2011: 42.

⁵⁰ *Edfou* III, 211 (4)–(7).

⁵¹ Thomas 1956: 65.

⁵² Nash 1897: pl. ii; Daressy 1903: 49–50.

the morning sun, the scarab beetle, is not replaced by the squatting baboon, while the boat on the left continues to carry the evening sun, in the form of a ram-headed human or a ram itself. The apposition of the solar boats with the same or very similar iconography is attested on a number of late stelae coming from Akhmim,⁵³ reinforcing the view that the hypocephali shown in fig. 3 must originate from that location.⁵⁴



Fig. 3: Two hypocephali showing the solar barques prow to prow (left: Nash 1897: pl. ii; right: © D. Kelly Ogden).⁵⁵

Other small details of the boat with the baboon on board seem to substantiate its identity with the solar barque. On the prow a reed mat is depicted with a child sitting on it. Whereas this is a typical feature of the solar barque,⁵⁶ itself signalling the rebirth of the sun in the morning,⁵⁷ whenever the moon is represented as sailing in a boat, its prow may carry a falcon or a baboon, but never a squatting child.⁵⁸ Also, the presentation of the wedjat-eye by a baboon is part of the iconography of the solar boat,⁵⁹ on the lunar barque it is the anthropomorphic form of Thoth that offers the wedjat-eye.⁶⁰ Therefore the boat on the right really mixes the iconographic elements that are used to represent either the solar or the lunar barque. The cosmographic scheme of the hypocephali provided a good opportunity for the substitution of Khepri by the baboon because the apparent motion of the boat on the left could be conceived as reflecting both the east-west movement of the morning/day sun in the sky and the east-west transition of the duat by the invisible moon.

The register is thus a compact depiction of the journey of the sun in the netherworld, also making reference to one of the key points of the lunar cycle. In light of this, it is not impossible that the right part of the top register in the other hemisphere of the hypocephalus,

⁵³ Munro 1973: 117–154, figs. 166–168, 184, 188–189, 193; Minas-Nerpel 2006: 334–335.

⁵⁴ Mekis 2013: 223–224, 230–240.

⁵⁵ This hypocephalus is in the collection of the Egyptian Museum in Cairo (CG 9443), see Daressy 1903: 49–50.

⁵⁶ Roulin 1996: 76; Goebis 1998: 59–65.

⁵⁷ Borghouts 1971: 181–182; Goebis 1998: 65.

⁵⁸ *Edfou IX*, pl. lxix; *Edfou X*, pl. cxxxv (fig. 6 below); *Dend. II*, pl. cxxvii; *Dend. X/2*, pl. 146; Cauville 2012: pl. vi.

⁵⁹ To the morning sun: Bács 2011: 43 fig. 24. To the evening sun: Daressy 1903: pl. xiii (on a hypocephalus); Fakhry 1974: 147 fig. 73; DuQuesne 1998: 616 fig. 3.

⁶⁰ *Edfou IX*, pl. lxix; Cauville 2012: pl. vii (see fig. 7 below).

with its double depiction of the emerging sun in the visible world, was also intended to express the dual nature of sunrise on *psdn.tjw*. This intermingling of solar and lunar motifs may indicate the growing importance of the moon – and Osiris – in the second half of the 1st millennium BCE. It is perhaps unexpected that – instead of the more luminous stage of the lunar cycle, full moon – the hypocephali allude to the invisibility of the moon. However, an inscription on the propylon leading to the Khonsu temple at Karnak, built by Ptolemy III, links *psdn.tjw* with conception (Khonsu ‘is conceived on the day of the new moon’, *bk3.tw=f m psdn.tjw*),⁶¹ so this point in time was evocative of (re)birth, and thus concurred with the primary purpose of the hypocephali. Chapter 141 of the Book of Going Forth by Day also relates that the initiation of the deceased into the netherworld was to take place on the day of lunar invisibility.⁶²

The wider context of the hypocephali also offers some arguments in favour of interpreting the lunar boat as showing conjunction. We learn from Ptolemaic texts that Min was considered as the god who stood in for the moon at its time of invisibility,⁶³ so the scene in the other register of the netherworld – Nehebkau offering the wedjat-eye to a deity who for one part displays the peculiar characteristics of Min – may relate to the same time as the meeting of the celestial boats in the duat. Furthermore, in the lunar version of chapter 162 of the Book of Going Forth by Day the description of the moon seems to point to the time of its monthly disappearance, echoing a previous passage in which the sun is addressed when it is about to plunge into the duat as the lion of the western mountain of Manu (*jnd hr=k rw ʿ3 rw m3nw*).⁶⁴ The relevant lines about the moon read: ‘You rise on the eastern horizon of the sky, the months are made for you, the hours pass by for you, you come victoriously to the ground of the earth all year round, you rise as the moon at its time of waking (= in the morning) as you are seen aging’ (*h^c=k m 3h.t j3bt.t n.t p.t jrj n=k 3bd.w sš n=k wnw.t jj=k m m3^c-hrw <hr> s3tw m tr rnp.t nb.t h^c=k m j^ch m tr=f n wrš m33 n=k m qh*).⁶⁵

The events listed here refer to the second half of the lunar cycle, and more particularly perhaps to the day of the last crescent. It is in the latter half of the month that the moon rises in the east, and on successive nights it reaches lower and lower heights in the sky so that the last crescent only briefly emerges above the horizon immediately before sunrise (‘you come victoriously to the ground of the earth’), and all this of course takes place at dawn when the brightness of sunshine masks the light of the moon (‘you rise as the moon at its time of waking as you are seen aging’). Also, on the propylon of the Khonsu temple at Karnak it is stated in no uncertain terms that the moon ‘grows old after the day of the full moon’ (*tnn.n=f m-ht smd.t*).⁶⁶ Therefore both the sun (Re) and the moon (Osiris) in spell 162 are viewed as poised to enter the duat at the end of their respective cycles, and this situation immediately precedes the moment that is depicted by the meeting of the two celestial boats on the hypocephali.

Finally, there is one more detail that may hint at the time of conjunction on the hypocephali, and that is the depiction of the moon travelling in its boat as a squatting baboon, either with or without the lunar disc on the head. Although, as remarked above, it is clear that such an image could refer to the moon in general, Horapollo, the Greek author who described Egyptian hieroglyphs in the 4th century CE, especially connects the figure of the baboon with the meeting of the sun and the moon at the eastern horizon: ‘When they mean the moon ... they draw a baboon. The moon, because this animal has a certain sympathy with the

⁶¹ *Urk.* VIII, 89b.

⁶² Allen 1974: 117.

⁶³ *Edfou* VII, 311 (11)–(12); *Dend.* XII, 162 (4)–(8); Cauville 2011: 43.

⁶⁴ Allam 2006: 48.

⁶⁵ Allam 2006: 48.

⁶⁶ *Urk.* VIII, 89b.

conjunction of this goddess. For when the moon, moving into conjunction with the sun, is darkened, then the male baboon does not look nor does he eat'.⁶⁷

Other depictions of lunisolar encounters

Thus the arrangement of the two opposing boats within the context of the hypocephali suggests that they show the atemporal encounter between the evening solar boat, entering the netherworld, and the lunar boat, standing in for the morning boat as it is leaving the duat, when neither of them is present in the visible world. This message is reinforced by the fact that in the known instances where *snsn k3.wj* is illustrated, it is represented in a markedly different way. The ceiling of the third Osirian chapel in the east on the roof of the Dendera temple offers ample material in support of this statement (fig. 4). The inscriptions and decorations in the chapel make it quite clear that this room was put to ritual use when, during the Khoiak festival, the bodily integrity of Osiris had been reconstructed and the moon reached its state of fullness.⁶⁸

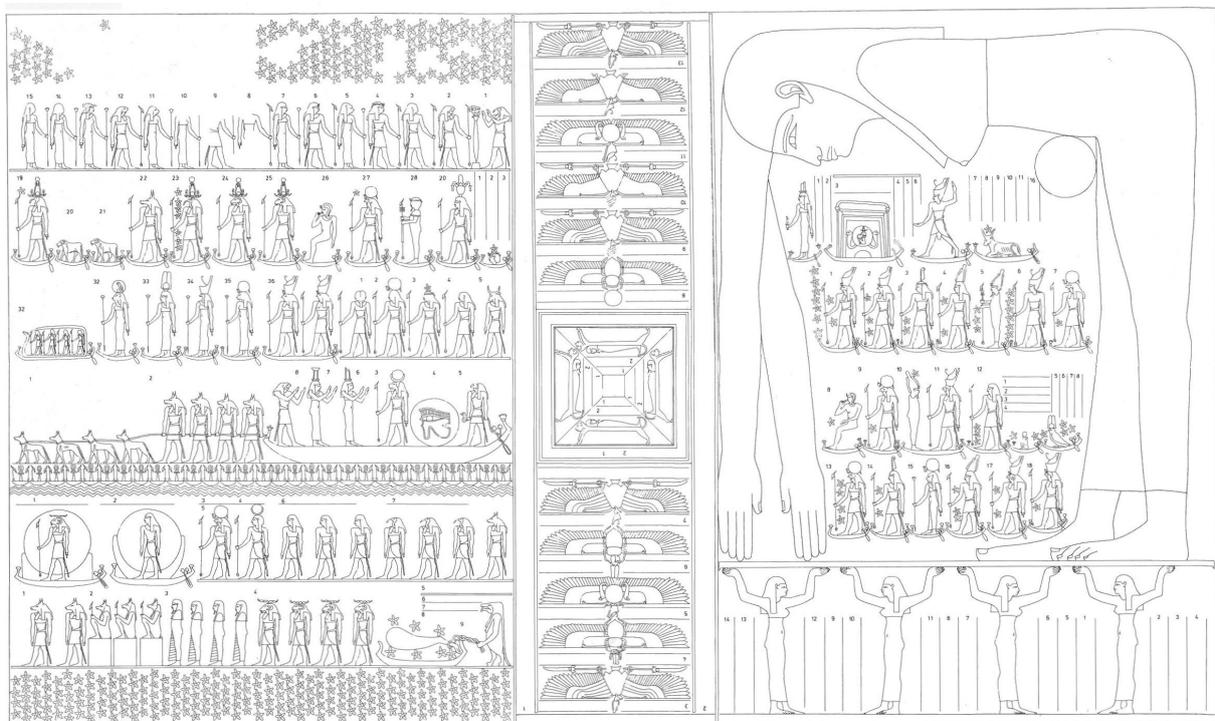


Fig. 4: Ceiling of the third Osirian chapel in the east at Dendera (*Dend. X/2*, pl. 115, © IFAO).

The fourteen days leading up to full moon are marked on the one hand by the fourteen images of the wedjat-eye inscribed within the akhet-hieroglyph in the frieze on the four walls,⁶⁹ and on the other by the lunar ennead of fourteen figures marching towards the wedjat-eye in the top register in the western half of the ceiling decoration. Texts in the four corners specify the moment of full moon stating that ‘Osiris-Moon-Thoth appears on the horizon, the wedjat-eye is equipped on the fifteenth day of the month’ (*Wsjr-Jh-Dhwtj h^c.tw hnt 3h.t wd3.t*

⁶⁷ Boas 1993: 52–53 (ch. I.14).

⁶⁸ Cauville 1997: 127–128.

⁶⁹ Cauville 1997: 127.

ⲉⲣⲧⲱ ⲙ ⲙⲉⲃⲟⲩⲧⲓ).⁷⁰ To illustrate this point, in the third register on the left the full moon travels in its boat as the wedjat-eye in the lunar disc, while in the register below it is represented in relation to the sun. Sun and moon caught up in *snsn k3.wj* are shown twice, once as anthropomorphic deities inscribed into discs and travelling in boats,⁷¹ and once as anthropomorphic figures walking in the same direction. These two pairings most probably correspond to the two halves of the daily cycle, daylight and night.⁷² In both cases the moon dutifully follows the sun, just as in reality the solar and lunar discs move in the same direction from east to west. The same motif is found on the ceiling of the pronaos at Dendera,⁷³ though the two luminaries are represented differently there: the solar boat carrying ram-headed Atum, i.e. the setting sun, is followed by the lunar barque in which the full moon is signified by the wedjat-eye inscribed into the lunar disc (see fig. 7 below).⁷⁴ All these records of *snsn k3.wj* can be put in contrast with the depictions on the hypocephali where, we should bear in mind, the two celestial boats oppose each other

On the right half of the ceiling of the third eastern Osirian chapel, in the top row of the images *snsn k3.wj* is depicted in another way. In a boat that is preceded by that of Isis and followed by those of Osiris and Sopdet we see a shrine in which the nocturnal form of the sun god, a seated ram-headed figure inscribed into a disc, is hovering above a semicircle that must represent the rising full moon on the eastern horizon.⁷⁵ That the image shows the alignment of the two celestial bodies at full moon is reinforced by the fact that it reoccurs on the northern wall of the pronaos of the Edfu temple. There it is directly connected by a line to the wedjat-eye which surmounts a papyrus column at the end of a flight of steps, and towards which the fourteen deities of the lunar ennead are marching.⁷⁶ This symbol, as in the top register on the left of the ceiling of the Osirian chapel, also with the lunar ennead (see fig. 4), undoubtedly represents the full moon.⁷⁷ In its immediate context on the ceiling of the Osirian chapel, the boat showing *snsn k3.wj* in the company of the southern stars of Orion and Sopdet (Sirius) is separated by twelve figures of decans (representing the twelve hours of the night) from two other boats signalling sunrise: one carrying a sitting child, and the other the god Sopdu.⁷⁸ Thus the inclusion of the sun and the moon within the same boat at the beginning of the night perhaps emphasizes that during *snsn k3.wj*, or in astronomical terms, opposition, the moon mirrors the path of the sun perfectly, and the two luminaries travel across the sky as if they were attached to the two end points of an axis. The lunar inscriptions in the pronaos of the Edfu temple stress this coordinated movement of the sun and the moon at *snsn k3.wj*: ‘the two luminaries unite as one, these two wanderers circle the sky’ (*snsn ḥ3y.tj m-sp-wꜥ dbn.tj nn dbn=sn hh*).⁷⁹

Yet another possible representation of *snsn k3.wj* is found on the astronomical ceiling of Deir el-Haggar (fig. 5). The image on the left that encroaches on a register showing the nocturnal journey of the sun is quite fragmentary, but is clearly an enlarged version of the hieroglyph often employed to write the expression *snsn*: two figures facing each other and

⁷⁰ *Dend. X/1*, 252 (3).

⁷¹ More precisely, the sun appears as a ram-headed human figure within a disc that is part of an akhet-hieroglyph. The cryocephalus and the representation of the horizon both highlight that the setting sun, Atum, is depicted here.

⁷² Labrique 1998: 126.

⁷³ Kaper 1995: 191.

⁷⁴ Cauville 2012: pl. xxiii.

⁷⁵ For the identification with the moon, see Cauville 1997: 127.

⁷⁶ *Edfou IX*, pl. lxxiv.

⁷⁷ Labrique 1998: 107–109.

⁷⁸ *Dend. X/1*, 254 (12)–255 (2). The falcon in the second boat is named ‘Sopdu in the east’ (*Spd.w m j3b.tjt*) in the caption.

⁷⁹ *Edfou III*, 208 (2).

holding hands.⁸⁰ Here the figures are standing in a boat, the right one wearing the lunar disc on his head, while the left one most certainly displayed the disc of the sun in the corresponding position.⁸¹ In addition to this representation, which again shows *snsn k3.wj* differently from the encounter of boats on the hypocephali, the ceiling of Deir el-Haggar leads us on to another related topic, the occurrence of the seated baboon travelling in a boat as the representation of the moon in temple scenes. According to Olaf Kaper, to whom we owe the reconstruction of the astronomical ceiling of the Deir el-Haggar temple, the image to the right of the enlarged hieroglyphic sign of *snsn*, showing the meeting of two boats, one carrying the sun in the form of a child inscribed into the solar disc, the other a seated baboon in a disc, is a repetition of the same theme, and thus also depicts the time of the full moon.⁸²

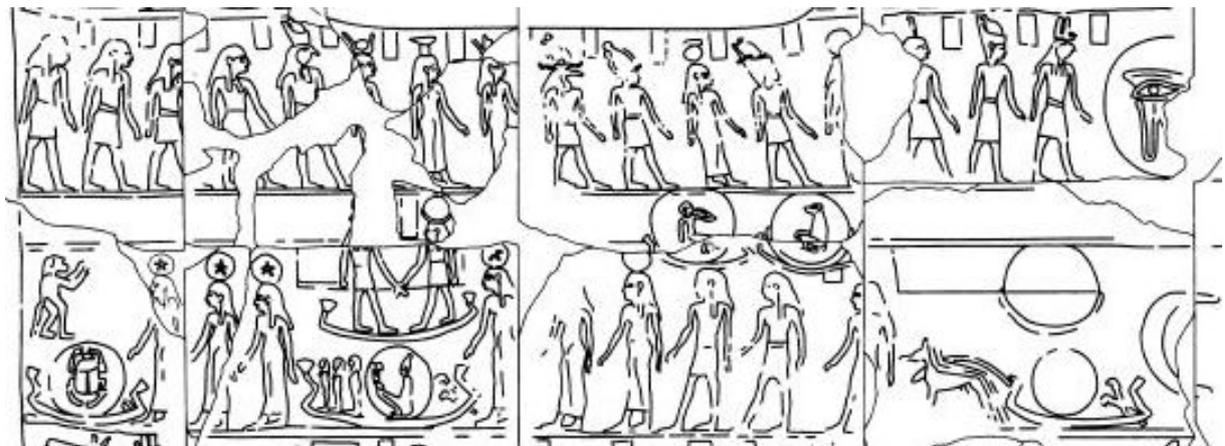


Fig. 5: Middle section of the astronomical ceiling of Deir el-Haggar (Kaper 1995: 176 fig. 1, © O. A. Kaper).

Though his interpretation has its own merits, especially in light of the ceiling decoration of the third eastern Osirian chapel at Dendera, where *snsn k3.wj* also seems to be doubly depicted, the representation can be viewed from another perspective, too. In numerous other astronomical scenes and inscriptions, where the solar cycle is equated with the successive life stages of a human, the child – quite understandably – corresponds to the morning sun in the east.⁸³ The proper moment of *snsn k3.wj*, however, as has been underlined earlier, arrives at dusk, when the sun is setting in the west and the moon is rising in the east. Therefore the two images on the Deir el-Haggar ceiling most probably refer to two distinct spectacles in the sky. The figures holding each other's hand in the boat on the left show *snsn k3.wj*, while the meeting of the morning solar boat with the lunar boat that ferries the squatting baboon marks the equally important moment when the waning moon nears the rising sun and then disappears from sight for a while. It must be noted, however, that because the expression *snsn* is also used to describe conjunction,⁸⁴ it cannot be categorically ruled out that the image on the left, instead of *snsn k3.wj*, also signifies the monthly disappearance of the moon.

The baboon sitting in a boat also features in the scenes carved on the northern lintels of the colonnade surrounding the court of the Edfu temple.⁸⁵ Here on the western lintel we see

⁸⁰ Kaper 1995: 184. For the sign, see Kurth 2007: 130.

⁸¹ Kaper 1995: 184.

⁸² Kaper 1995: 184.

⁸³ *Edfou IX*, pl. lxx; *Esna IV*, fig. 1, strips C and D.

⁸⁴ *Edfou III*, 211 (7); Depuydt 1998: 83.

⁸⁵ *Edfou X*, pl. cxxxv.

the setting sun, Atum, travelling in his barque, whereas at the eastern end, some thirty metres apart, the lunar boat appears with the squatting baboon and the hailing Thoth and Harendotes on board (fig. 6). While previous commentators associated these scenes with the moment when the evening sun goes down on the western horizon and the full moon rises on the eastern one (i.e. *snsn k3.wj*),⁸⁶ an alternative interpretation may also be contemplated. According to this approach, the common theme that links the two boats on the northern lintels of the colonnade is not *snsn k3.wj*, but the wish to depict both the sun and the moon at the time when they are about to disappear out of sight, the sun daily in the west, and the moon – as expounded earlier – at the end of its monthly cycle in the east. One noteworthy detail of the scene offers support in favour of this interpretation: the baboon is adored by Thoth and Harendotes, two gods who according to the lists found in Ptolemaic temples naming the eponymous gods of the month correspond to the first two days of the lunar cycle,⁸⁷ that is, the days when in fact in the framework of the Egyptian lunar calendar, which started the month with last crescent invisibility, the moon was not present in the sky.

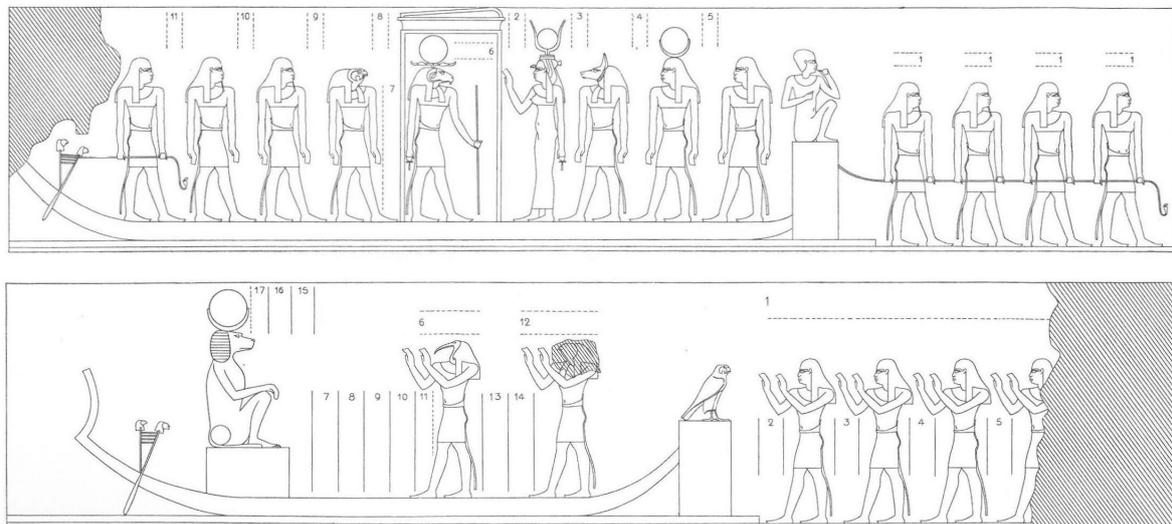


Fig. 6: Sun and moon on the opposite northern lintels of the colonnade in the court of the Edfu temple (top: west, bottom: east, *Edfou X*, pl. cxxxv, © IFAO).

However, it must also be mentioned that the figure of Thoth is accompanied by a short text that makes a reference to the situation when ‘the left eye is received by the right eye’ (*j3b.t sšp n wnm.t*), an expression that on the pylon of Ptolemy III at Karnak surely refers to the full moon.⁸⁸ This riddle can only be resolved if we suppose that the reception of the moon by the sun was not a momentary occasion but a longer process encompassing the whole period when the moon in fact gradually got closer and closer to the sun during its cycle (that is waning, from full moon to the disappearance of the last crescent). The description of the waning moon on the eastern wall of the Edfu pronaos seems to support this interpretation, because its wording contains such expressions (*snsn*, *hnm*) that are also known to refer to the full moon in other contexts.⁸⁹

⁸⁶ Barguet 1978: 19; Labrique 1998: 124 n. 97; Colin and Labrique 2002: 53.

⁸⁷ Brugsch 1882: 45–54; *Dend.* XV/1, 32 (6)–34 (9).

⁸⁸ *Urk.* VIII, 531.

⁸⁹ *Edfou III*, 211 (14)–212 (1); Herbin 1982: 269–270; Cauville 2011: 44–45.

In light of all this, it is not altogether impossible that the two boats on the lintels of the colonnade at Edfu are the closest relatives of the nautical scene on the hypocephali. The barque in the east showing the moon in conjunction, though this time it is lacking the subtle references to the solar vessel, may here as well serve as a substitute for the morning solar barque. Thus the whole scene can again be considered as a peculiar variation of a more straightforward motif: on the eastern lintel the rising sun appears in the disguise of the blacked-out moon, whereas the setting sun is duly depicted in the west.



Fig. 7: Depictions representing the lunar cycle on the astronomical ceiling of Dendera. Top: the waxing and full moon (second western strip). Bottom: the waning and blacked-out moon (second eastern strip) (© Olaf Tausch, commons.wikimedia.org).⁹⁰

Another example illustrating the link between the baboon and conjunction is found on the astronomical ceiling of the pronaos at Dendera. In the second strips of images on the western and eastern sides, which generally correspond to the night and day sky, respectively,⁹¹ there are two complementary depictions of the lunar cycle (fig. 7). In the west we can see the evening sun, Atum, sailing in a barque, followed by two other boats, those of the moon and Osiris. The moon here appears as the wedjat-eye within the lunar disc, itself also incorporating the crescent at the bottom. In the east the lunar boat sails in front of Re-Horakhty and Khepri, and is represented by an anthropomorphic figure. The suggestion that the two scenes allude to two key points of the lunar cycle, full moon and the invisible moon,⁹² is certainly tenable but this statement is only partly correct. It is perhaps more appropriate to look at the scenes in their entirety as referring to the two halves of the month. This is clearly indicated by the relative positions of the moon reflecting natural observation. In the west the moon sails in the wake of the sun, just as in fact in the first half of the month the waxing crescent appears at dusk (bigger and bigger and more and more to the east on successive days) and follows the setting sun in the sense that it also sets on the western horizon. The description of the waxing moon in the lunar inscriptions at Edfu expressly states that the moon follows the sun in the first half of its cycle.⁹³ In contrast, in the east the lunar barque sails in front of the sun, corresponding to the second half of the month when the waning crescent rises from the eastern horizon (smaller and smaller and closer and closer to dawn as time goes by) and thus indeed precedes the rising sun.

Nonetheless, the two end points of the opposing halves of the lunar cycle are also marked. In the west it is the full moon, which is evoked in the first place by the caption above the lunar boat: ‘The moon has come to its place, the left eye is equipped with its perfection’

⁹⁰ https://commons.wikimedia.org/wiki/File:Dendera_Tempel_Pronaos_16.jpg

⁹¹ Cauville 2013: 528–529.

⁹² Cauville 2013: 530–531.

⁹³ *Edfou* III, 211 (9)–(10); Cauville 2011: 43–44.

(*j^ch jj.wy r s.t=f j3b.t ʕpr.tw m nfr.w=s*).⁹⁴ The presence of Osiris and the text accompanying him also specify this moment: ‘He has united with the left eye, renewed (its) cycle and illuminated the sky and the earth with his perfection’ (*hnm.n=f j3b.t whm.n=f šn shd.n=f p.t t3 m nfr.w=f*).⁹⁵ An inscription in the lunar strip of the ceiling states explicitly that Osiris unites with (‘enters into’, ʕq) the left eye on the fifteenth day of the month (full moon, *snsn k3.wj*).⁹⁶ In the east the other key point emphasized is conjunction (astronomical new moon). Between the moon and Khepri sails Re-Horakhty with a baboon sitting on the prow of his barque, once more alluding to the conjoined movement of the sun and the moon. Thus Re-Horakhty’s barque most likely represents the diurnal sun and the invisible moon as they together traverse the sky in daylight on the day of *psdn.tjw*.

Conclusion

In conclusion, in the cosmographic scheme of the hypocephali the placement of the scene showing the encounter between the solar and lunar boats in the netherworld indicates that this image refers to the time at the end – or, in Egyptian terms, at the beginning – of the month when the moon is not visible. The meeting of the sun and the moon in the lower hemisphere of existence on the hypocephali also intermingles the depiction of the lunar baboon with that of the morning solar boat, thus signalling that the makers of these magical objects felt the need not only to evoke the rising sun for the rebirth of the deceased, but equally to involve the moon in the process. The inference that the nautical register of the hypocephali refers to the conjunction of the sun and the moon is backed up by the astronomical scenes of the Graeco-Roman temples in two ways. First, when the antithetical stage of the lunar cycle (full moon, *snsn k3.wj*) is depicted, its iconographic representations differ from the image on the hypocephali, and secondly, when the moon is represented in a similar way to depictions on the hypocephali, with a sitting baboon in a boat, these representations can be shown to refer to situations when the moon is invisible or nearing its period of unobservability.

Abbreviations

Dend. = Chassinat, É., Daumas, F., and Cauville, S. 1934–2008. *Le temple de Dendara* vol. 1–15. IFAO: Cairo. [Vols. 13–15 published by S. Cauville on the Internet.]

Edfou = Rochemonteix, M. de and Chassinat, É. 1897–1934. *Le temple d’Edfou* vol. 1–14. IFAO: Cairo.

Esna = Sauneron, S. 1959–1963. *Esna* vols. 1–5. IFAO: Cairo.

Urk. VIII = Sethe, K. and Firchow, O. 1957. *Thebanische Tempelinschriften aus griechisch-römischer Zeit*. Urkunden des ägyptischen Altertums 8/1. Akademie-Verlag: Berlin.

⁹⁴ *Dend.* XV/1, 39 (6).

⁹⁵ *Dend.* XV/1, 39 (7).

⁹⁶ *Dend.* XV/1, 35 (6).

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