The Spinning Tops of Hemaka

Patrizia Piacentini
Università degli Studi di Milano
Dipartimento di Studi Letterari, Filologici e Linguistici
patrizia.piacentini@unimi.it
ORCID https://orcid.org/0000-0002-8657-7948

Alessio Delli Castelli
Université de Liège (Belgique)
Sciences historiques – Faculté de Philosophie et Lettres, Histoire de l'art et
archéologie de l'Egypte pharaonique – UR Mondes anciens,
alessio.dellicastelli@uliege.com
ORCID https://orcid.org/0009-0006-0915-1448
DOI: 10.54103/milanoup.115.103

Abstract

Forty-five spinning tops were found by W.B. Emery in 1936 at Saqqara, inside the tomb of Hemaka (S 3035), Chancellor of Den, the fifth king of the First Dynasty (ca. 3000-2900 BCE). Behind their appearance of innocent games, the spinning tops reveal themselves to be the sign of a time of deep transformation in Egypt. They show connections both to the culture of the Naqada Period and to the motifs and forms that would characterise the Old Kingdom. This contribution analyses the connection between state formation and the societal relations it entailed; the history of their archaeological discovery and historical milieu; the syntactic structure of images based on circular frames; other Egyptian forms of amusement. A diachronic view of the iconography of hunting is offered, and two case studies (disks Cairo, JE 70164 and JE 70165) have been selected which best exemplify the nature of these artefacts as representative of a world in transition.

1. Introduction

Works of art are the speculative tools of the creative process, which involves a synthetic and crystallised understanding of the world's order, connections and aprioristic perceiving categories. The aim of a creative work is seamlessly to integrate these different levels of human understanding through their analogies. The earlier the cultures under observation are, the more cemented the relations between their signifiers, as a reflection of the fundamentally totalising character of their world-view. In Egyptian works of art, one can recognise socio-political,

utilitarian, ideological, levels of meaning which necessitate a horizontal, inter-iconical and net-like interpretive structure (Laboury 1998, Laboury 2017).

The spinning-tops found in the tomb of Hemaka (S 3505) from the Archaic Cemetery of North Saqqara afford a perfect example of the multi-dimensional, synthetic expression of Egyptian works of art. Behind their innocuous and jejune appearance of amusingly decorated games, the spinning tops of Hemaka stand as signs-of-the-times. This «time» was the historical cusp in a process that brought the population of the Nile Valley from small, autarchic groups politically regulated according to the principles of a chiefdom to a highly centralised State.

The formation of the Egyptian unitary state (Stevenson 2016; Bard 2017) was a thousand-year-long affair that occupied the whole of the fourth millennium, also known as the Naqada Period, divided in three stages and relative sub-phases which reflect the cultural and political changes (Hendrickx 1996, Hendrickx 1999)[1].

This historical process saw the continuous movement of the Upper Egyptian chiefdoms towards such remote lands as Nubia and the Near East in search of objects of prestige in exchange for their agricultural surplus. This process of goods-exchange had various ramifications. It was in the interest of the cultures of Upper Egypt to try and facilitate their own passage towards the mining country of Sinai and the Near East beyond and so include the territories that divided them from their destination. Before political unification could occur, the contacts between the various groups established along the Nile Valley gave their culture uniformity, as is evidenced by the changes in funerary customs in Lower Egypt and the diffusion of cults focusing on falcon gods. These cults would constitute the ideological foundation of the Egyptian monarchy which perceived the king as embodiment of and intermediary with the gods and an assurance of the continuation of the world order, which the Egyptian called and deified as *ma'at*.

The nature of power slowly changed during the fourth millennium. The acquisition of objects of prestige had the long-term effect of creating social disparity, as testified by the content and topography of tombs. The élite tended to separate itself both spatially and qualitatively by selecting separate burial grounds and including a wider variety of goods in their interments. In the long-run, this process favoured a concept of power the transmission of which was based on dynastic lines. This substituted the more egalitarian feats favoured by chiefdoms the effects of which were extinguished with the chieftain's passing.

The gradual inclusion of wider territories under centralised power required the creation of an administration and a tool, *i.e.* writing, with which it could operate. From its earliest appearance in Egypt, writing had a simultaneously

---

1   The absolute chronology of the Naqada Period is as follows (all dates BCE): Badarian (ca. 4400-3800); Naqada IA-IIB (ca. 3800-3450); Naqada IIC-D (ca. 3450-3325); Naqada IIIA1-IIIB: Scorpion I- Irj-Hor/Ka (ca. 3300-3100); Naqada IIIC1: Narmer-Djed (Dyn. I) (ca. 3100-3000); Naqada IIIC2: Den-Adjiib (and also the official Hemaka) (ca. 3000-2900); Naqada IIID (Semerkhet/Qa'a-Dyn. II) (after ca. 2900).

religious, social and administrative significance (Wengrow 2008) as well as being connected, from a semantic point of view, to its visual culture, *i.e.*, to the way through which society shaped the perception and presentation of itself.

The territorially growing country of Egypt gradually changed its physical centre of power northwards to just below the separation of the Nile into the branches of its Delta, thus facilitating control over its various districts. Contrary to apocryphal legends concerning Menes, the first king of Egypt, almost certainly identified with Narmer, this process was not immediate, as were none of those concerning the birth of the Egyptian state. The change of capital from This to Memphis occupied the passage from Dynasty 0 and the Early Dynastic period (First and Second Dynasty) (Tallet *et el.* 2012: 385-387 [3] and Fig. 9 on 396) and was resolved only at the beginning of the Third Dynasty, on the inception of the Old Kingdom.

(P. P.)

2. Hemaka. History and Archaeology

The reign of King Den[2], under whom Hemaka served, is one of the best documented and important of the Early Dynastic Period, showing changes that would become effective during the Old Kingdom. Nineteen partitions of the *Palermo Stone*, divided between the Palermo and Cairo fragments concern the reign of King Den. It has been concluded that he reigned between 33 and 65 years (Godron 1990: 105-106).

A great increase in the administrative body, both in titles and officials, occurred under this king although a contraction can be similarly observed, alongside the merging of a number of administrative bodies, during the reign of his successors Anedjib and Semerkhet (Müller 2012). The tombs of the numerous officials of King Den are found in Saqqara, Abu Roash and Helwan (Wilkinson 1999: 75-78), beside the subsidiary tombs dug around his tomb at Umm el-Qa'ab. The different topography also signifies a difference in status, Saqqara being the burial ground of the highest officials and Helwan of the lowest.

Through the employment of a fewer number of hieroglyphic signs, a first simplification of the writing system occurred, alongside the simultaneous recording of almost all consonant sounds employed in the Egyptian language (Kahl 2001: 119, 123-124). Both processes bespeak a system that was gradually becoming more sophisticated — simplicity being the result of a resolved complexity. Coincidentally, the tomb of Hemaka (fig. 1), contained the oldest traces of papyrus, albeit not used to write on but with a symbolic signification of the

---

2   The deciphering of the name of this king is uncertain. The various interpretations may be found in Godron (1990: 11-17).

power of writing (Piacentini 2002: 44), together with its practical function of packing material.
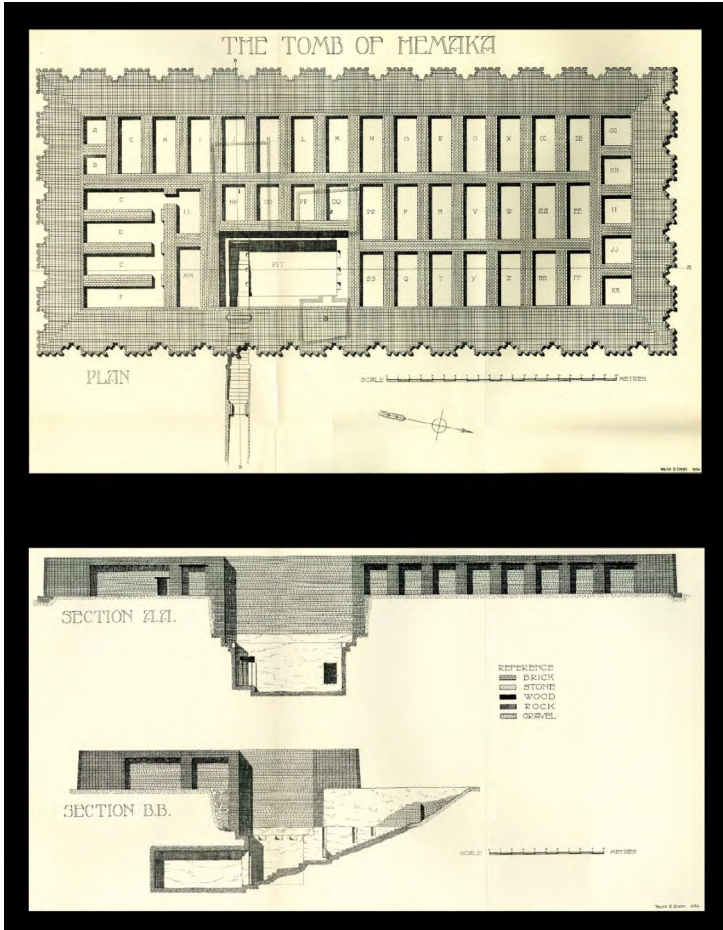

Fig. 1. Plans of the tomb of Hemaka (S 3035), Archaic Cemetery, North Saqqara (from EMERY 1936: Pl. 1 and 2).

King Den introduced the royal title *njswt-bjtj* literally «he who Belongs to the Sedge and Bee» and often translated as «Dual King»[3] and meaning «King of Upper and Lower Egypt». The double crown, which combined the White Crown of Upper Egypt and the Red Crown of Lower Egypt also appeared around this time. Both innovations stand to signify the simultaneous unification and acknowledgement of the differences of the two territories which constituted Egypt as a State that had probably been unified at this point, albeit temporarily.

---

3   This name has also been interpreted in different ways (Godron 1990: 17-21).

From the perspective of architectural development, the reign of this king shows the introduction in funerary architecture of stone in the paving of the royal burial chamber and of a descending ramp leading to it, which aided the construction process considerably (Engel 2008: 33). The same descending apparatus is found in the tomb of Hemaka, whose name is of difficult translation[4].

Judging from the seal-impressions and inscriptions found both in his tomb at Saqqara by Emery and in the tomb of Den at Umm el-Qaʿab by Petrie, Hemaka was the highest official to serve under King Den (Emery 1938: 62-64; Petrie 1900: 22, 25, 41, Pl. XXV [53-56]). Den appointed Hemaka to the highest position in the treasury, that of Chancellor, *i.e.*, «Bearer of the Royal Seal» (*khetemu-bjtj*). He was also a «controller» or «manager» (*kherep*) and «administrator» (*ʿadj-mer*) of a domain called *Hor-tepj-khet* first, and of the more prestigious *Hor-sekhentj-dju* later (Wilkinson 1999: 147; Müller 2012: 24-28) (fig. 2). As testified by their crenelated determinatives, domains were self-contained stretches of land destined to the production of the funerary endowments destined to the king. In the Early Dynastic Period, they were devoted to wine-production. Each king founded his own domains and some continued production in subsequent reigns. As seal-bearer, Hemaka would have also been in charge of distribution. He was, at all effects, at the core of the economic life of the mid First Dynasty.
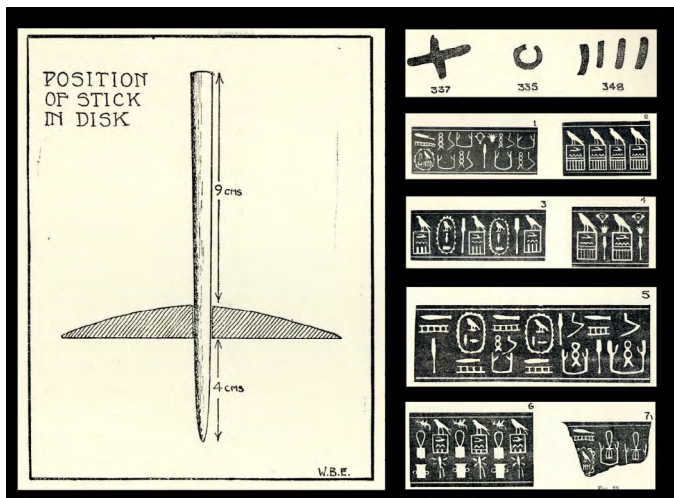
Fig. 2. Model representation of the functioning of the Hemaka disks, some numeral signs found inscribed on three of them and seal-impressions found in the tomb of Hemaka (from EMERY 1936).

---

4   Godron (1990: 69-71) does not mention the possibility that the *hema* part of the name might mean «*formen*» as is found in Jochem Kahl's Dictionary (Kahl 2002-2004: 307 with previous bibliography). Other names composed by verb+ka (ex. *ankh-ka*), are usually translated as *sdm=f*-Forms with gnomic meaning (*ankh-ka*= the ka lives); *hema-ka* would then mean «the ka forms» and maybe by extension «(whom) the ka forms».

As already mentioned, the tomb of Hemaka (S 3035) is part of the Archaic Cemetery at Saqqara. The name was originally given the necropolis by James E. Quibell (Quibell 1913, Quibell 1923), who excavated its northern section, closer to the village of Abusir.

Now barely visible, the Archaic Cemetery of Saqqara is situated in the northern section of this vast site, on the edge of the Saqqara Plateau, approximately 30m above the alluvial plane. This elevated position would have made the façades of these monuments visible from great distances and certainly from Memphis, which stood 4km away. The Archaic Cemetery originally comprised a series of monumental tombs dating to the first three dynasties which are characterised by exteriors decorated with a series of uninterrupted crenelated niches forming a so-called palace-façade (Hendrickx 2008).

The Archaic Cemetery of Saqqara is an archaeological site of fundamental importance, especially in its connection to the royal necropolis of This/Abydos/Umm el-Qaʿab[5]. It stands as the archaeological sign of the gradual shift of power from the southern capital of This to *Ibenu-hebu* (the White Walls), *i.e.*, Memphis in the north and the consequent choice of moving the royal necropolis from Abydos/Umm el-Qaʿab to the Memphite Necropolis, which represented the last steps in the unification of the Land.

After completing his work at the Step Pyramid in 1931, the archaeologist Cecil M. Firth turned his attention to an Early Dynastic Tomb standing in the Archaic Cemetery half a kilometre north-east of the Funerary Complex of Netjerikhet/Djoser (Firth *et al.* 1935). Firth gave the tomb which would come to be known as the tomb of Hemaka, inventory number S 3035 but died before being able to complete his excavations, which were then carried out by Walter B. Emery in 1936. An architect and engineer, Emery had been charged by the director of the Harvard Expedition William Stevenson Smith to draw the plans of the tomb so that they may be included in Reisner's monumental publication on the development of archaic tombs down to the accession of Khufu (Cheops) (Reisner 1936: 64-65)[6]. The results of Emery's work were published in 1938 in *The Tomb of Hemaka* (Emery 1938).

As all Egyptian tombs, the tomb of Hemaka (fig. 1) is a double structure, comprising an accessible superstructure devoted to mortuary cults and an inaccessible hypogeic space contemplated for the preservation of the body of

---

5   *This* is the name of the capital of the district and Abydos of the adjoined necropolis in its widest sense. As seat of the god Osiris, Abydos is a wide archaeological site of great importance and comprises monuments from all ages of Egyptian history. Umm el-Qaʿab is the name of the locality within Abydos where Pre- and Early Dynastic tombs are situated.

6   At least standing to what Emery wrote in *Preface*. In his publication, Reisner quotes Firth's Manuscript.

the deceased (Reisner 1936: 1)[7]. The superstructure is defined by a rectangular perimeter of crude brick which was faced with white-washed mud-plaster and painted red in places in imitation of wood. It originally measured 3.45h x 57.30 (N-S) x 26 (E-W) m, with walls sloping at an angle of 26° and decorated with a palace-façade motif of intricate niches.

The rectangle of the superstructure was further divided into forty-five storage rooms, inventoried by Emery with letters (A, B, etc.) and double letters (AA, BB, etc.). Some storage rooms presented a layer of sand covered with reed mats; others, especially conceived for the preservation of wine jars, were connected by wooden doors. From 9m outside the perimeter of the structure, a ramp and staircase proceed east-west to allow access to the underground structure. At a depth of 3m this structure encountered the rock stratum, from which point they ceased to be built but were cut directly into the rock[8]. The ramp and staircase lead to the pit and three subterranean rooms, one of which (Room I) probably was the burial chamber (Emery 1938: 3-9, Pl. I, II).

The spinning tops of Hemaka were found alongside various other finds in the superstructure, in the eastern half of the storage room to which Emery gave inventory letter Z (fig. 1), a space measuring 3.25d x 4.80l x 2.00w m, above a false-floor of sand 2m high and covered with reed mats. The spinning tops lay in a wooden box underneath a stack of arrows near the northern wall. Inside the box were 45 disks (Emery Cat. Nos. 306-50) made in different materials such as stone[9], copper, horn and ivory. The box (Cat. No. 433) also contained wooden sticks, some of which were found still in contact with the disks, making the interpretation of the objects as spinning tops almost certain. Emery himself carried out an experiment to see whether they worked as such. If inserted in their central perforation, the wooden sticks would stand 9cm above the disks. Emery placed the upper section of the sticks between the palms of his hands which he then slid swiftly and horizontally in opposite directions, making the object spin for a considerable amount of time (fig. 2, top left; fig. 3, top left). Their nature as games found further confirmation in the inclusion of painted
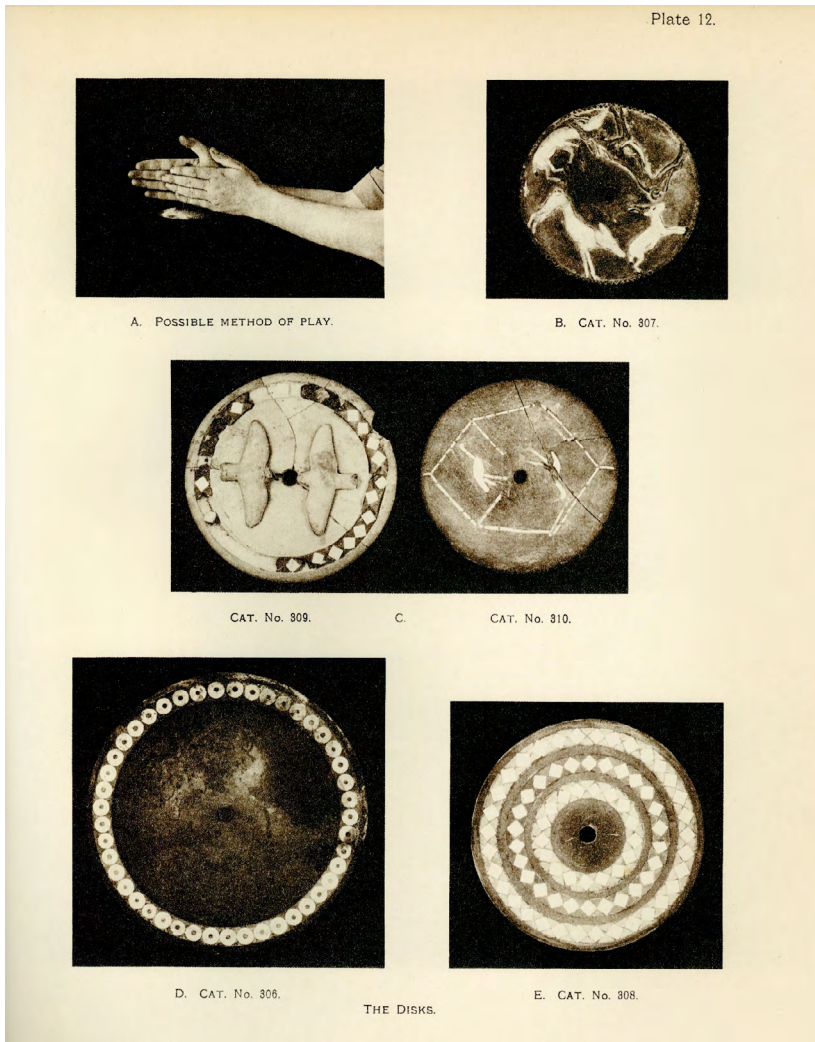
---

7   These two spaces did not necessarily exist in the same context, as the tombs of the First Dynasty kings of Abydos (cf. the preceding note) and those of the New Kingdom in the Kings' Valley testify. The cult place could in fact be placed separately, for security and religious reasons, in order to avoid robbery and, certainly in the New Kingdom, to associate the king with the cult of various local and national deities (the so-called Temples of Millions of Years).

8   This is the main architectural difference of the royal tombs of Abydos, which are completely built, while those of Saqqara are partly cut directly into the rock, which depended on the different geological formation of the two sites but also entailed the creation of a new kind of building expertise.

9   As stones, Emery recorded: schist (also greenish), black steatite, limestone (also yellow), crystal, alabaster (also pink and white), blue-green volcanic ash, dolomit.

numerical signs on the surface of three of them (Cat. Nos. 335, 337 and 348) (fig. 2, top right).

Plate 12.

A. POSSIBLE METHOD OF PLAY.

B. CAT. No. 307.

CAT. No. 309.   C.   CAT. No. 310.

D. CAT. No. 306.

THE DISKS.

E. CAT. No. 308.

Fig. 3. Decorated spinning top disks from the tomb of Hemaka (from EMERY 1936: Pl. 12).

The box was lidless, measured 54 x 15cm and most probably presented an ivory decoration on the sides and upper width[10] but had been eaten away by insects. The box may also have worked as a games board. Emery proposed that the bottom of the box presented a pattern somewhat connected with the object

10 The continuation of the decoration on the upper width confirms that it was meant not to have a lid.

of the game. Although coherent with the structure of other Egyptian games (cf. § 4), this was unprovable, due to the state of deterioration of the box, as the archaeologist himself stated.

(P. P.)

3. The Decorative Syntax of the Spinning Top Disks of Hemaka

The disks of Hemaka (figs. 3-5) are all circular while their sections and sizes vary considerably. Some are flat on both sides, some flat on the bottom and convex on top, others convex and concave or concave and convex. The diameters of the disks range between 82 and 144mm, and one alabaster disk (Cat. No. 345) is recorded to measure 313mm. Thickness and diameter of the central hole are often very similar in measurements, ranging between 6 and 14mm. (Emery 1938: 13-14, 28-32). Overall diameter, thickness and the diameter of the hole are not in a proportional ratio.

Of the forty-five disks which were found, five present a decorated surface, each different from the other. Cat. No. 306 and 308 present an abstract and geometric pattern, while Cat. No. 307, 309 and 310 present theriomorphic decoration connected, at least in two specimens (307 and 310), to the iconography of either fowl or game hunting.

All five decorated disks present a decorative pattern which is structured around the circular frame of the disk. Roland Tefnin defined this figurative syntax of circular-frames-based images as *symétrie rotative* (Tefnin 1993: 9). In the absence of a word-image relation which would help the interpretation of the iconography as in later pharaonic times, the underlying visual syntax of the Naqada Period offers an insight into a general set of signifiers connected to the way of life of these early cultures. Similarly, in the passage from images based on circular frames to those based on registers, a reflection is found of the socio-political-religious changes which occurred between the Neolithic and historical times, the advent of a monarchy and a unified State. A similar change can be observed in housing practices, in the passage from huts with a circular/ovoid plan to houses based on rectangle structures, as is also shown in hieroglyphs (Gardiner Signs O1 and O6). The different plan of houses evidently reflects a new hierarchical and social disposition, which would find its final form in the organisation of houses around the perpendicular structure of temples during the Old Kingdom. The passage to rectilinear structures might also have been influenced by changes in agricultural labour — the employment of ploughing, which proceeded in parallel, boustrophedon lines and canals, revolutionary in Egyptian society towards the maximum exploitation of the Nile's flood, and

provisioned by central authority, as testified by the Scorpion (II) mace-head[11], at an early stage of State development.

Essentially, the difference between images based on circles and rectangles concerns the passage from a natural to an abstract approach to natural forms. The curved line is the natural expression of organic forms, while straight lines describe a more intellectualistic, structural and therefore hierarchical mental structure. This change also involved Egyptian monumental architecture, especially in the passage from Imhotep's rendition of natural details and edification of mock buildings within the precinct of the Step Pyramid of Netjerikhet/Djoser at Saqqara at the beginning of the Third Dynasty and the abstract structure of the Pyramids of the Fourth. Sculpture was also interested in this change. Compared with earlier specimens, the unfinished figurative sculptures from the Step Pyramid (Firth *et al.* 1935: 12, 114-15 [66], Pl. 66) and the Funerary Complex of Menkaura (Reisner 1931: Pl. 61-63) show a sculptural procedure based from the outset on parallelepipeds which envelop the image in a system of intersected cubic volumes.

In relief and painting, images based on the rectangle and inserted in registers have a predisposition toward narration and invite (con)sequential interpretation. The *symétrie rotative* bases images around a centre from which rays develop dictating a syntactic structure conforming with the very essence of the circle, existing without beginning or end. This phenomenon is clearly observable on the flat, inner circular surface of cups. On White Cross-lined pottery composing its images on the outside perimeter of vases, it is often very difficult to determine where the image begins or ends, unless clearly stated by the painter through the employment, for instance, of a straight vertical line (Hendrickx *et al.* 2012: 25-29).

The exploitation of the possibilities offered by the centre and its rays, linearity and circularity, has been interpreted by Tefnin as an early reflection on the nature of the One and the Many, which expresses the two concepts of growth and diffusion connected to nature and its multiple forms (Tefnin 1993: 10, 12-13) and accommodates the fundamentally dualistic worldview of the Egyptian. Circle-based images are also figurative-syntactic structures which make it impossible to distinguish between abstract and figurative decoration. A continuous relation is formed between centre and periphery, so that any figurative element is also, simultaneously, a structural element.

Among the most important proto-historical documents, the decorated palettes display an intermediary tension between circular and rectangular images. Within their ovoid contours, they show different syntactic strategies which developed over time or, rather, in time lost their connection with their Neolithic precedents. In the earliest examples of decorated palettes, the Neolithic layout

---

11 Oxford, Ashmolean Museum, E 3632.

is preserved. In the Hunters Palette[12], the images are positioned along the outline and around the centre, indicated by the circular depression destined for the grinding of ore used as eyepaint. The palettes that show decoration on both sides are more complex and their syntactic structure differs on the two sides (Tefnin 1993: 18). One of the two sides is deprived of its centre, as the circular depression always appears only on one side. The contradicting syntactic structure of these objects testifies to the change that was occurring in the Naqada culture and society, with one side of these palettes remaining faithful to the Neolithic mentality and the other anticipating later pharaonic form. It is around this time that the concept of royalty permanently substitutes that of chiefdom. On the Narmer Palette[13], the last example of this kind of artefact, the circular depression has lost its function as a centre from which rays depart to become a negative space formed by the intertwining necks of two serpopards.

<div align="right">(A. D. C.)</div>

4. Games in Pre- and Early Dynastic Egypt

The spinning tops of Hemaka are not the only source of amusement found in Egyptian Pre- and Early Dynastic tombs. A game composed of sticks was found in Chamber 11 of Tomb U-j at Abydos, the first Egyptian tomb to show signs of royalty. Some of these games were sticks which gave the player points according to the number that landed on a board (Dreyer 2011: 133 and note 3 on 136).

Another game re-occurring in Pre- and Early Dynastic iconography and tomb finds has a more direct bearing on the iconography of the Hemaka spinning tops, and helps define their cultural context and explain their decoration. This is the *mehen* game, the components of which are represented on the walls of the tomb of Hezyra (Quibell 1913: Pl. XI, XXVI). The game was played on a board in the shape of a coiled snake, the head of which rested in the centre of the board and the body was divided in a variable number of spaces on which the game pieces moved according to rules that can only be inferred. Many pieces have been found in tombs; they are in the shape of lions, lionesses or dogs[14], which were interchangeable with a certain chronological and iconographic extent.

This iconographic similarity is not the only point of interest with regard to the *mehen* game. Mentions of *mehen* may be found in the *Pyramid Texts*, among others, at Utt. 332, §541 and Utt. 758. Here, the determinative of the word

---

12 British Museum EA 20790, EA 20792; Louvre E 11254.
13 Cairo Museum, JE 14716.
14 Cf., for example, Copenhagen, Ny Carlsberg Glyptotek ÆIN 1605-06; Chicago, Oriental Institute Museum, E6057, E7895; the same Museum preserves a *mehen*-board from the Old Kingdom E16950.

mehen has the same form of the board in the Hezyra wall-painting, a circle with a protruding trapezoidal appendage:

> Utt. 332: Recitation: It is this N. who has come forth from the *mehen*-board When he came around, N. came forth from its fiery breath Just as N. has travelled <to> the two skies, so N. has returned <to> the two lands Utt. 758: Neith is conceived in the nose. This is how Neith is born in the nostril. Just as Neith rests in your coils, so Neith sits in (i.e. "resides in") your *mehen*-board (Translation: Piccione 1990: 48).
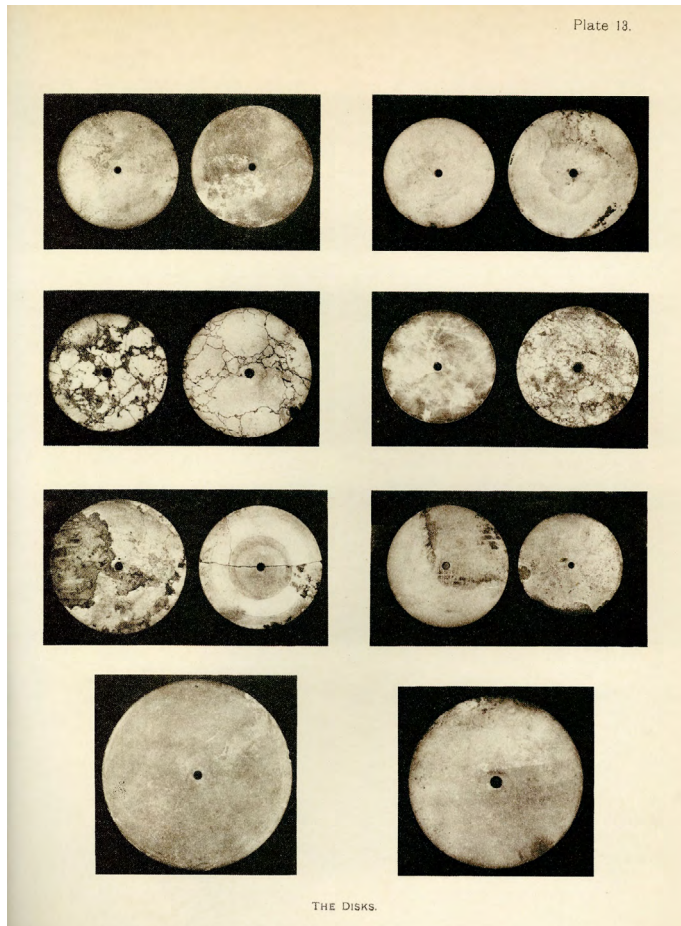

Fig. 4. Plain spinning top disks from the tomb of Hemaka (from Emery 1936: Pl. 13).

In the texts, the word *mehen* presents three levels of interpretation, as referring to the game, hunting and the name of a serpent god, as testified by the various translations offered by Sethe, Junker, Montet and Faulkner (Piccione 1990: 48 with previous bibliography). The *mehen* board-game appears as a transitional

space in which the coordinates of the phenomenal world may be reversed — up becomes down, the inside inside out, the contained the container, the dead the living and vice versa — as so often occurs in the perspective of Egyptian relief. The spinning tops of Hemaka suggest a variation on this meaning.

In the context of the Hemaka spinning tops, it is interesting to underline the relation existing between rebirth, transformation and descension as testified by the third line of Utt. 332, hunting and games.
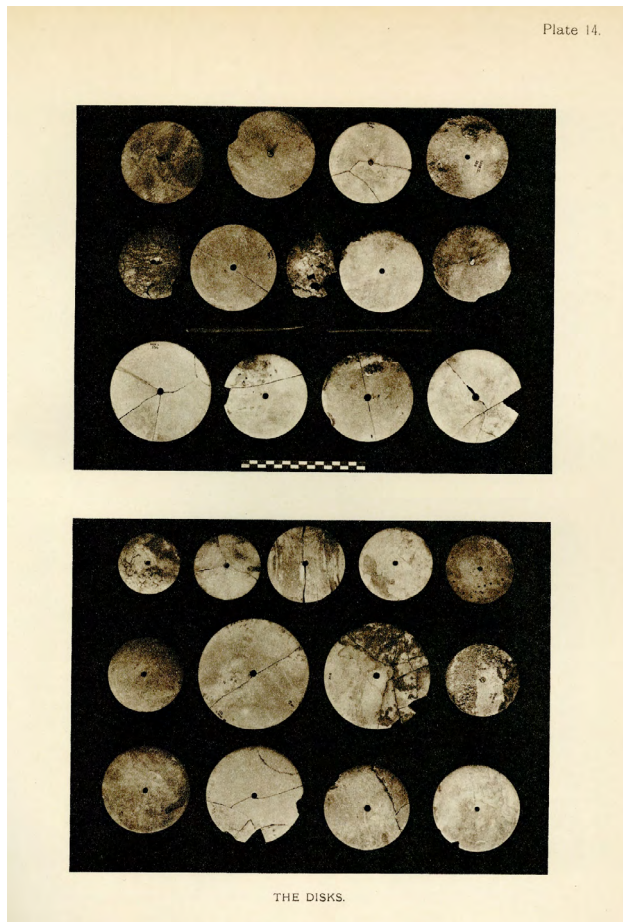
(A. D. C.)

Fig. 5. Plain spinning top disks from the tomb of Hemaka (from EMERY 1936: Pl. 13).

5. The Iconography of Hunting between the Predynastic and Early Dynastic Period

Hemaka disks Cat. No. 307 (figs. 6-7) presents a synthetic image of game hunting, popular throughout the Naqada Period.

In Upper Egypt, between the Badarian Period and the beginning of Naqada I, in normal circumstances, the percentage of wild animals is around 10% against 90% of domestic animals (excluding carnivores). For the following Predynastic Period, the percentage decreases to 1-2%. Although there is evidence of hunting for all Predynastic settlements, the various sites show variations in the importance of wild game. This may depend on the nature of the animal being hunted. In the area of Merimde, for example, this might be due to the protection of fields from the incursion of hippopotami. It may otherwise depend on the nature of the settlement. In Hierakonpolis, a large number of wild-game-remains were found in structure HK29A, which has been interpreted as an archaic temple, thus requiring to consider the cultic activities in the interpretation of the data (Linseele *et al.* 2009: 54-64).

The economic reality represented by the archaeological data does not find confirmation in the social self-expression offered by iconography of the Predynastic Period, in which hunting is widely represented. More than forty years ago, Tefnin exemplified his concerns regarding the utilisation of Egyptian images as historical sources by using, among others, Predynastic hunting scenes. The author demonstrated the absence from these objects of a narrative *Kunstwollen*. Rather than being based on a space-time continuum, Pre- and Early Dynastic decorated objects adopted a ritual dualistic contraposition (Tefnin 1979: 221-229).

Hunting is found on White Cross-lined pottery of the Naqada I-IIA Period. A variety of wild animals are represented while domesticated animals are largely absent, with the noticeable exception of dogs. Important toward the interpretation of the Hemaka spinning tops is the fact that on the White Cross-lined pottery the hunter is seldom represented directly. He appears metonymically, through his weapons in hippopotamus hunts or through his dogs in desert hunts (Hendrickx 2010: 110). Dogs were an important aspect of the Predynastic way of living of the élite and their hunting practices in particular. They have been found buried in settlements and necropolis and, more importantly, in the proximity of élite tombs, especially HK6 at Hierakonpolis (Hendrickx 2010: 118).

Between the whole period ranging from early Naqada Period to the Early Dynastic, hunting and political power were synonymous. In two examples from Abydos, Tomb U-415 and U-239, the theme of the hunt is directly connected with that of military victory (Hendrickx 2010: 110-13, 129-31). At times, such as in the Decorated Tomb of Hierakonpolis (Tomb 100) and on Oxford AM E.2832, dogs are associated with a person raising their arms (Hendrickx *et al.* 2012: 59). Once connected with dancing, they are considered today to represent

the idea of power, through the analogy between the position of the arms and the horns of a bull. This corroborates the interpretation of hunting as a form of domination over the chaotic principle represented by desert animals and, by extension, of the role of royalty and the élite in the preservation of order (*ma'at*) within society.

Considering the position of captured animals as testified by the finds of Hierakonpolis, hunting was also a sign of social prestige. The return from the hunt and the hiatus between the placement in captivity and ritual death of the animals would have conspired to augment such prestige. The visual aspect was not negligeable and was probably reiterated by the possession of hunting dogs as permanent reminders.

The élite cemetery of Hierakonpolis HK6 demonstrates that the eating of game was part of the élite way of living and contributed to social inequality, offering access to a more varied diet and to weaponry. Furthermore, within the élite, the social circumstances surrounding hunting presupposed a social pact similar to the one that has been described for the earliest written documents found in Tomb U-j at Abydos (Wendrow 2008). Metaphorically, the identification between hunters and lycaons appearing on Predynastic Decorated Palettes was selected by virtue of the ability of these animals to successfully hunt in groups.

On certain cups of the Amratian Period, a concept similar to the most accomplished of the Hemaka disks can already be observed. It is a series of four hippopotami composed neatly around the centre and framed by a zig-zag «decorative» motif, which would in historical times stand as a word for water (*mw*) or as a determinative for any liquid substance (both Gardiner Sign N35A) (Tefnin 1993: Fig. 8a on 15).

Among White Cross-lines pottery, more archaic examples developed in Hemaka's disk Inv. No. 307 can already be found[15]. As in Hemaka, these examples bring together dogs and gazelles[16]. Except in the earlier specimens no contact is made between the animals, the syntactic structure is more erratic, images can develop on more registers and other emblems accompany the images, such as the sign for foreign territories and a boat.

In the decorated pottery of the Naqada IIC-D period, hunting is seldom represented and only on two examples are known. The limited number of specimens is most probably due to the funerary destination of the decorated pottery (Hendrickx 2010: 115-117) and of the loss of the greater part of the iconography due to a shift to a poorly preserved pictorial medium. On the item in Lyon, Musée des Confluences inv. n. 90000098, a gazelle is represented between two dogs in heraldic fashion; on Oxford AM E.2832 a dog is chasing a long line of

---

15 Brussels, MRAH E.2988 and E.2631; Oxford AM 1895.482.
16 A certain amount of confusion appears to exist in the determination of these species, which are often called antelopes (Strandberg 2009: 8-23).

desert animals. The example from Lyon has the simplicity of the Hemaka disk but does not share its utilisation of the whole figurative space.

On a stela found in Meri 02/50 (70 km south-west of the Dakhla Oasis) and dating to the first two dynasties a dog attacking the jugular of a mouflon sheep (Hendrickx 2010: 119, Fig. 26 on 117), is typologically the same as dog attacking an antelope in one of the Hemaka disks.

(A. D. C.)

6. Hemaka: Disks JE 70164 (Emery Inv. No. 307) and JE 70165 (Emery Inv. No. 310)

Hemaka's disk JE 70165 (Emery Inv. No. 310, fig. 3) presents what is probably the earliest known example of fowl hunting. This is perhaps the reason for some of its formal asperities, it lacked the thousand-year-tradition on which the iconography of JE 70164 (Emery Inv. No. 307, fig. 6-7) could rely (cf. further). Regardless of the success of its form, the ideas that the craftsmen wanted to express are not less interesting. A hexagon that does not comply to any strict geometric structure was drawn. The bottom half is larger and the upper half is further defined by a diamond shape. This is the classic shape with which nets employed in fowl hunting were indicated and which are still employed to this day on Lake Manzala (Henein 2001). The net is supposed to be open. The two birds represented on the surface of the disk have been interpreted as storks, cranes or large egrets (Henein 2001: 240 with previous bibliography). One of the two is placed inside the diamond-shape partition and the other in the remaining lower part of the hexagon. The first bird would appear to be outside the net and the second inside, as a variation on the idea developed with the gazelles in JE 70164, and coherent with the structure of other Egyptian games. Image of fowl hunting would be very common in the Old Kingdom. One of the earliest examples, from the tomb of Nefermaat in Meidum from the very beginning of the Fourth Dynasty shown how it developed into a tomb decoration scene (fig. 8).

The surface of disk JE 70164 (fig. 6) presents four images, two dogs and two gazelles. One dog is chasing a gazelle while the other has successfully captured its prey and is holding down its neck between its fangs. JE 70164 certainly stands out as the masterpiece among the decorated disks of Hemaka. To a certain extent, this certainly is a culturally empathic and subjective projection based on the naturalism and seemingly narrative form of its representation. However, it would be incorrect to assume that the image represented two moments in a narration, like a magic lantern, as Tefnin observed with regard to other artefacts (Tefnin 1979) rather than a dualistic, cultic principle. One golden and the other black, the colour of the dogs' furs alone testifies to this. From a more objective and aprioristic point of view based on its structural elements, it

is the outstanding coherence with which the project of the craftsman has been carried out that places this specimen in a class all of its own. Exceptionally, JE 70164 considers the spinning motion of the object and applies it to the decoration. This was studied with such accuracy that even when the object is static the mind guesses its potential revolving principle. This is achieved through the sinuous contours of the dogs, presenting a sliding, downward curve from their hindlegs to their necks inviting one's gaze to follow it.

Fig. 6. Spinning top disk, black steatite, diam. 87mm., hole 7mm, thickness 7mm, Cairo Museum JE 70164, Emery Cat. No. 307 (from EMERY 1936: frontispiece).

Fig. 7. Visual syntactic structure of disk JE 70164 (Author's elaboration).

The structure of the image (fig. 7) follows the principle of rays and concentric circles described in Tefnin's *symétrie rotative*. The circle is divided in sixteenths that accommodate the lengths of the figures. The concentric circles can be divided in four equal parts. The closer they are to the centre the more frequent they are and smaller the space between them, which doubles with every set of lines, making for progressively fewer lines. Observed from the point of view of its geometric construction, Hemaka's disk JE 70164 appears as the major achievement of one millennium of images based on a *symétrie rotative*. Especially noteworthy is the subtle liberty in the use of this geometric structure. Except for their heads, the two dogs are practically symmetrical, occupy the same space and appear as being one the projection of the other. The craftsman simultaneously utilised straight lines. The employment of a square/oblong pattern in disk JE 70164 connects Predynastic and Old Kingdom formal principles. The two gazelles do not follow the same principles. It is on their figures that the notion of reversal observed in the *mehen*-game is displayed, while the dogs display reversal in the choice of colours. While the dimensions of the two gazelles is consistent, they are not positioned on specular sections of the circle. The gazelle

that has been captured shifts by one-sixteenth of the circle in order to join the portion of the black dog and so find room between its fangs.


Fig. 8. Fowl hunting scene from the tomb of Nefermaat
at Meidum, Tomb 16a (from Petrie 1892: Pl. XVIII).

The wider context of the desert hunt that could be found in Pre-Dynastic works disappeared from the Hemaka disk together with the supplementary emblems observed in White Cross-lines pottery and, with this, another connection is created with subsequent Old Kingdom iconography. In the non-royal iconography of the Old Kingdom, thirty-six examples of desert hunt involving dogs and gazelles are known (for the full list, cf. Strandberg 2009: 197-202). Of particular interest here are the earliest examples known from Meidum, dating to the end of the Third Dynasty and the beginning of the Fourth. They are the tombs of Nefermaat[17], Atet (fig. 9)[18],

---

17   Meidum, Tomb 16a, Cairo JE 43809.
18   Meidum, Tomb 16b, Pennsylvania University Museum E.16141.

and Rahotep[19]. The constant preoccupation with the achievement of a unitary state necessitated a confrontation with its dualistic opposite, represented by the chaotic element of the desert. This found a reflection in the iconography of hunting, its fauna, weapons and rituals both cultic and funerary. The strengthening of the state would have loosened this connection, while the solidification of the individualism of monarchy also implied that what had been achieved as a collective enterprise became the sole right and duty of the king. This is testified by the continuity of the iconography of the hippopotamus hunt and the slaying of captives. The attention which the Egyptians paid to tradition seldom allowed for the abandonment of an iconographical motif. Hunting must have come to be regarded as representative of a way of living which, in Egyptology, takes the name of «Decorum» (Baines 1993: 59-62 with previous bibliography) but is devoid of the cosmogonical significance it presented in the Naqada Period.
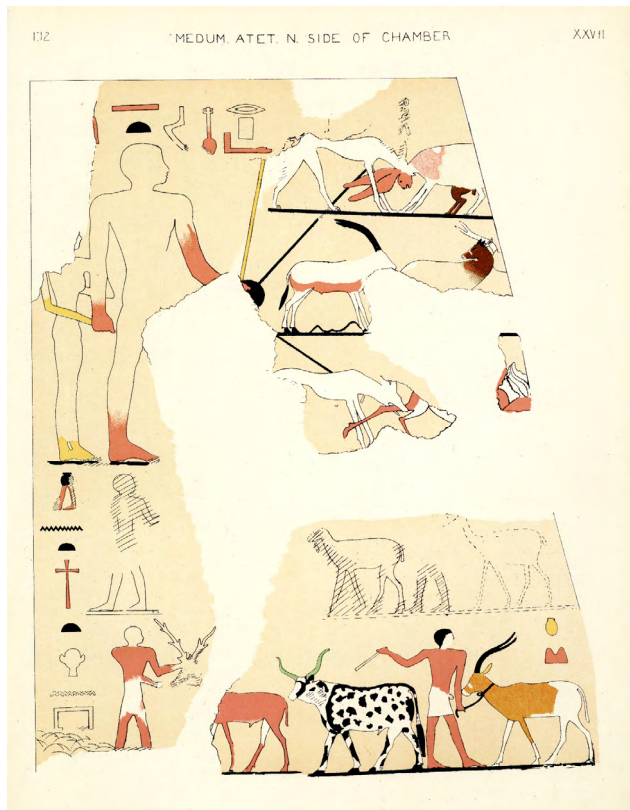
Fig. 9. Game hunting scene from the tomb of Atet at Meidum, Tomb 16b
(from Petrie 1892: Pl. XXVII).

19 Tomb 6, Cairo Temp. No. 19.11.24.3G.

The representations of the Early Dynastic and the Old Kingdom also differ in their employment of metonymy. (Auto)biography and portraiture have been identified as the two principle and most prolific forms of self-thematisation of the Old Kingdom creative faculty (Assmann 1996). The presence of the large-scale representation of the tomb owner makes the hunting scenes of the Old Kingdom an exemplification of a pseudo «moral perspective» (Laboury 1998: 140) rather than the representation of the whole cosmos and of the battles for its preservation from chaos. The difference is subtle. Among the many scenes of «daily life», dogs become attributes (Schulz 2006: 318) rather than metonymic substitutes of the élite way of living and are now indicated by their name proper, which can be, exceptionally for an animal, even be theophoric (Fischer 1977, with previous bibliography).

Bibliography

Assmann J. 1996, *Preservation and presentation of self in ancient Egyptian portraiture*, in P. Der Manuelian (ed.), *Studies in honor of William Kelly Simpson*, Boston (MA), pp. 55-81.

Baines J. 1993, *Symbolic roles of canine figures on early monuments*, in «Archéo-Nil» 3, pp. 57-74.

Bard K.A. 2017, *Political economies of Predynastic Egypt and the formation of the early state*, in «Journal of Archaeological Research» 25.1, pp. 1-36.

Donadoni S. 1957, *Un disco di Hemaka*, in Anonimo (a cura di), *Studi in onore di Matteo Marangoni, Pisa 1957*, Firenze, pp. 101-103.

Dreyer G. 2011, *Tomb U-J: A royal burial of Dynasty 0 at Abydos*, in E. Teeter (ed.), *Before the pyramids: The origins of Egyptian civilization*, Chicago, pp. 127-136.

Emery W.B. 1936, *The tomb of Hemaka*, Excavations at Saqqara, Cairo.

Engel E.-M. 2008, *The royal tombs at Umm el-Qa'ab*, in «Archéo-Nil» 18, pp. 30-41.

Firth C.M., Quibell J.E. 1935, *The Step Pyramid*, Excavations at Saqqara, Cairo.

Fischer H.G. 1977, *More ancient Egyptian names of dogs and other animals*, in «Metropolitan Museum Journal» 12, pp. 173-178.

Godron G. 1990, *Études sur l'Horus Den et quelques problèmes de l'Égypte archaïque*, Cahiers d'Orientalisme 19, Genève.

Henein N. 2001, *Du disque de Hemaka au filet hexagonal du lac Manzala: un exemple de pérennité des techniques de chasse antiques*, in «Bulletin de l'Institut Français d'Archéologie Orientale» 101, pp. 237-248.

Hendrickx S. 1996, *The relative chronology of the Naqada culture: Problems and possibilities*, in J. Spencer (ed.), *Aspects of early Egypt*, London, pp. 36-69.

Hendrickx S. 1999, *La chronologie de la préhistoire tardive et des débuts de l'histoire de l'Égypte*, in «Archéo-Nil» 9, pp. 13-81.

Hendrickx S. 2008, *Les grands mastabas de la Ière dynastie à Saqqara*, in «Archéo-Nil» 18, pp. 60-88.

Hendrickx S. 2010, *L'iconographie de la chasse dans le contexte social prédynastique*, in «Archéo-Nil» 20, pp. 106-133.

Hendrickx S., Eyckerman M. 2012, *Visual representation and state development in Egypt*, in «Archéo-Nil» 22, pp. 23-72.

Kahl J. 2001, *Hieroglyphic writing during the fourth millennium BC: an analysis of systems*, in «Archéo-Nil» 11, pp. 101-134.

Kahl J. 2002-2004, *Frühägyptisches Wörterbuch*, Wiesbaden.

Laboury D. 1998, *Fonction et signification de l'image égyptienne*, in «Bulletin de la classe des beaux-arts» 6th series, 9.7-12, pp. 131-48.

Laboury D. 2017, *Tradition and creativity: toward a study of intericonicity in ancient Egyptian art*, in T. Gillen (ed.), *(Re)productive traditions in ancient Egypt*, Proceedings of the conference held at the University of Liège, 6th-8th February 2013, Liège, pp. 229-258.

Linseele V., Van Neer W. 2009, *Exploitation of desert and other wild game in ancient Egypt: The archaeozoological evidence from the Nile Valley*, in H. Riemer, F. Förster, M. Herb, N. Pöllath (eds), *Desert animals in the eastern Sahara: status, economic significance, and cultural reflection in antiquity*, Proceedings of an interdisciplinary ACACIA workshop held at the University of Cologne, December 14-15, 2007, Cologne, pp. 47-78.

Müller V. 2012, *Do seal impressions prove a change in the administration during the reign of King Den?*, in I. Regulski, K. Duistermaat, P. Verkinderen (eds), *Seals and sealings practices in the Near East. Developments in Administration and Magic from Prehistory to the Islamic Period*, Proceedings of an International Workshop at the Netherlands-Flemish Institute in Cairo on December 2-3, 2009, Leuven - Paris - Walpole (MA), pp. 17-32.

Petrie W.M.F. 1892, *Medum*, London.

Petrie W.M.F. 1900, *The royal tombs of the First Dynasty. Part I*, Memoir of the Egypt Exploration Fund 18, London.

Piacentini P. 2002, *Les scribes dans la société égyptienne de l'Ancien Empire, I, Les premières dynasties, les nécropoles memphites*, Études et Mémoires d'Égyptologie 5, Paris.

Piccione P.A. 1990, *Mehen, mysteries, and resurrection from the coiled serpent*, in «Journal of the American Research Center in Egypt» 27, pp. 43-52.

Quibell J.E. 1913, *Excavations at Saqqara (1911-12): The tomb of Hesy*, Excavations at Saqqara, Cairo.

Quibell J.E. 1923, *Excavations at Saqqara (1912-1914): Archaic mastabas*, Excavations at Saqqara, Cairo.

REISNER G.A. 1931, *Mycerinus: The temples of the third pyramid at Giza*, Cambridge (MA).

REISNER G.A. 1936, *The development of the Egyptian tomb down to the accession of Cheops*, Cambridge (MA) - London.

SCHULZ R. 2006, *Dog missing his master: Reflections on an Old Kingdom tomb relief in the Walters Art Museum, Baltimore*, in M. Bárta (ed.), *The Old Kingdom art and archaeology*, Proceedings of the conference held in Prague, May 31 - June 4, 2004, Prague, pp. 315-324.

STEVENSON A. 2016, *The Egyptian Predynastic and state formation*, in «Journal of Archaeological Research» 24.4, pp. 421-468.

STRANDBERG Ås. 2009, *The Gazelle in ancient Egyptian art: Image and meaning*, Uppsala Studies in Egyptology, 6, Uppsala.

TALLET P., LAISNEY D. 2012, *Iry-Hor et Narmer au Sud-Sinaï (Ouadi 'Ameyra): un complément à la chronologie des expéditions minières égyptiennes*, in «Bulletin de l'Institut Français d'Archéologie Orientale» 112, pp. 381-398.

TEFNIN R. 1979, *Image et histoire: réflexions sur l'usage documentaire de l'image égyptienne*, in «Chronique d'Égypte» 54.108, pp. 218-244.

TEFNIN R. 1993, *L'image et son cadre: réflexions sur la structure du champ figuratif en Égypte prédynastique*, in «Archéo-Nil» 3, pp. 7-22.

WENGROW D. 2008, *Limits of decipherment: object biographies and the invention of writing*, in B. Midant-Reynes, Y. Tristant (eds), *Egypt at its origins 2*, Proceedings of the international conference "Origin of the State. Predynastic and Early Dynastic Egypt", Toulouse (France), 5th-8th September 2005, Leuven, pp. 1021-1032.

WILKINSON T.A.H. 1999, *Early dynastic Egypt*, London - New York.