

## CONCEPTUALIZATIONS OF THE MOON

تصورات القمر

*Victoria Altmann-Wendling*

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## CONCEPTUALIZATIONS OF THE MOON

## تصورات القمر

Victoria Altmann-Wendling

Konzeptualisierungen des Mondes  
Conceptualisations de la lune

*Our understanding of the moon as it was regarded in ancient Egypt from the Old Kingdom to the Ptolemaic and Roman Periods is based mostly on texts and images from temples, but also on stelae, coffins, and papyrus. Just as Conceptual Metaphor Theory provides a theoretical background for research on the moon in ancient Egypt, a basic knowledge of astronomical facts is essential for our understanding of the sources and of how the moon was conceptualized anciently. The conceptualizations can be categorized into those concerning astronomical properties of the celestial body (its shape, luminosity, motion, constellations), those in which the moon takes on anthropomorphic (man, child, eye, leg, arm) and zoomorphic (bull, ibis, baboon) forms, and those that have a socio-political background, concerning the reign of the pharaoh, the measuring and conception of time, and the maintenance of the cosmos (maat) as a whole.*

إن فهمنا للقمر في الديانة المصرية القديمة من عصر الدولة القديمة وحتى العصور البطلمية والرومانية يعتمد بشكل رئيسي على النصوص والمناظر المصورة على المعابد. بالإضافة إلى اللوحات التذكارية، والتوابيت، والبردي. في حين أن دراسة نظرية الاستعارة التصورية (المفاهيمية) (Conceptual Metaphor Theory) توفر لنا خلفية نظرية للبحث عن القمر في مصر القديمة، فإن المعرفة الأساسية بعلم الفلك أمر ضروري لفهم كيف تم تصوّر القمر في تلك الفترة. يمكن تصنيف هذه المفاهيم إلى فئات تشمل الخصائص الفلكية للقمر (شكله، إضاءته، حركته، كوكبة النجوم التي تحيط به)، والتصوّرات التي يتخذ فيها القمر أشكالاً مجسمة (رجل، طفل، عين، ساق، ذراع) وأشكالاً حيوانية (ثور، طائر الإبيس، قرد بابون)، والتصوّرات ذات الخلفية الاجتماعية والسياسية، التي تتعلق بعهد الفرعون، وقياس الزمن، والحفاظ على الكون (الحق).



Among the most important sources of information for our understanding of the moon as it was regarded in ancient Egypt are texts with discourses on the moon and (related) representations from temples, of which those from the Ptolemaic and Roman Periods (c. 300 BCE – 300 CE) predominate. These temples are mainly located along the Nile Valley, as far north as Athribis and as far south as Philae, but are also represented in the oases (Bahria, Dakhla, and Kharga) and Nubia (Soleb and Abu Simbel). That the moon is

visually and textually represented with striking frequency on ceilings and door lintels on the north side of temples, combined with the assignment of the north to the night, illustrates the Egyptian perception of the temple as a cosmos.

In addition, papyrus manuscripts dating mainly from the Roman Period are informative; they are almost entirely funerary, the moon being referenced there in connection with Osiris, the god of the dead. Supplementing these are sources from previous eras, beginning with the Old

Kingdom (6<sup>th</sup> Dynasty, c. 2300 BCE), from temples, tombs, stelae, and coffins. Since the earliest sources, the Pyramid Texts, most likely reflect previous stages of religion that have not survived or were transmitted only orally, it can be assumed that a moon god existed prior to their inscription (García Fernández 2017a: 13; and see, e.g., Morales 2016). The distribution of the sources is, on the one hand, due to their preservation (the more recent papyri being the best preserved) and, on the other, to the tendency in Ptolemaic and Roman times for temple texts to become ever more detailed—sometimes downright encyclopedic—occupying virtually all available space on temple walls and ceilings, and written in smaller and more tightly set hieroglyphs compared to those of earlier phases. Whether at the same time an increase in moon worship or a reflection of foreign domination can be assumed remains uncertain.

#### *History of Research*

Some of the key depictions of, and texts pertaining to, the Egyptian god of the moon, Iah (*Iḥ*), were already collected and translated by Heinrich Brugsch between 1883 and 1891 in his *Thesaurus inscriptionum Aegyptiacarum*. Early studies of astral eyes, especially the moon, were published by Hermann Junker (1917: 136-148) and Hermann Kees (1925), reflecting the available textual sources and the state of Egyptological knowledge in the early twentieth century. Fundamental to our understanding of lunar mythology and thus lunar conceptualizations was until recently a contribution by Philippe Derchain (1962). In addition to the names and iconography of the moon, Derchain discussed in this publication the various Egyptian moon deities and the role of the celestial body in different contexts, including its use in calendars and its perception as an omen, as well as its significance for the afterlife, especially as presented in the Pyramid Texts. Introductory in character, the study touches only upon excerpts of textual sources eclectically selected from the range of Egyptian history, the quantity of sources having significantly increased since the time of its publication,

especially for the Ptolemaic and Roman Periods. A number of subsequent studies analyzed specific mythological themes and individual texts; among these, the most important are those of Derchain (1963) on a frequent mythological lunar scene; of Paul Barguet (1977) on two highly detailed scenes with texts about the moon and the sun at Edfu; of François René Herbin (1982) on a hymn to the moon that is known from several sources; of Sydney Aufrère (1991: 197-235) on the filling of the lunar eye with minerals and plants; of Françoise Labrique (1997, 1998a, 1998b, 2002, 2003a) on lunar scenes at Karnak; of Frédéric Colin and Françoise Labrique (2002) on lunar scenes at the oases; of Sylvie Cauville (2011) on lunar scenes at Dendera; and of Jean-Claude Goyon (1983, 2013, 2015) on the political implications of several lunar scenes at Karnak. Pierre Koemoth (1996) and Leo Depuydt (1998) dealt with specific types of lunar representation. Special designations of the moon god were investigated by Derchain (2010) and Labrique (2003b).

Recently, the moon god has once again attracted the interest of Egyptologists: the hitherto unpublished dissertation by Gudelia García Fernández (2017a; for a preliminary report see 2017b) investigates Old to New Kingdom sources on the moon (god) and lunar festivals. In addition to the classical funerary texts (Pyramid Texts, Coffin Texts, Book of the Dead), her study includes the occurrence of Iah in literary and onomastic sources as well as in administrative titles. Her work reveals that a cult and priesthood of Iah(-Thoth) probably existed since the Old Kingdom and was certainly present in the 18<sup>th</sup> Dynasty in the areas of Memphis and Thebes, where we also find evidence for private veneration (García Fernández 2017a: 428-429; 2017b: 224-225). Theophoric names, feminine and masculine, with *Iah* are attested from the Old Kingdom, but have their peak in the 17<sup>th</sup>/18<sup>th</sup> Dynasties in both the royal and private spheres (García Fernández 2017b: 225-226). Furthermore, the present author has published a study (Altmann-Wendling 2018) on lunar conceptualizations and lunar knowledge based mainly on religious sources

of the Ptolemaic and Roman Periods, but also considering earlier periods, as well as authors of classical antiquity. Additionally, the publication integrates a theoretical approach with the elaboration of conceptualizations of the celestial body. Further papers by the author deal with specific aspects of the moon in ancient Egypt concerning architecture (2017a, 2023), traditions of knowledge (2019), magic (2022a, 2022b), local cults (2017b), and the role of the moon in kingship (2021). The political dimension of lunar symbolism in the Amarna-/post-Amarna Periods comprises part of a study by Fabienne Haas Dantes (2022) on Tutankhamun's burial equipment.

### *Astronomical Facts*

Due to Egypt's rather southerly latitude, the moon appears there as a horizontal (i.e., lying) rather than vertical crescent. Since the moon is 400 times closer to the earth than it is to the sun, but is also 400 times smaller than the earth, both celestial bodies appear around the same size in the sky (Kopal 1971; Morison 2008). Although the moon's luminosity is 400,000 times less than that of the sun, a night sky is 250 times brighter by virtue of a full moon. The moon rises in the East and sets in the West like every celestial body, caused by the rotation of the earth around its axis. Additionally, due to its proper motion around the earth, it moves in the sky from west to east relative to the fixed stars, about 13 degrees every day.

In modern astronomy, as in ancient Egyptian astronomy, the lunar month begins with the new moon. The most important stages of the average 29.5-day lunar cycle (lunation) are as follows: 1) new moon, characterized by complete invisibility, occurring on the first lunar-month day (LMD 1); 2) first crescent visibility/new light, indicated by the first appearance of the crescent moon on the western horizon shortly after sunset (LMD 2/3); 3) waxing half moon (LMD 7/8); 4) full moon, which rises when the sun sets and is visible all night (LMD 15/16); 5) waning half moon (LMD 22/23); and 6) last crescent visibility, indicating the crescent moon's last appearance before the

new moon on the eastern horizon just before sunrise (LMD 29/30).

Lunar eclipses occur when the sun, moon, and earth are in a plane and the (full) moon passes through the earth's shadow; the moon does not become invisible but appears reddish due to the refraction of sunlight by the earth's atmosphere. Solar eclipses take place when the (new) moon is positioned exactly between the earth and the sun, thus covering the latter. Both lunar and solar eclipses can occur only twice a year; lunar eclipses are more frequently visible on earth than solar eclipses.

### *Methodology*

Religious conceptualizations of the moon in ancient Egypt reflected the knowledge of the elite, priestly milieu. The various lunar designations and epithets that were applied (anciently) were mostly metaphorical attributions. According to Conceptual Metaphor Theory, which derives from the field of cognitive linguistics, these attributions designated not only rhetorical figures, but also concepts, understood as organizational units of world knowledge (Lakoff and Johnson 1980; Lakoff 2006; Croft and Cruse 2004: 193-221). Metaphors transfer the characteristics of one thing (= source domain) to another (= target domain), based on aspects common to both entities; usually not all characteristics are transferred, nor is the relationship necessarily reciprocal. Generally, more concrete, physical, and well-known things like creatures, body parts, or interactions with the environment explain more abstract and elusive concepts. This was true in ancient Egypt for the moon as a heavenly body, with its enigmatic shape-shifting (Altmann-Wendling 2018: 857-860). There were often several conceptualizations of a single phenomenon, including the moon, which was represented, for example, as a child, a bull, or an eye. In some cases, these representations had interconnections and overlappings, and could determine or influence each other. The underlying concept of a term used as a metaphor further dictated how the object was referred to. Since the moon, for example, was sometimes

designated as a child, its parents, birth, growing up, and aging could also be thematized. The concept of the moon as an eye, on the other hand, entailed that it could be injured and healed, as well as put (back) in its place.

### *Conceptualizations of the Moon*

#### *Visual depictions*

While other natural phenomena in ancient Egypt were mostly deified in an anthropomorphic way, the moon appears in ritual scenes as an actual celestial body from the New Kingdom onward and bears the same name as the moon god, Iah (Altmann-Wendling 2018: 699-706). It takes a symbolic form of a disk with an underlying crescent, thus incorporating both shapes typical of the celestial body (Altmann-Wendling 2018: 871-964). In addition to, or instead of, the crescent, the disk is sometimes equipped with a *wedjat*-eye inside (fig. 1). The crescent and *wedjat*-eye each provide a clear differentiation from the sun, which from the Amarna Period onward was represented as a venerated object

and invoked in the form of a disk (Redford 1984: 170-181). An even more symbolical depiction is the *wedjat*-eye alone on a crescent moon. A crescent moon is also attested as a representation in a limited number of cases since the New Kingdom and always refers to a specific lunar phase (first and last crescent) (Altmann-Wendling 2018: 702-703). García Fernández, on the other hand, proposes that the disk represents the sun, implying a solarization of the moon that begins in the New Kingdom, when the first representations appear and the deity is determined with a seated god with such a disk on his head (García Fernández 2017a: 248-249, 425; see also pp. 281-282 for her alternative interpretations of the disk as the full moon or the so-called ashen light, the otherwise dark moon-surface dimly illuminated by the earth's reflection of the sun). However, later depictions of the lunar phases show that the disk with the *wedjat*-eye clearly refers to the moon rather than the sun (e.g., Sauneron 1969: 1-4; Altmann-Wendling 2018: 610).



Figure 1. The moon as a disk enclosing a *wedjat* eye, with adjacent crescent, worshipped by the god Thoth. Temple of Dendera, ceiling of the pronaos, Roman Period.



Figure 2. Procession of 14 deities symbolizing the waxing of the moon, each deity representing a day, and the royal couple (at far left). Karnak, temple of Khonsu, lintel of the door to the barque chapel, Ptolemaic Period.



Figure 3. Representation of the phases of the moon. Temple of Esna, ceiling of the pronaos (detail), Roman Period.

The moon is frequently addressed in the texts as a disk of varying qualities, e.g., “bright,” “luminous,” “nocturnal,” “large,” “golden,” or “white,” referring to its luminosity, or in the case of the golden color, to its remarkable appearance especially at rise and set in the earth’s denser atmospheric layers nearest the horizon (Clère 1961: pl. 17; Altmann-Wendling 2018: 872, 874-875). References to other colors as well as to the “skin” of the celestial body might refer to its cratered surface, to its appearance during a lunar eclipse, or to its changing appearance depending on its phase and position (after all, the celestial body shows itself to earth’s inhabitants with a different shape every day). The dark areas of the moon (e.g., *maria*, the lava-lined craters informally referred to as the “Man in the Moon”) and lunar eclipses find

no explicit mention; they are instead referred to indirectly, couched in the euphemism of Egyptian religious texts. Moreover, lunar eclipses were interpreted as omens with mostly negative implications (Parker 1959; Altmann-Wendling 2018: 792-797; 2019: 225-233).

Similarly, the waning moon and other (non-full) manifestations within the lunation are, prior to the Roman Period, not explicitly designated or depicted. The lunar phases are, for example, indicated via representations of processions of gods, each god symbolizing a day (fig. 2) (Altmann-Wendling 2018: 731-748). In contrast, during the Roman Period the phases are explicitly depicted with a waxing and waning crescent (fig. 3) (Altmann-Wendling 2018: 606-612, 704-706; Mendel 2022: 474-490). Inasmuch as the conception

of the “disk” was dominant and prototypical—the moon’s structural similarity to the sun being immanent—the positive connotation of the full-moon phase becomes apparent

*Light and darkness*

The natural association of the moon with the nocturnal period and darkness is mostly linked with its positive quality as a radiant light-bringer, a concept that is particularly frequent in the texts, starting in the Middle Kingdom and becoming predominant in the New Kingdom (García Fernández 2017b: 222-223; for later periods see Altmann-Wendling 2018: 929-937). This reveals the fear of darkness present in ancient Egypt as well as in numerous pre-modern societies, whether based on real dangers such as disorientation and human or animal attacks, or imagined ones such as demons, the primordial chaos, or the proximity to death (Assmann 2005: 522-528; Pries 2009: 5-6; Kucharek 2010: 554-560; 2016: 75). Moreover, in the absence of effective lighting options, the changing lunar phases and the resulting fluctuating light intensity had a far greater impact on people anciently than they do today. The contrast between the bright full-moon sky and the new-moon period would have been all the more intense in the mostly cloudless sky of arid Egypt. The desire for daylight and sun-like illumination, which appears in Egyptian texts (e.g., Cauville 2007: 103, 1.10; Altmann-Wendling 2018: 929-936, 948-954), is clearly exaggerated; nevertheless the moon replaces the sun in its function as an illuminating agent at night. The moment when the sun and the moon exchange roles in the sky finds a frequent echo in the inscriptions (e.g., Chassinat 1928: 210, 1.1; Altmann-Wendling 2018: 940-948). Invigoration, the ability to see, and people’s rejoicing are the concrete effects of moonlight (e.g., Cauville 1997: 239, 1.4-9; Altmann-Wendling 2018: 915-918). What the moon illuminates (just like what the sun illuminates during the day) even serves as a measure of a ruler’s territory. The expression “everything the moon sees” indicates that the moon’s luminosity was interpreted as the celestial body’s gaze upon the world (e.g., de

Rochemonteix and Chassinat 1887 [1984]: 74, 1.6; Husson 1977: 64, n. 9; 257; Altmann-Wendling 2018: 449-450, 933-936; 2021: 235). The actual illumination of the moon by sunlight would seem to be acknowledged in expressions about uniting with the sun, and about receiving/capturing, or filling with, light (e.g., Chassinat 1932: 293, 1.12-14; and see Altmann-Wendling 2018: 947). These descriptions might also be purely symbolic or refer to the full-moon constellation.

*The moving celestial body*

A prominent aspect of the moon is its clearly visible movement, not only within one night, but also in a monthly framework. The rising of the moon is a particularly imposing spectacle on the horizon, and one that makes the earth’s satellite appear larger and consequently closer by optical illusion. The moon is associated with the cardinal direction East, which typically marks the place where celestial bodies rise, and is especially associated with the simultaneous setting of the sun at full moon, since the two brightest celestial bodies show up (almost) exactly opposite each other in the sky at this time. Of additional importance anciently, however, was the moon’s rise in the West, referring to the first crescent visibility. The frequent mention of this in Egyptian texts (e.g., Clère 1961: pls. 13, 17; and see Altmann-Wendling 2018: 897-902) makes clear how fervently the moon’s reappearance after the invisibility phase was longed for—probably since the dark, moonless nights had ended, and probably also due to the implicit affirmation that the moon was not gone forever and the world was continuing on its correct course. Therefore, the correct timing of the moon’s appearance and the absence of irregularity were emphasized (e.g., Chassinat 1928: 208, 1.3; Altmann-Wendling 2018: 923-929, 958-961). References to the hiddenness or mystery of the earth’s satellite (e.g., Leitz, Mendel, and El-Masri 2010: 554) are indebted, on the one hand, to the somber period of its invisibility and, on the other hand, to its obscure quality as a “shape-shifter” (Altmann-Wendling 2018: 918-921; 2020). In addition to its daily orbit across the firmament, which resembles that of the sun and stars, the moon performs a

proper motion based on its rotation around the earth, a feature that makes it unique. The moon rises on average 50 minutes later each day, its movement in front of the fixed stars being clearly perceptible. Awareness of this latter aspect is evident in the Egyptian conception of the nocturnal celestial body, insofar as the (rapid) traversal of the sky is reflected in the discourses on the moon (e.g., Chassinat 1934: 153, 1.1-2; Altmann-Wendling 2018: 921-923).

#### *Anthropomorphism*

In ancient Egypt natural phenomena were typically personified by deities represented in human form, some examples being the Nile flood represented by the god Hapi, the star Sirius marking the New Year as the goddess Sothis, and the three Egyptian seasons (Baines 1985; Rickert 2020). Thus anthropomorphized, these deities could be addressed and worshipped directly and therefore mastered in a cultic way by man (Guglielmi 1974, 1991; Baines 1985: 19-30). The moon god Iah is similarly featured with a human body with a moon disk and crescent on his head, although this representation is much rarer than that of the lunar disk; rather, this form reflects associations with other lunar gods (Khonsu, Thoth, Min, Osiris) (Altmann-Wendling 2018: 706-707). A female moon deity is not known pictorially. In certain texts referencing Hathor and Isis, a feminine lunar aspect appears only in association with (several) other astral qualities (e.g., Chassinat 1935: 267, 1.9; Altmann-Wendling 2018: 757-767).

Especially with regard to Osiris, the moon appears with the characteristics of a living human being who can be bodily injured, even fragmented, and who can be involved in “human” conflicts: The dismembered and reassembled corpse of the god finds its counterpart in the celestial body—first, in its invisible phase, then in its phases of growing “piece by piece” (Altmann-Wendling 2018: 893-897). Osiris’s resurrection in the afterlife corresponds to the once again complete shape of the full moon.

The prevalent Egyptian conceptualization of the moon as an eye (the Horus-eye, *wedjat*-eye, or left eye), documented from the earliest

periods, is based on a similar structural correspondence, following the myth of Horus, whose eye was injured by his rival Seth and subsequently healed by Thoth (Gräßler 2017: 305-313; Pommerening 2005: 241-244, 253-257; Stadler 2012: 40-41, 57-62). The processes of filling, healing, providing, and counting the lunar eye are furthermore closely associated with this conceptualization. According to another variant of the myth, the moon originates from the ejaculate of Horus, which is ingested by Seth and emerges from his head in the form of a golden disk (Servajean 2004). Similarly, the sun and moon were interpreted as the right and left eye, respectively, of the sun god (Gräßler 2017: 8-11, 305, 312-313). Gräßler (2017: 253-256) identifies the origin of this interpretation mainly in the shining quality of both the human eye and celestial bodies. Occasionally Osiris is described as being in the eye of the moon, and a child is depicted in the pupil of the *wedjat*-eye in a lunar scene in Dendera (fig. 4) (Cauville 2012: pls. 24-26). The representation of the child may be related to the identification that existed in some cultures, such as the ancient Greek, of the iris/pupil with a young girl (Gräßler 2017: 150-158). In the temple of Edfu the moon is associated with the (injured) leg of Osiris, from which the moon had come out. The basis of this association is probably formed by the similarity to the crescent shape, as well as the (Ptolemaic and Roman) homophonic expressions *sebaq* “leg” and *sebaqet* “shining (lunar) eye.”

A significant and long-attested anthropomorphizing metaphor is that of the moon as a child, as briefly mentioned above, whereby the process of lunation is equated with the cycle of human life (Altmann-Wendling 2018: 897-904). The metaphor is mostly applicable to the first crescent after invisibility, because this reappearance is also understood as the birth of the moon. Its conception, on the other hand, was dated on the new moon (Clère 1961: pl. 60; Altmann-Wendling 2018: 408, 421-424, 902). The child, invisible at first in the womb and then growing fast within the visibly enlarging belly



Figure 4. Representation of the lunar disk enclosing a *wedjat*-eye, with a child in the pupil. Temple of Dendera, ceiling of the pronaos, Roman Period.

of its mother, can be correlated easily with the enlarging illuminated lunar surface. However, aging is also part of the lunar cycle: On the full moon, the celestial body gains the status of “an honorable one”/“one provided for” (e.g., de Rochemonteix and Chassinat 1887 [1984]: 255, 1.12-14), a term used for mature people and for the desired state after death (Jansen-Winkel 1996). The moon subsequently “grows old,” i.e., during the waning phase, and is called the “old man rejuvenating” (Chassinat 1935: 135, 1.13-17). Therefore, death and rebirth were equally important stages during the cycle of lunation. Unlike humans, however, the divine moon could control aging and even youth itself, which was a desirable quality in a culture that sought to counter death and decay with elaborate rites. Indeed this perpetual cycle of life would account for the moon’s mention in funerary texts since the Old Kingdom and the identification of the deceased with the moon since the Middle Kingdom (García Fernández 2017b: 222-223).

#### *Zoomorphism*

The conceptualization of the moon as an animal is found more often in the texts than in the depictions. Among the former stands out the description of the moon as a bull, perhaps founded in the similarity of the bent horns and the crescent moon, as shown in Figure 5, one of the (infrequent) depictions.

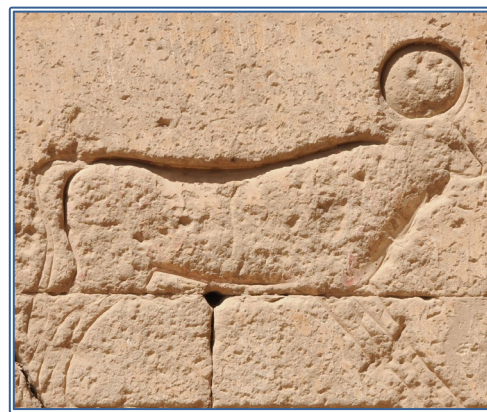


Figure 5. The moon as a bull with the lunar disk between its horns. Karnak, Gate of (Ptolemy III) Euergetes, south-western interior side, Ptolemaic Period.

The bull played an important role for the agro-pastoralist Egyptians and could personify gods and the pharaoh (Galán 1994: 96). The attribute “blazing” invariably qualifies the lunar bull (*Ka-pesi*) as wild and potent, suggesting the mating, fertility, and impregnation of cows (e.g., Leitz and Mendel 2017: 369; Altmann-Wendling 2018: 456-465, 769-770, 880-884). The association of fertility with the moon was universal within Egypt because of its monthly growth (Altmann-Wendling 2018: 954-955). The moon is accompanied by the sun, both shown in bovine form, as a designation of the full moon, which is referred to as the “union of the two bulls” (e.g., Leitz 2001: 259; Altmann-Wendling 2018: 442-456). In the waning phase, on the other hand, the moon transforms into a castrated ox, the absence of a “part” thus indicating the lunar disk’s diminishment. Other less frequent zoomorphic representations of the moon are the ibis and baboon, both often associated with the god Thoth, to whom these animals were sacred; the syncretism between Thoth and the god Iah starts only in the 18<sup>th</sup> Dynasty (García Fernández 2017b: 225; Altmann-Wendling 2018: 770-773). It is exclusively in Greek texts by Plutarch, Horapollon, and Clemens of Alexandria that the connection of the ibis and baboon with the moon is developed in detail (Plutarch, *De Iside et Osiride* 75 [381D], trans. Griffiths 1970: 75-76; Clemens of Alexandria, *Stromateis* V.43, 2, trans. Stählin 1937: 156; Horapollon, *Hieroglyphica* I.14-15, trans. Thissen 2001: 14-16).

In a rather rare mytheme, the arm of Thoth is restituted as the moon; here probably the form as well as the color of the (black and) white plumage of the ibis acts as *tertium comparationis* (the point in common in which two different objects or states of affairs coincide) (Quack 1996; Stadler 2009: 331-333). There likewise existed a negative lunar connection to animals, as was illustrated in the mytheme, in the Coffin Texts and later sources, that a (black) pig bit off a piece of the lunar eye (Leitz 1994: 269-270; el-Huseny 2006: 240-319; Meeks 2006: 218-219).

#### *Socio-political conceptualizations of the moon*

The moon god Iah remains clearly secondary to the sun god in power and reputation, but he is definitely perceived as a ruler in his nocturnal sphere of activity: He dominates heaven and earth with his light, he is referred to as the lord of certain astronomically or ritually significant days of the lunar month, and he is invoked as a powerful apparition (Altmann-Wendling 2018: 962-964). Particularly at full moon, the earth’s satellite outshines most stars and planets both factually and figuratively. Indeed the possibly best-known mythological model of legitimate succession to power and of overcoming hostile and chaotic forces—the installation of Horus on the throne of his father, Osiris—is often linked to lunar concepts: thus, Horus’s healed eye is equated with the (once again full) moon, and lunar rituals often invoke the desire to be deemed justified (*mꜣꜥ-hrw*) against enemies (Altmann-Wendling 2018: 59, 61, 800, 884-892).

Furthermore, a prominent socio-political concept is the role of the moon as a deputy of, or spokesperson for, the sun, since the moon shines like the sun and is referred to as the sun’s companion (literally, “second”) (Altmann-Wendling 2018: 940-948; 2021). This is particularly true with respect to the full moon, which appears from earth in approximately the same size and orbit as the sun, and which likewise has the ability to illuminate the earth. The sun as “father of the moon” (e.g., de Rochemonteix and Chassinat 1887 [1984]: 255, 1.3-6) implies the subordinate position and possible succession of the earth’s satellite on a genealogical level. This concept reflects the structure of the Egyptian social and administrative system, in which the state leadership and civil service had a strictly hierarchical and effective system of command and executive power. The conceptualization of the sun and moon as regent and deputy/successor, respectively, was also applied to divine and royal legitimation of rule. Thus, the moon god Khonsu in Thebes, depicted in the form of a child, is the son of the imperial solar deity Amun-Ra (see, e.g., Klotz 2012). Amenhotep III and Ramesses II at times presented

themselves as moon gods in order to theologically substantiate their rule and to assume for themselves god-like status (Altmann-Wendling 2021: 236-237). In Tutankhamun's tomb inventory, lunar symbolism plays a significant role, reflecting a return to the more traditional view of the sun's journey, including its traversal of the netherworld, and thus constituting a departure from Akhenaten's radical new solar religion (Haas Dantes 2022: 242-274, 332-370). Likewise, the identification with Thoth by Horemheb, who was not a member of the royal family and who actively participated in the restoration efforts of the post-Amarna Period, could be representative of (his) rightful accession to the previous rulers, who were theologically solar dominated (van Dijk 1996; Altmann-Wendling 2021: 237).

A socio-cultural aspect is inherent in the concept of the moon as a time indicator and lord of time, according to the theory of "social time." This concept includes, among other things, the emphasis, idealization, and sacralization of time cycles and certain points in time, as well as the qualitative evaluation of time (see, for example, Sorokin and Merton 1937; Zerubavel 1981; Färber and Gautschy eds. 2020: 9-21). In the texts, the moon controls, in addition to the units of the lunar month, all time units such as hour, day, and year, although the latter are rather measured by the sun and not the moon (e.g., Davies 1953: pl. 31; Altmann-Wendling 2018: 923-929). Furthermore, the constantly mentioned number 30 constitutes an idealized form of the lunar month (Altmann-Wendling 2020), which fluctuates irregularly between 29 and 30 days. The moon appearing, disappearing, rejuvenating, and repeating its (full) shape at the proper time further expresses the significance of a regular cycle (Altmann-Wendling 2018: 958-961). Overall, the worldview thus reflected runs throughout Egyptian culture from the daily birth and aging of the sun to the cyclical perception of the creation of the world (Assmann 1990: 34). The moon symbolized the punctuality and regularity of astronomical phenomena, which—in contrast to earthly events, characterized by uncertainty and

changeability—conveyed to man a sense of predictability and permanence through their steady course. Especially in view of the desire for eternal life in the hereafter, so prevalent in ancient Egypt, predictability and permanence were of importance, which is why the transformation of Osiris (representative of the dead) into the moon features prominently in afterlife texts since the Middle Kingdom (Altmann-Wendling 2018: 681-698).

Furthermore, the correct course of the lunation (in addition to the course of the sun) was considered a manifestation of creation as well as of the functioning world order, *maat*. To maintain the latter, subdivided by Jan Assmann into a private, a public, and a cosmic sphere, was the task of the reigning pharaoh (Assmann 1990, 2001), who, according to ancient Egyptian belief, secured the cosmic sphere of *maat* through knowledge of the processes of nature as well as by performing certain magical-ritual acts. The moon with its properly proceeding shape-shift was thus an indicator of a legitimate rule; at the same time, with his involvement, the pharaoh could participate in the symbolism inherent in the celestial body, such as that of rejuvenation and permanence (Altmann-Wendling 2018: 967-969).

#### *Additional lunar conceptualizations*

A conceptualization whose origin is unclear is that of the moon as a pillar. "Rejoicing pillar" (*Iun-ha'a*) is a frequent second name for the moon from the Ptolemaic and Roman Periods onward (Altmann-Wendling 2018: 877-880) and has at times been regarded in Egyptology merely as a notational variant and pseudo-etymology of the usual term *Iah* (e.g., Herbin 1982: 245, n. 2). However, the literal translation is quite plausible, as there are also designations of "pillar" (*Iun*) or "pillar of the sky" (*Iun-en-pet*) for the moon (e.g., Clère 1961: pl. 13). The latter designation may have originated in the image of the brightest celestial body by night being a symbolical "support" of the canopy of heaven, imagined in ancient Egypt on four posts (Kurth 2016: 240-241; Mendel 2022: 145). One text passage even seems to indicate that the sun itself was leaning on the moon (Sethe 1908 – 1910: 401,

§732 b-c). Of further consideration is the possible association of pillars with beams of moonlight (perhaps reflected on the surface of the Nile), in parallel to the association of sunbeams with solar obelisks. Marguerite Morfin (1997: 320-321) suggests that the lunar pillar was regarded as a symbol of the separation of chaos and cosmos, as well as an aid in orientation.

The moon's influence on the inundation, however, is postulated only by Greek author Plutarch (*De Iside et Osiride* 43 [368B-C]; trans. Griffiths 1970: 41-44) and is probably based rather on its equation with Osiris, whose corporal efflux was interpreted as inundation water (Altmann-Wendling 2018: 956-958).

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The most relevant comprehensive works on the conceptualization of the moon in ancient Egypt are Derchain (1962), García Fernández (2017a, 2017b), and Altmann-Wendling (2018). While the first of these can be considered rather eclectic, the latter two complement each other chronologically, as García Fernández covers sources up to the New Kingdom and Altmann-Wendling focuses on the Late and Ptolemaic and Roman Periods. In accordance with the available sources, García Fernández (2017a, 2017b) includes literary, onomastic, and administrative texts in addition to the religious funerary sources, while Altmann-Wendling (2018) predominantly comprises temple texts, though sepulchral texts as well as iconographic sources are taken into account. The elaboration and theoretical underpinnings of the varying motifs and symbolism of the moon are also included in the latter work. Individual studies include Labrique (1997, 1998a, 1998b, 2002, 2003a) on the lunar child aspect; Degardin (1985, 2001, 2007) on the lunar connection with Osiris; Goyon (1983, 2013, 2015) on the lunar bull aspect, including its political implications; Gräßler (2017) on conceptions of the moon as an eye; Derchain (1997) on the shape of the moon and its special movement (2010); Morfin (1997) on the lunar pillar; and Labrique (2003b) on the moon's specific movement. The moon's political role and luni-solar symbolism are treated by Haas Dantes (2022) and Altmann-Wendling (2021).

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Figure 1. The moon as a disk enclosing a *wedjat* eye, with adjacent crescent, worshipped by the god Thoth. Temple of Dendera, ceiling of the pronaos, Roman Period. Photograph by Stefan Baumann.

Figure 2. Procession of 14 deities symbolizing the waxing of the moon, each deity representing a day, and the royal couple (at far left). Karnak, temple of Khonsu, lintel of the door to the barque chapel, Ptolemaic Period. Photograph by Christian Leitz.

Figure 3. Representation of the phases of the moon. Temple of Esna, ceiling of the pronaos (detail), Roman Period. Photograph by Ahmed Amin © Esna-Project Tübingen and Ministry for Tourism and Antiquities, Egypt.

Figure 4. Representation of the lunar disk enclosing a *wedjat*-eye, with a child in the pupil. Temple of Dendera, ceiling of the pronaos, Roman Period. Photograph by Stefan Baumann.

Figure 5. The moon as a bull with the lunar disk between its horns. Karnak, Gate of (Ptolemy III) Euergetes, south-western interior side, Ptolemaic Period. Photograph by Christian Leitz.