# HELIOPOLIS AND THE SOLAR CULT IN THE THIRD MILLENNIUM BC

Massimiliano Nuzzolo and Jaromír Krejčí\*

Abstract: The article reassesses and re-discusses the available archaeological and textual evidence of the city of Heliopolis, in the attempt to clarify its role in the historical evolution of the solar cult and religion in third millennium BC Old Kingdom Egypt. By connecting archaeological evidence with landscape phenomenology as well as private sources with royal texts and decorative material, the paper emphasises how certain Egyptological assumptions, usually taken for granted, are far from being proven. It eventually shows that the key of the discussion has to be searched for in the study of the relationship between Atum and Re.

Keywords: Heliopolos, solar cult, third millennium BC, Old Kingdom, Egyptian religion, Atum, Ra.

#### I. Introduction

One of the most widespread assumptions in Egyptology is the importance of Heliopolis as the main centre of the solar cult throughout Egyptian history. The pivotal role of the city in this regard, ever since the early Old Kingdom, is usually based on the discovery of fragments of a *naos* inscribed with the name of Netjerykhet, found by Ernesto Schiaparelli in Tell el-Hisn.<sup>2</sup>

Starting from the 1980s, criticism to these assumptions was put forward by some scholars. W. Helck was probably the first who noticed that the connection of Ra with Heliopolis is apparently not supported by any primary evidence prior to the

late Old Kingdom. It is, in fact, at the turn between the Fifth and the Sixth Dynasty that the association of Ra and Heliopolis is made explicit, either textually in the corpus of the Pyramid Texts from Unas's reign, or archaeologically with the construction of a shrine and an obelisk by Teti.3 Helck, later followed by D. Raue and S. Morenz, also pointed out that throughout the Old Kingdom, the site of Heliopolis appears to be associated more with Atum and the Ennead rather than the god Ra.4 Helck's arguments were also recently taken over by Voss and Shalomi-Hen. Particularly the latter emphasises the criticism on the connection of Heliopolis with Ra based on the analysis of the titles of priests.<sup>5</sup> She notes that before the Sixth Dynasty the so-called title of "High Priest of Ra" (lit. "Greatest of the Seers of Heliopolis," i.e. wr m3 Twnw)<sup>6</sup> does not seem to be a real priestly title but rather an administrative one.7

The solution to these questions is also of the utmost importance for a better understanding of the royal (mortuary) cult and its religious contents, since the influence of Heliopolis on the royal cult as well as on the location and architectural layout of the royal monuments has always been taken for granted.

The aim of this paper is thus to re-analyse all the available archaeological, textual and historical data on Heliopolis during the Old Kingdom, with the attempt to clarify some aspects of the evolution of the solar cult in third millennium BC Egypt.

Both authors: Charles University, Prague, Czech Institute of Egyptology. This article is the result of the combined work of the two authors who have dealth with, and written, the part concerning the archaeological data (Jaromír Krejčí) and the textual evidences (Massimiliano Nuzzolo). Introduction and conclusions have been drawn together by both authors. The authors wish to thank to the direction and the staff of the State Archive of Turin for securing permission to check personally the archival material connected with the Turin Egyptian museum excavation in Heliopolis in 1903–1906 led by Ernesto Schiaparelli. The authors also wish to express their gratitude to the Direction of the Egyptian Museum of Turin for providing them with very useful information in concern with the above excavations.

Last but not at least, the authors would like to thank Dr. Andrzej Ćwiek for reading of the article and for all his precious remarks and criticism.

<sup>&</sup>lt;sup>1</sup> Quirke 2001, 7–8. See also Raue 1999, 8, fig. 1.

<sup>&</sup>lt;sup>2</sup> Turin Museum cat no. S. 2671: see Weill 1911, 9–26.

<sup>&</sup>lt;sup>3</sup> Helck 1984, 67–70; Habachi 1988, 42, fig. 17.

<sup>&</sup>lt;sup>4</sup> Helck 1991, 164; Raue 1999, 81–82; Morenz 2002, 142.

<sup>&</sup>lt;sup>5</sup> Voss 2004, 165–169; Shalomi-Hen 2015, 463–464.

<sup>&</sup>lt;sup>6</sup> Jones 2000, 386–387.

<sup>&</sup>lt;sup>7</sup> This was already noted by Helck 1954, 91–98. In this book, however, he did not completely deconstruct the importance of Heliopolis as a centre of the sun cult that he instead criticised openly in 1984, in the article mentioned above (Helck 1984, 67–70).

## II. Archaeological sources

Heliopolis predominantly gained its economic and cultic role thanks to its position on a cross-road of important east-west trade routes leading from Asia and Sinai to the centre of the Sahara as well as on its being at the intersection of the north-south Nile route connecting the Delta and Upper Egypt. Despite its importance in Egyptian history, our archaeological knowledge of the ancient city of Heliopolis is still rather scarce. The main reason is that remnants of this once imposing city are now located under several metres of Nile mud layers and man-made sediments, which have accumulated throughout the last five millennia. In addition to the soil accumulations, the high level of the underground water as well as the ever intensifying (especially after the foundation of the Heliopolis suburb at the beginning of the 20th century) urbanisation of the districts of Ain Shams, el-Mataryia and Tell el-Hisn make archaeological research of ancient Heliopolis very difficult today. Moreover, the situation regarding the archaeological data from the earliest periods of the Egyptian history was already blurred in antiquity when, as individual finds dated to very different periods show (see discussion later in this article), a repeated destruction and reconstruction of the monuments, with an intense re-use of the building material came about.

# II. 1. The exploration of the main topographical features of Heliopolis

The investigation of the area of Heliopolis began with the French Army Expedition to Egypt (1798– 1801). The scientific part of this expedition force produced the documentation of many sites and monuments in Egypt and Sudan, including a map of Heliopolis.8 Another important account is represented by the work of a Prussian expedition led by K.R. Lepsius, which, however, did not produce a map of the site. Nevertheless, the most important survey was undertaken by the Armenian-Egyptian engineer Joseph Hekekyan. Commissioned by the Scottish entrepreneur Leonard Horner, Hekekyan examined the geological development of the alluvial sediments in Memphis and Heliopolis. Here,

After some minor archaeological work carried out at the site during the second half of the 19th century, Ernesto Schiaparelli conducted two archaeological seasons in 1903 and 1904. Schiaparelli focused on the area of a massive mudbrick temenos construction which represents, beside a huge double mudbrick enclosure wall, a major topographical and archaeological feature in the area of ancient Heliopolis (Fig. 1). During his work, he also discovered fragments of the relief decoration coming from a naos ascribed to Netjerykhet, which is considered to be the main element for the dating of the sun cult to the early Old Kingdom  $(Fig. 3).^{12}$ 

However, it was finally W.M. Flinders Petrie who made a reliable archaeological map of the site following his work in the terrain in 1912.<sup>13</sup> His work was neither systematic nor extensive, however. Petrie also recognised the presence of the temenos, which he identified as a structure built by the Hyksos and used as a fortress, and included it in his map of the site (Fig. 1).<sup>14</sup>

Another important piece of work regarding the topography of the site is represented by an article of Herbert Ricke, who mainly dealt with a determinative feature of the site - the extensive temenos mudbrick enclosure or revetment,15 which might have created a platform for the main solar Heliopolitan temple (see also the discussion concerning the dating of this construction later in this article). Using the attestation in Pyramid Texts: "O Atum-Beetle! You became high, as the hill; you rose up

he carried out a short geological survey in 1851.<sup>10</sup> The outcome of his work is a series of plans and handwritten notes which constitute a convolute of manuscripts housed in the British Library and the British Museum in London. In the moment of their creation, his approach to the method of survey was ground-breaking and revolutionary as well as usable for the archaeological and historical reasoning even in our times. Hekekyan's papers, beside other important data, such as the stratigraphy of the site, also documented morphological features in the terrain as well as the height of alluvial and manbuilt accumulations, which varied from 0.9 to 6.3 m at the time of his work on the site.<sup>11</sup>

GILLISPIE and DEWACHTER 1987, fig. referred as Vol. V, pl. 26.

LEPSIUS 1849, 5-6.

Jeffreys 1999.

JEFFREYS 1999, 165, figs. 3-5, 7; see Dobrowolski and Dobrowolska, 1999.

WEILL 1911, 9-26.

Mackay, Wainwright and Petrie 1915, 1–7, and pl. 1.

Mackay, Wainwright and Petrie 1915, pl. I.

**R**ІСКЕ 1935а.

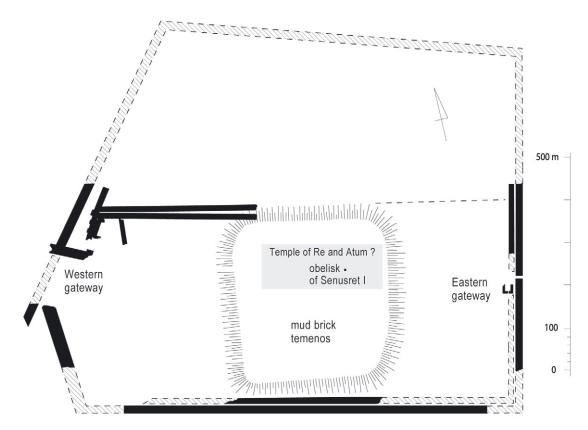


Fig. 1 The plan of the temple precinct in Heliopolis, with indications of the main archaeological features, including the mud brick temenos (Jolana Malátková and Luděk Wellner, after Arnold 1992, figure on p. 205).

as the benben-stone in the Benben Enclosure in Heliopolis. ...",16 he connected this temenos construction with the notion of "High Sand of Heliopolis" attested in Piankhi's stela.<sup>17</sup> However, the long timespan that elapsed between the dating of the Pyramid Text and the Late Period construction (some 1600 years, see later in this article) should prevent us from taking this connection for granted.

After Ricke, Heliopolis did not undergo any indepth analysis until the 1990s, when the first monograph on the topography and toponyms of the area of Heliopolis was carried out by Dietrich Raue.<sup>18</sup> Further investigations led by Raue and his Egyptian colleagues during the last 20 years have then increased our knowledge of the site by also significantly contributing to the rescue of important archaeological data endangered by the overgrowing urbanisation of the site.<sup>19</sup> A close cooperation with Morgan De Dapper and Tomasz Herbich also brought important results regarding the topic of this article.<sup>20</sup> They undertook test drillings and a geophysical survey inside the temenos as well as in the surrounding area and attested pottery dated to the Buto-Maadi culture some 300 to 400 m to the west of the obelisk of Senusret I. This occupation has been detected on top of a sandy levee<sup>21</sup> of the late-Pleistocene date. Other drillings were done very close to the obelisk open air museum, revealing that this sandy island continues as far as there. The investigators came to the conclusion that the island was c. 5.5 m high and thus, for the first time, attested the existence of an elevated place that had been occupied already in the Prehistoric period. The geophysical survey undertaken in the area very close to the obelisk also proved the existence of a limestone construction in the depth of only 2.20 m. Unfortunately, information about the dating of this feature cannot be ascertained without an archaeological excavation. The same goes for the area further to the west, where a stone structure located in a depth of 3-4m was detected.22

PT 600 (§ 1652): translation after Allen 2005, 269.

<sup>17</sup> RICKE 1935a, 110.

RAUE 1999.

RAUE and ASHMAWY 2015.

DE DAPPER and HERBICH 2015.

For definition of the term levee see Butzer 1976, 15-18.

DE DAPPER and HERBICH 2015, 13.

Another important topographical feature of Heliopolis was represented by a canal which connected the city with the Nile. According to Susanne Bickel, the canal passed through the eastern edge of the Nile Delta, approximately in the same position as the modern canal Khalig (which dried up at the very end of the 19<sup>th</sup> century) – along Gebel el-Akhmar,<sup>23</sup> passing by Heliopolis and then flowing into the Pelusiac branch of the river.<sup>24</sup> The canal should have enabled a quick connection with the Memphite area.<sup>25</sup>

In conclusion, the only still visible feature of a solar temple which might have existed at this site is represented by a 20.41 m high obelisk of Senusret I. Its position inside the mudbrick temenos wall is widely regarded as the place where the solar temple stood in antiquity (Fig. 2). This supposition, however, cannot be proved by the archaeological data and thus cannot be taken for granted.<sup>26</sup> The obelisk was erected (in a pair and alongside the construction of Ra-Harakhty's temple) on the occasion of Senusret I's Sed festival. The modern terrain level exceeded the preserved base of the obelisk for about 3.3 m. Dieter Arnold thus suggested that the temple of Senusret I was embedded into an already existing precinct or kom,<sup>27</sup> although one cannot exclude the possibility that the accumulation of man-built layers attested by Hekekyan and later scholars was due to the construction of Senusret's temple itself.

#### II.2. The archaeological exploration of the site

A very early occupation in the broader area of Heliopolis has been attested by a cemetery, whose publication was prepared by Fernando Debono and Étienne Drioton and which was located in the area north-west of Gebel el Ahmar.<sup>28</sup> Altogether, 63 graves dating to the Naqada II period were investi-

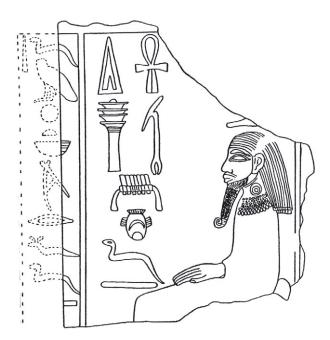


Fig. 2 One of the reliefs fragments of the naos of Netjerykhet from Heliopolis (Torino Museum cat. no. S-2671/20; after SMITH 1946, p. 135, fig. 50).

gated there. The oval and circular graves contained standard burial equipment<sup>29</sup> and their variable dimensions apparently show the social differences of the individuals buried here. The same goes for those graves unearthed in this cemetery which were reinforced with reed matting or wood. Burials of domesticated animals, mainly goats and dogs were also found in the area,<sup>30</sup> enabling the archaeologists to conclude that these animals played an important role, perhaps religious or economic, for the human communities which inhabited this area. Although the settlement belonging to this cemetery was not identified, Debono suggested that it might have been located some 500 m to the north-west of the cemetery.<sup>31</sup>

Nowadays, the quartzite quarries at Gebel el-Ahmar, laying some 8.40km to the south-east of Heliopolis (Klemm and Klemm 2010, 216–219, map of the quarries on fig. 332) represent a rather hardly recognisable outcrop of orangered quartzite full of recent buildings with many places where the rock is almost fully exploited or covered by modern supporting masonry. The association of quartzite (metamorphic sandstone) with the solar cult and the sun itself (Aufrère 1999) was based on the stone's colouring which can vary from golden, through yellow, orange, to red and brown which is similar to the shades of sky during sunrise or sunset. This relation came to the existence also due to the relative proximity of the quartzite quarries to Heliopolis. The use of this stone in the royal architecture to a larger extent is detectable in connection with the ris-

ing role of the solar religion in the monumental royal architecture – an early example represents the sun temple of Userkaf. One can observe it also in mortuary monuments built by the Abusir 'solar' kings and it can be again encountered to a larger extent in the Sixth Dynasty (e.g. in the mortuary temple of Pepi I in South Saqqara).

<sup>&</sup>lt;sup>24</sup> RAUE 1999, pls. 1–2.

<sup>&</sup>lt;sup>25</sup> Bickel 2010, 26.

<sup>&</sup>lt;sup>26</sup> RAUE 1999, 83; NUZZOLO 2015b, 293.

<sup>&</sup>lt;sup>27</sup> Arnold 1992, 206.

<sup>&</sup>lt;sup>28</sup> Debono and Mortensen 1988, 7.

DEBONO and MORTENSEN 1988, 38.

DEBONO and MORTENSEN 1988, 39.

DEBONO and MORTENSEN 1988, 50.

Unfortunately, the complex situation with limited accessibility of the appropriate archaeological layers does not allow to make a clear picture of what the development of the occupation of the Heliopolitan area at the end of the Predynastic and the beginning of the Early Dynastic period looked like. In this respect, the above-mentioned rescue works by Raue, Ashmawy, De Dapper and Herbich show that as early as this period some activities were taking place directly in the supposed area of the later solar temple. Based on our current knowledge, one can hypothesise that in this period the gravity centre of the city's development had already shifted from the area of Debono's cemetery to the north, towards the current Kom el-Hisn.

As has been already mentioned, the presence of the solar cult and the existence of a cultic construction connected to the sun god in Heliopolis already at the beginning of the Third Dynasty has been the subject of a long scientific discussion. The main argumentation is based on the discovery of limestone relief fragments originating from a naos (or chapel) ascribed to Netjerykhet.32 The discovery was made by Ernesto Schiaparelli during his research campaign in Heliopolis in the year 1903 and was published by Raymond Weill some years later.<sup>33</sup> These fragments – altogether 39 pieces – were found in the fill of a massive mudbrick temenos construction (see above) and are currently stored in the Egyptian Museum in Turin (under cat. no. S-2671). It was William Stevenson Smith who managed to partially join the fragments together.<sup>34</sup> However, based on the accounts of Schiaparelli, the find conditions of these fragments are not clear,35 and this has generated a long discussion which so far has not found a real consensus among scholars. The most important accounts discussing these reliefs are to be found in works of H. RICKE (1935b), W.S. SMITH (1946, 132–137), S. Morenz (2002) and R. Bussmann (2010, 101–102).

The relief fragments seem to deal with several topics, first and foremost Netjerykhet's sed feast. The king, whose Horus name is written on one of the fragments, is represented seated on the throne

with three royal women at his feet. The accompanying names identify queen Hetephernebty with her title m3(3t)-Hrw (see part III of this article) and Inetkaes, who was probably Netjerykhet's daughter. The name of the third female figure is, unfortunately, largely damaged and no longer readable.<sup>36</sup>

Other fragments encompass scenes which are more important for our discussion, among them especially those representing the gods Geb and Seth.<sup>37</sup> The attestation of the god Geb is of particular importance since it has been used as the main argument for supporting the hypothesis that the relief fragments document an early worship of the Heliopolitan Ennead,38 which is, in principle, of solar nature (Fig. 2). As was the case with other representations of gods in this early period of the Egyptian history, the gods Geb and Seth are not depicted iconographically in a specific way, but in a more generic way typical for all male deities, namely as sitting men with a long false beard. An important iconographic detail might be the presence of a circular sign (a solar disk?) above the necklace held by one of the divine figures (Fig. 2).<sup>39</sup> This design (circular sign + necklace) resembles the one engraved on the base of the famous statue of Netjerykhet, found in the serdab of his pyramid complex at Saqqara. 40 Here, behind the Nswt-bity and Nbty names of the king, we find what was probably the first attestation of the Golden Horus name, although written in a quite anomalous way. The same design can be also found on one of the fragments of Netjerykhet's naos (cat. no. S-2671/17).41

Mostly based on the above elements, Ludwig D. Morenz argued that the solar deity was actually referred to on these fragments. In fact, above the divine figure, which is usually attributed to Geb, only a part of the god's name, the hieroglyphic sign for b, survives. Morenz thus suggested that it was the rest of the divine name Nbw – "the Golden one" - interpreted as a sort of epithet, or a "taboo name", of the solar deity. The identity of this deity as Atum or Ra in Morenz's analysis is not really relevant, for the two gods, according to

SMITH 1945, 134; ARNOLD 1992, 206.

Weill 1911, 9-26.

Sмітн 1946, 132–137.

<sup>35</sup> See SBRIGLIO and UGLIANO 2014, 284-285.

<sup>36</sup> See Ziegler 1999a, 153-154.

See Sмітн 1946, 134.

If the fragments really depict the Heliopolitan Ennead, it would have been, according to Hermann Kees, its oldest depiction: see KEES 1961, 155.

Morenz 2002, 143-144.

Cairo Museum, cat. no. JE 49158: see SALEH and SOUROUZ-IAN 1986, no. 16.

See Smith 1946, 133, fig. 48.

him, were already associated ever since the Early Dynastic period.<sup>42</sup> The incompleteness of the surviving decoration and accompanying texts represents, however, the most serious problem in accepting Morenz's interpretation as it stands, notwithstanding the fact that in another fragment there is a very similar image of deity clearly identified as "Seth from Ombos (nwbty)", 43 which might also be the case also of the fragment discussed here. Therefore, the relationship between the figures depicted on the naos and the solar god Ra remains quite questionable and, in any case, very blurred.

An important notion in the discussion of the fragments of Netjerykhet's *naos* is also to be given to their dimensions and find conditions. The dimensions of the relief fragments are rather small and clearly show that they do not originate from a chapel or a temple, but more probably from a smaller type of monument, such as a small naos, box, or reliquary.<sup>44</sup> Therefore, it is possible that these relief fragments might have been brought to Heliopolis from another place and might not have originated at Kom el-Hisn.45

As already mentioned, the finding conditions of the relief fragments are problematic, since they are not well documented in Schiaparell's plans and field notes. Based on those, it seems that the fragments were found in the fill of the mudbrick temenos construction, which was described as a casemate building with rounded corners and slightly curved sides. The structure was also characterised by a complex inner brick masonry with a broad central nave and four narrower side aisles.<sup>46</sup> A few years later, however, Petrie expressed criti-

cism on Schiaparelli's reconstruction, since he had not been able to find any trace of the above described nave-construction during his survey of the area. Petrie thus came to the conclusion that these 'spaces' or 'compartments' were created artificially due to the way how Schiaparelli's workers were excavating the compacted and ruined mudbrick masonry.<sup>47</sup> This observation thus imposes important questions on the character of this mudbrick construction which, however, cannot be answered more thoroughly without any new archaeological work.

In the fill of the temenos wall, Petrie managed to find an object which can plausibly be dated to the Old Kingdom, namely a rather large part of a fine relief of a king sitting on a throne.<sup>48</sup> Unfortunately, he did not pay much attention to this finding and he only published a short description and a photograph, dating the object to the Fifth Dynasty. This dating cannot be assured now, as the relief fragment is not accessible anymore and the published photograph of the relief fragment is blurred.<sup>49</sup>

Petrie also published a section through this massive revetment,50 which clearly shows that its core was made up of sand and gravel layers overbuilt by massive mudbrick masonry. Its inner face drops down sharply, and the inside of the temenos and the outer wall seems to be faded. Petrie's section shows that the masonry was part of a huge construction, at least 6 m high and 40 m wide at its base.

The dating of this construction is a question which remains ambiguous, given the diverse typology and dating of the objects found in the fill of this enclosure.<sup>51</sup> The discussion of this problem entails opinions which vary significantly: Ricke

MORENZ 2002, 142-148, 153-154, figs. 6-9.

See Smith 1946, 136, fig. 51.

See, e.g., Morenz 2002, 152. What was the content of this naos is not clear and the solution of this question is beyond the scope of the present article. It was W. Helck who suggested that it was represented rather by a royal statue rather than by a cult object or statue associated with one of the gods (Helck 1991, 164, n. 1).

Quirke also came to a similar conclusion: "It is even conceivable that the Netjerykhet shrine had been moved in antiquity from some other site, such as the cult complex at his burial place. Nevertheless, it is tempting to link the find of his chapel at the city of the sun with the shape chosen for the superstructure over his tomb at Saqqara, opening the way to the final smooth-sided form of the classic Old Kingdom pyramids." See Quirke 2001, 84.

See also Raue 1999, 82; Sbriglio and Ugliano 2015, 286-

MACKAY, WAINWRIGHT and PETRIE 1915, 4.

Mackay, Wainwright and Petrie 1915, 4, pl. III.

Another limestone fragment with both sides decorated by reliefs depicting a royal figure and part of a nswt-bitj title, which was attributed to Heliopolis (Porter and Moss IV, 64), cannot be taken into account. The main reason is that information on its place of origin is completely missing. The same goes for its dating, which cannot be attributed, based on the available information, to an early period of the ancient Egyptian history (CAPART 1927, 5-6, pl. II). BORCHARDT (1928, 43), who insisted that this piece represents an artisan's model, was also unable to add information in regarding the piece's origin.

Mackay, Wainwright and Petrie 1915, pl. 2.

It is beyond the scope of this article to present all finds which were used in the discussion concerning the date of the temenos wall.

dates it back to the Early Dynastic period,<sup>52</sup> whereas Quirke prefers a date in the early Twelfth Dynasty,<sup>53</sup> and Petrie assigns it to the Hyksos times.54 Baud suggested a Saite date for the construction55 and Raue also dates it back to later epochs, from the late Saite period to even the Thirtieth Dynasty.<sup>56</sup> Without obtaining new data through a well-documented archaeological excavation at the site, the dating of the *temenos* remains a matter of a debate. Nevertheless, in the present state of our knowledge, the post quem criterion does not permit to date its construction before the Saite period. The same uncertainty remains for the relief fragments of Netjerykhet's naos which, therefore, cannot be used as a document for the existence of the solar cult in Heliopolis at the beginning of the Third Dynasty.

In the frame of the archaeological finds, the situation changes with the advanced 3<sup>rd</sup> millennium BC. The oldest object which directly documents the existence of the solar cult in Heliopolis is a fragment of a quartzite obelisk inscribed with the full royal protocol of King Teti.57 Together with this obelisk fragment, a door lintel with Teti's name was found by the Egyptian Antiquities Service.<sup>58</sup> In Labib Habachi's opinion, the lintel was part of a chapel, in front of which the king's obelisk (in a pair with another, undiscovered obelisk) might have stood. This may, together with the rather large dimensions of the fragment of Teti's obelisk, prove that the obelisk was originally placed at its present place and was not transferred from a distant site (which might have been the case, on the contrary, with the fragments of Netjerykhet's *naos*).

Beside this obelisk fragment, there is also a textual account on the transport of two obelisks (for a king) from Nubia (Wawat) to Heliopolis in the autobiography of the late-Sixth Dynasty official Sabni, documented on the wall of his tomb at Qubbet el-Hawa.<sup>59</sup> Unfortunately, these two obelisks have not still been attested archaeologically. The place where they were once erected is, as is the case with Teti's obelisk and supposed chapel, thus not known.

In addition to Teti's obelisk, four obelisks ascribed to persons of non-royal origin were also discovered during the archaeological work along the eastern part of the temenos – two obelisks were ascribed to Sheshi, one obelisk to Nehor, and another to Tjetji.60 All four obelisks have been dated to the Sixth Dynasty.61 This archaeological excavation, made by G. Daressy and M. Barsanti in 1916, focused on the revealing of four tombs of the greatest of the sears of Heliopolis (see also Part III). Mudbrick tombs belonging to Meru, Sebeky, Sebeky By and Khuenhor were built in two parallel rows along the eastern outer face of the temenos construction62 and all of them had a similar layout.<sup>63</sup> Side walls of these tombs, dated to the reign of Pepi I, bore a rather large amount of texts including titles of the deceased, offering formulae and lists carved on limestone blocks.64

At the beginning of 1990s, the Egyptian Antiquities Organisation conducted archaeological work in the area to the north-east of the obelisk of Senusret I, during which a lower part of the mudbrick temenos was unearthed with a limestone wall running along it. Some construction blocks built in this wall represented re-used material from mastaba tombs, which were destroyed and whose original location is unknown. Among these blocks, there were three which can be dated to the period within the scope of this article:65 an architrave, which can be dated to the late Fifth or the Sixth Dynasty on account of its short hieroglyphic text, and a decorated, double-sided fragment originating from the mastaba of Sebekuseri, who was, among other functions, also hrp-h. The dating of the latter two pieces is not a simple task, as hieroglyphic signs inside a royal cartouche which was documented on one of the fragments were erased. However, it seems that the name of the Tenth Dynasty king Merikare can be reconstructed. Following other features, the tomb from which the blocks came from can be dated to the period between the end of the Sixth Dynasty and beginning of the Middle Kingdom.<sup>66</sup>

RICKE 1935a, 107-111.

Quirke 2001, 85-88.

MACKAY, WAINWRIGHT and PETRIE 1915, 4.

Baud 2007, 200.

<sup>56</sup> RAUE 1999, 81-83.

<sup>57</sup> Martin 1977, 42.

Навасні 1988, 42-43.

EDEL 2008, 816-817, pl. LV.

Daressy 1916, 211-212.

PORTER and Moss 1934, 62.

Daressy 1916, 193-211; Barsanti 1916, 213-220.

In the northern part of the mudbrick tombs, there were courtyards giving access to these burial chambers with sarcophagi.

Daressy 1916, 195-211.

GELIL, SAADANI and RAUE 1996, 143-152.

GELIL, SAADANI and RAUE 1996, 151-152.

There are also other finds dated to the Old Kingdom whose Heliopolitan origin has been argued but is still far from proven. According to Dieter Arnold, for example, 17 palm columns, which were re-used in medieval buildings in Cairo, might have been of Heliopolitan provenance.<sup>67</sup> Having in mind that it is impossible to specify their dating solely on the basis of the typology and size of the columns, the supposition that the columns would imply the existence of a monumental stone sacral construction in Heliopolis remains hypothetical.

Additionally, several objects which plausibly document the royal presence during the late Old Kingdom were unearthed in Matariya and its vicinity. One of them is a lower part of a travertine offering table ascribed to Pepi I.<sup>68</sup> During the archaeological work done in the area lying to the north of the site, clay tablets with the cartouche of Pepi I were found as well and it cannot be excluded that they might have come from this site.<sup>69</sup> Two reliefs were found in Bubastis, together with a basalt sphinx with the name of Pepi I.<sup>70</sup> The king is identified as "the son of Atum" on it. Based on this epithet, L. Morenz believes that it originated from Heliopolis.<sup>71</sup>

# II. 3. The visual connection between the pyramid fields in the Memphite necropolis and Heliopolis

The visual connection between the pyramid complexes (Giza and Abusir necropoleis) and Heliopolis, or more precisely the Heliopolitan solar temple, has often been taken into account as one of the main arguments concerning the importance of the solar cult in Heliopolis, its early Old Kingdom date and its influence on the sacred topography of the Memphite necropolis (fig. 3).

It was Hans Goedicke who first suggested an alignment of the Giza pyramids with the Heliopoli-

tan temple as the main cultic and topographical reference of the Fourth Dynasty royal ideology.<sup>72</sup> In his opinion, this alignment was important not only from Giza to Heliopolis, but also in the reverse direction.<sup>73</sup> Khufu's pyramid (which was the first to be built and, therefore, the focus of this alignment) can be seen as a monumental marker for the setting sun in opposition to the *benben* stone which marked the point of sunrise. The fact that the Giza pyramids were visible from Heliopolis is also documented by several 19<sup>th</sup> century "*vedute*" of the area of the Heliopolitan obelisk of Senusret I with the Giza pyramids in the background.

According to David Jeffreys and Miroslav Verner, the line of sight with the supposed main centre of the sun cult – the temple in Heliopolis – was decisive not only for the layout of the Giza necropolis but also in the case of Abusir.<sup>74</sup> Whereas the line visually connecting Giza and Heliopolis passed through the pyramids' south-east corners,<sup>75</sup> the Abusir pyramids (Sahure's, Neferirkare's and Raneferef's Unfinished Pyramid) were adjusted along their north-western corners.

As already noted in previous contributions by the present authors,<sup>76</sup> there are, however, several critical points which make this visual connection practically impossible, especially in the case of Abusir. While the alignment of the Giza pyramids with Heliopolis is possible and may not have been a pure matter of chance, the alignment of Heliopolis with Abusir is made impossible by reasons of morphological nature.

Firstly, an important obstacle is the curvature of the Earth which makes Abusir invisible from Heliopolis. In fact, the terrain of the supposed centre of the Heliopolitan temple (the area of the mudbrick *temenos* wall and the obelisk of Senusert I discussed above) is located at a depth of c. 69 m below the visible horizon calculated for the distance from Abusir to Heliopolis (29.7 km).<sup>77</sup>

<sup>67</sup> Arnold 1996, 43–44.

<sup>&</sup>lt;sup>68</sup> Von Bissing 1907, 114.

<sup>&</sup>lt;sup>69</sup> Brugsch 1883–1891, 1212.

<sup>&</sup>lt;sup>70</sup> Naville 1891, pl. 32C; Bussmann, 2010, 101.

<sup>&</sup>lt;sup>71</sup> Morenz 1999, 61–64.

<sup>&</sup>lt;sup>72</sup> GOEDICKE 1995, 46; GOEDICKE 2000, 403–404.

<sup>&</sup>lt;sup>73</sup> Goedicke, 1995, 39–40.

<sup>&</sup>lt;sup>74</sup> Jeffreys 1998, 63–71; Verner 2008, 43–57; Verner, Brůna 2011, 286–294.

In fact, only Khufu's and Khafra's south-east corners can be connected by one line, Menkaure's pyramid falls out of this line: Verner and Brůna 2011, 289, pl. 9.

<sup>&</sup>lt;sup>6</sup> Krejčí 2010, 21–24; Nuzzolo 2015b, 289–312; Krejčí 2016.

<sup>&</sup>lt;sup>77</sup> Brůna 2008, 66–67. Magli, by means of what he calls the "horizon formula" (Magli 2010, 62–63, fig. 4), calculated that the closest point from which the solar temple in Heliopolis could be seen was c. 21.8 km. Therefore, even if we consider that the Abusir pyramids, and especially the one of Neferirkare, were located some 25 m above the Nile alluvial plain, the visibility between Heliopolis and Abusir would have been impossible. Magli thus supposed that this distance might have been overcome by means of temporary rely stations placed on the Mokattam hill, but, as we will see below, this idea is not feasible.

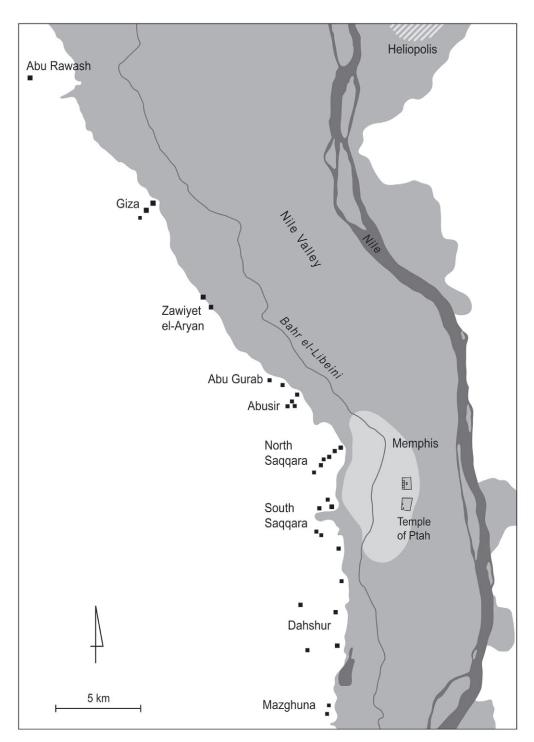


Fig. 3 Schematic map of the Memphite area and Heliopolis, with indications of the major archaeological sites and monuments of the eastern and western banks (Jolana Malátková).

Secondly, another important complication is represented by the existence of the rock cliff on which the medieval Citadel in Cairo was built and which is part of the Mokattam formation. It would have blocked the view from Heliopolis to Abusir,

because this formation intersects the above-mentioned ideal line connecting the two sites.<sup>78</sup> This also includes the area of the sun temples since none of the two currently preserved sanctuaries are in fact visible from Heliopolis and vice versa.<sup>79</sup> In

Krejčí 2010, 21–24.

See Nuzzolo 2015b, 292-296, and fig. 2. This also demonstrates that Quirke's theory of the sun temples as relay sta-

tions of the sun beams to the pyramids of Abusir in the absence of a direct visual connection between the two sites is untenable (Quirke 2001, 90).

order to justify the positioning of the first royal monument to be built in the Abusir necropolis, the sun temple of Userkaf, M. Verner<sup>80</sup> put forward a hypothesis which has to overcome this given geomorphological situation. In his opinion, the assessment of the direction towards Heliopolis might have been completed through measuring from a hill (98 m a.s.l.) placed to the south-west from the Abusir pyramids and by using an auxiliary measuring station on top of the Citadel promontory which would help to transfer the direction of the Abusir pyramids towards Heliopolis. Even if we accept this reconstruction, which seems, however, highly implausible, we should still ask why the sun temple of Userkaf was built in an area with such problematic conditions for the hypothetical visual connection with Heliopolis when there was enough space for its construction to the north of it.81

Thirdly, we do not know anything about the physical nature of the focal point of the solar cult in Heliopolis, i.e. whether it was a high obelisk, a sacred stone, or some kind of building. All the above-mentioned speculations on this visual alignment are based on the location of the obelisk of Senusret I, which is, however, much later than the period considered here and in any case cannot be taken into account to support the location of the solar temple of Heliopolis in the Old Kingdom.

Finally, we should also bear in mind that there is no written evidence directly connecting the pyramids on the western bank of the Nile with Heliopolis,82 a fact which should at least warn us from accepting similar speculations too freely. All theories about possible visual alignments of Heliopolis and the Memphite necropolis should thus be taken very cautiously, and, especially when it comes to Abusir, they definitely have to be discarded.

This does not mean that Heliopolis did not play an important role in the royal ideology of the Fifth Dynasty, but rather that the connection of Heliopolis and the royal monuments in the Memphite necropolis, both pyramids and sun temples, was probably more symbolic than visual.83

Relations between individual royal monuments built in the Memphite necropolis were also discussed in recent years,84 but it is out of the scope of the present paper to deal with them. Whatever the case, it is clear that the royal power used the sacred landscape for its own legitimisation, its interconnection with the divine power (and with the solar cult) and with ancestors' monuments. Heliopolis was probably also a part of these wider ideas but to which degree is not completely clear yet.

## III. Epigraphic and Textual Evidence

The epigraphic and textual sources are pivotal for our knowledge of the religious history of Heliopolis and its role in the overall development of the solar cult in the third millennium BC. In fact, whereas there is practically no element explicitly associating the city and the solar cult in the archaeological context before the late Old Kingdom, the textual sources provide us with quite a different picture, with several titles and an official royal document (Palermo Stone) clearly connected with Heliopolis throughout the Old Kingdom. Particular importance in all previous discussion on the sun cult and Heliopolis has been given to the recurrent title of "Greatest of the Seers of Heliopolis" (wr m3 Twnw), which is usually taken as the first reference to the office of "High Priest of Ra". However, when we analyse the main elements of this title (such as its chronology and association with other titles) as well as the mention of Heliopolis in the royal sources, including the later Pyramid Texts, which remain the main source of our knowledge in the royal context, the situation is not less cloudy than the one we grasped from the archaeological evidence. Given the importance of the above title and the fact that it is chronologically attested before the royal texts, we will start our analysis with it and the other private sources.

# III.1. Private sources

Seven titles are associated with Heliopolis at the Old Kingdom:

1. "Greatest of the Seers of Heliopolis" (wr m3 Twnw);85

Verner 2008, 50-52.

Reasons for this topographical location might be of various nature and it is not the object of the present article to deal with this topic. The morphological situation of the Giza and Abusir plateaus has been discussed by Krejčí (2010, 24). For another hypothesis, focused on the intervisibility among the Memphite funerary monuments, see Nuzzolo 2015b, 292-302.

ROMER 2007, 306, and n. 17.

Nuzzolo 2015b, 303-304.

Verner 2008, 43-57; Magli 2010, 70-71; Nuzzolo 2015b, 292-304; Bárta 2016, 60-65.

Jones 2000, 386-387 [1429].

- 2. "Chief of the Great Estate of pr-Iwnw/phr-Twnw" (hk3 hwt-\Gt pr-Twnw / phr-Twnw);86
- 3. "Elder of the ist-chamber of Heliopolis" (smsw istn Twnw);87
- 4. "Overseer of the Scribes of Heliopolis" (imy-r sšw Twnw);88
- 5. "Greatest of the Ten of Heliopolis" (wr 10 *Twnw*);89
- 6. "Scribe of Heliopolis" (sš Twnw);90
- 7. "Scribe of the Phyles and Troops of Heliopolis" (sš s3w tswt Twnw).91

None of these have a clear reference to the name of any deities and, except for the first one, only title no. 5 may apparently refer to a group of deities. The second92 and third title, very rarely documented, were certainly administrative offices,93 while the last four appeared only during the Sixth Dynasty and may thus represent a change, and an increase, in the religious role of Heliopolis during the late Old Kingdom, which is also reflected by the archaeological evidence (see above).<sup>94</sup>

The core of the issue of this paper, namely the beginning of the solar cult, is thus the right interpretation and reading of the first title, i.e. "Greatest of the Seers of Heliopolis" (wr m3 Twnw), since it is usually considered to be the main religious title connected to the city and is interpreted as the "High Priest of Ra."

According to Moursi, who has collected all the available evidence on the title, there are 19 attestations dating to the Early Dynastic period and the Old Kingdom.95 These attestations are spread throughout the period of concern when we consider that the oldest one comes from a stone vessel found in Saggara tomb S 3506, which can be dated to the First Dynasty, whereas the most recent belong to priests Sbkj and Sbkj-By (for their tombs, see above) dated to the very end of the Sixth Dynasty-beginning of the First Intermediate Period.<sup>96</sup> Although the title is further documented during the Early Dynastic period, e.g. on a travertine vessel dated to the Second Dynasty and found in the galleries below the Step Pyramid Complex in Saggara,<sup>97</sup> the first and most significant mention of the title is probably the one which can be found on the statue base of king Netjerykhet from Saggara. Here, we find the title simply written as wr m3, possibly to be read as "Greatest of the Seers" (see further below), in connection with the name of Imhotep, the famous architect of the Step Pyramid.<sup>98</sup> Later on, the title reappears only at the beginning of the Fourth Dynasty, held by Prince Rahotep in Meidum in its classical form of wr m3 Twnw.99 This form will remain, from now on, as the only one attested up to the end of the Old Kingdom.

Despite the frequent mention of the title, Helck is of the opinion that it was a purely civil and administrative one throughout the Fourth and Fifth Dynasty – regularly associated to other military titles and connected to expeditions to mines/ quarries as well as to construction activities of the king.<sup>100</sup> In Helck's opinion, the title would have acquired a religious connotation only during the Sixth Dynasty, when the primacy of Ra is also tes-

JONES 2000, 673 [2464].

Jones 2000, 898-899 [3297].

Jones 2000, 208 [776].

JONES 2000, 387 [1433].

JONES 2000, 835 [3048].

JONES 2000, 871 [3185].

It is worth noting here that a shorter form of this title as "Chief of the Great Estate" (hk3 hwt-3t) is engraved on the already mentioned statue base of Netjerykhet among the titles of Imhotep: see Moursi 1972, 15-16; Jones 2000, 671 [2457]. While this seems to demonstrate the original identification of the "Great Estate" with the Heliopolis temple and its importance in the royal ideology already in the Third Dynasty (see also Ćwiek 2003, 79–80), this does not demonstrate the association of Heliopolis with Ra by that time, for the "Great Estate" may well have been dedicated to Atum or the Ennead. In this sense it is also interesting to remember that in the famous Third Dynasty stela of Qahedjet, now kept in the Louvre Museum (cat. no. E25982: see Ziegler 1999b, 155), the "Great Estate" is mentioned in connection with Horus, who also appears to

have been venerated therein. This would seem to further reinforce the idea that the Heliopolis temple was originally dedicated to a collective group of deities and not necessarily (or at least not only) to Ra (see also below).

Helck 1954, 91-98.

Shalomi-Hen 2015, 463.

Moursi 1972, 15-33. The correct number of people is, however, 18, for individual no. 8, i.e., king Userkaf, is not to be taken into account. His connection with the title of "Greatest of the Seers of Heliopolis" is in fact only based on later literary tradition (Westcar Papyrus) and not on direct epigraphic or textual evidence. See further below.

Moursi 1972, 12, 18-19.

Moursi 1972, 14. In addition, there are several attestations not connected with a specific personal name, such as the number of stone vessels from Khasekhemuy's tomb at Umm el-Qaab and the galleries below Netjerikhet's pyramid complex: Moursi 1972, 109

Moursi 1972, 15-16.

Moursi 1972, 16.

<sup>100</sup> HELCK 1984b, 69.

tified by several other elements. 101 These characteristics would demonstrate, according to Helck, that Heliopolis was not a pivotal cult centre during most of the Old Kingdom and that the title-holders were not ranking in the highest places of the social hierarchy.<sup>102</sup>

Quirke also notes that throughout the Old Kingdom there are no high priests in local cult centres as those documented from the Middle Kingdom onwards. Even the title which later identifies the "High Priest of Ptah," i.e. the "Greatest of the Directors of Craftsmen" (wr hrp hmwt), in the Old Kingdom is mainly a court title and does not seem to rank extremely high. 103 This phenomenon, Quirke concludes, may thus also apply to Heliopolis and its local deity/deities.

However, when one analyses other titles associated with the title of "Greatest of the Seers of Heliopolis", as well as the date of the people holding the title during the Old Kingdom, some interesting conclusions can be drawn.

First of all, during the Fourth Dynasty, we may note that the title-holders are usually associated to the king by means of direct kinship, all being physical sons.<sup>104</sup> They bear very high titles in the state administration including, in some cases, even the Vizierate, and they often also hold the title of Lector-Priest (hry-hbt). 105 This association further confirms what we already know from the analysis of the other titles of the time, namely a clear concentration of the main titles of the state administration among the members of the royal family and thus seems to demonstrate a certain importance of the title of "Greatest of the Seers of Heliopolis". 106

At the beginning of the Fifth Dynasty, namely with the introduction of the sun temples, the title seems to disappear completely, to be again documented at the very end of the same dynasty.<sup>107</sup> In

fact, Moursi includes three people with an early/ mid Fifth Dynasty date.<sup>108</sup> However, when we look in detail at these characters, we can note that they are all not dated correctly. The first of these characters (no. 8 of Moursi's catalogue) is actually king Userkaf, who is listed as "High Priest of Ra" based on the sole account of the Westcar Papyrus. This mention cannot be accepted for obvious reasons of historicity, without considering the fact that Userkaf is never historically attested with this title. The second character of Moursi's catalogue who is dated to the mid Fifth Dynasty (no. 9: K3. mni) is documented only by means of a fragmentary statue whose date is absolutely unclear. The third official (no. 10: *Inti*) is instead more probably datable to the end of the Fifth Dynasty or even to the early Sixth Dynasty.<sup>109</sup> The only individual who can safely be dated to the Fifth Dynasty, and notably to the late part of it, is thus Htp*hr-n-Pth* (no. 11 of Moursi's catalogue). 110

During the Sixth Dynasty, the title, no more associated with the king's sons, is held by the Viziers (mainly Teti's reign)<sup>111</sup> or, in any case, by high-ranking priests (rest of the dynasty). 112 Therefore, at least during the Fourth and the Sixth Dynasty, the holders of the title "Greatest of the Seers of Heliopolis" were not at all middle-ranking but high-ranking people. Their high social status may also consequently imply that the title had a real religious meaning connected to the cult practice in Heliopolis, although it is currently impossible to say more about its practical and symbolical aspects.<sup>113</sup>

It is also worth noting that some of the high priests of Ptah held priestly offices for Ra (hm-ntr  $R^{c}$ ) in the sun temples as well as the otherwise unattested title of wr hrp hmwt n(y) hrw hb / n(y) hb  $R^{c}$  ("Greatest of the Directors of Crafts-

Helck 1984b, 70.

HELCK 1954, 95-98. See also Shalomi-Hen 2015, 463.

QUIRKE 2001, 106. This is definitely confirmed, in Quirke's view, by the fact that the holders of this title also held other offices connected to the king's personal care and his pyramid complex: see also Maystre 1992, 35-36. Freier 1976, 5-34, also argues for an original non-priestly meaning of

Although we do not have enough material to properly evaluate the ranking of Imhotep in the state administration and his possible kinship with Netjerykhet, it is undoubted that he had a very prominent position at court, for he was mentioned on an official statue of the king, a privilege which is quite rare during the Old Kingdom.

Moursi 1972, 16-22.

See Bárta 2013, 172–175 with further bibliography.

Nuzzolo 2018, pls. 1–3, forthcoming.

Moursi 1972, 22–25, nos. 8–10.

STRUDWICK 1985, 159-160.

Moursi 1972, 26.

Moursi 1972, 26-29 (nos. 12-13).

Moursi 1972, 30-33.

QUIRKE 2001, 106, suggests they may have been in charge of the astronomical observations connected to the solar/ stellar cycle, which played a fundamental role in the construction of the royal complexes and, more in general, in the royal ideology. Although fully plausible, the hypothesis is, however, not supported by any piece of evidence, as we have shown above.

men in the day of the festival / in the festival of Ra"), which may have been directly connected with the sun temples.<sup>114</sup> These elements might indicate an association or intermingling of the two cults of Ra and Ptah at least from the late Fifth Dynasty onwards, something which is also confirmed by the evidence of the Abusir Papyri (esp. those from Raneferef's temple), which document a clear economic connection of the two temples and cults.115 Yet, it is not clear if the above festival of Ra (if we accept the above translation of the title, which is indeed very debated) referred to the sun temple, as it would be logical, 116 or to any other cultic buildings, including, at least theoretically, either the temple of Heliopolis or that of Memphis.

The reading of the title wr m3 Twnw is also controversial. According to some scholars, the title should not be translated, as commonly accepted, as the "Greatest of the Seers of Heliopolis" (wr m3 *Twnw*), 117 but rather as "He who Sees the Great One of Heliopolis" (m3 wr Twnw), the latter subject (i.e. the "Great One in Heliopolis") being originally intended as Atum and not as Ra.<sup>118</sup> One would even be tempted to read the "Great One" as the king himself, if we rely on the early mentions of the title, especially the one on the statue base of king Netjerykhet (see above),<sup>119</sup> where indeed the title is only written as wr m3 (or m3 wr if we take a different reading). However, this reading of the "Great One" as the king seems to contrast with the existence of the title of m3(3t) Hrw ("Seer of Horus"), 120 which is documented, in association with queen Hetephernebty, on the above-mentioned fragments of Netherykhet's *naos* from Heliopolis, as well as with the title of m3(3t) Hr Sth ("Seer of Horus and Seth"),<sup>121</sup> which is documented for several members of the royal family from the Fourth to the Sixth Dynasty. In both cases, the king is clearly referred to under the name of Horus and it would be strange that he may also have been mentioned in another very similar title as "Wr" and not "Hr."

Whatever the case, it is important to note that the title of "Greatest of the Seers of Heliopolis" is apparently not connected with Ra, who is in fact never explicitly mentioned, whereas he is indeed always and explicitly mentioned in the titles of the sun temple's personnel in the form of hm-ntr / w b / hry-sšt3 R<sup>.122</sup>

On the one hand, these remarks would lead us to conclude that Ra was not associated with Heliopolis and the title of wr m3 Twnw throughout the Old Kingdom, and that the solar cult was focused, and carried out, in the sole sun temple and, before it, in the pyramid complex. On the other hand, however, the absence of any explicit reference to the sun god and his cult also in the Sixth Dynasty titles, namely after the sun temple's era, may simply imply that for ancient Egyptians the city was automatically associated with the solar god and that this connection did not need any more explicit references. In fact, as already said, the title which is usually translated as "High Priest of Ptah" is also not explicitly connected with Ptah, being written as "Greatest of the Directors of Craftsmen" (wr hrp hmwt), but at least until now nobody has seriously questioned the association of Ptah with the title in the Old Kingdom and the title's religious meaning (if we exclude Helck, see footnote above).

The solution of this question of course lies in the actual cult practice entailed by both titles, which may have had nothing to do (or conversely a direct connection) with the cult of Ra and Ptah respectively. However, this cult practice is currently almost completely unknown to us and both the archaeological and textual sources, either in the private or in the royal context, do not tell us more in this sense.

<sup>&</sup>lt;sup>114</sup> Jones 2000, 394–395 [1457].

Posener-Kriéger, Verner and Vymazalová 2006, 382-383; Papazian 2010, 137–153.

MAYSTRE 1992, 44–45, maintains that the sun temple was the seat of the festival. However, the title is also documented as "Greatest of the Directors of Craftsmen in the Two Houses who belongs to the Feast of Ra", wr hrp hmwt m prwy n(y) hb  $R^{c}$ . This title variant is held by people who did not have any office in the sun temples: see Jones 2000, 393–394 [1453]. Therefore, the direct reference of the festival to an event to be performed in the sun temples cannot be given for granted.

Starting from the Middle Kingdom the title is always written with the plural "Seers", a writing which indicates,

beyond doubts, that at least from this period the title has to be read as "Greatest of Seers."

Junker 1955, 106–109; Moursi 1972, 148–150; Voss 2004, 168. HORNUNG 1982, 188-196, however, has shown how ambiguous the term "Great One" is, which does in fact refer to a plethora of gods during the Old Kingdom (including in particular Atum, Re and Ptah) and does not imply, in itself, any cultic priority, primeval character or transcendence. See Jones 2000, 386-387 [1428-29], for all the available studies and interpretations of the title.

<sup>119</sup> See Moursi 1972, 15–16, with further bibliography.

JONES 2000, 421 [1561].

Jones 2000, 421-422 [1562].

Nuzzolo 2010, 309-312, tab. 1.

#### III.2. The Royal Sources

Very important references to Heliopolis can also be found in the textual sources from the royal context. These sources are mainly two, i.e. the Pyramid Texts and the Palermo Stone.

In the Pyramid Texts, which is the primary and most important source (not only for the Old Kingdom) in defining the identity of the individual gods as well as and their association with the local cult centres and their role in the king's afterlife, the mention of Ra as a supreme god is very frequent, as well as his equation with Atum:123

Sun-Atum will not give you to Osiris: he will not claim your mind, he will not have control of your heart. Sun-Atum will not give you to Horus: he will not claim your mind, he will not have control of your heart.

Sun-Atum, this Unis has come to you, an imperishable akh, lord of the property of the place of the four papyrus-columns.

I have come for you as Horus's messenger, for he has installed you, father Osiris Nemtiemzaf Merenre, on Sun-Atum's throne, that you may lead the populace.

However, it is surprising to note that the association of Heliopolis with Atum is presented several times in a clear and direct way:124

(Unis), you shall release your cleansing to Atum in [Heliopolis; you shall descend] with him, that you may decide the needs of the undersky and stand up in the places of Nu.

Atum is the one who came into being as one who came (with penis) extended in Heliopolis

Ho, all you gods! Come, combine; come, gather, like when you combined and gathered for Atum in Heliopolis

On the contrary, the only spell which ties in Heliopolis and Ra directly is PT 307 (§§ 482-483):125

There is a Heliopolitan in Unis, god: your Heliopolitan is in Unis, god. There is a Heliopoli-

tan in Unis, Sun: your Heliopolitan is in Unis, Sun. The mother of Unis is a Heliopolitan, the father of Unis is a Heliopolitan, and Unis himself is a Heliopolitan, born in Heliopolis when the Sun was above the Dual Ennead and above the subjects, Nefertem without peer, heir of his father Geb.

More frequently, Heliopolis is mentioned in connection with the "Souls of Heliopolis" (b3w *Twnw*) or the Ennead: 126

"(The status of) honored firstborn pertains to Pepi," say the bas of Heliopolis, as they provide you with life and authority. "He shall live with the living as Sokar lives with the living: as he lives with the living, this Pepi shall live with the living."

Ho, Pepi! Raise yourself, stand up! The Big Ennead in Heliopolis has allotted you to your great seat. You shall sit, Pepi, at the fore of the Ennead as Geb, the gods' elite one; as Osiris at the fore of the controlling powers; as Horus, lord of the gods' elite.

Ho, Pepi! You shall become ba as the bas of Heliopolis, you shall become ba as the bas of Nekhen, you shall become ba as the bas of Pe, you shall become ba as the living star at the fore of his brothers.

You have become akh in the Akhet and stable [in] Djedut. Your arm has been received by the bas of Heliopolis, your arm has been taken by the Sun. [Your head has been] raised [by the Dual Ennead, and they have put you], Osiris Pepi, at the fore of the [Dual] Shrines [of the bas of Heliopolis].

Ho, Big Ennead in Heliopolis – Atum, Shu, Tefnut, Geb, Nut, Osiris, Isis, Seth, and Nephthys, Atum's children! His heart was stretched for (you), his children, in your identity of the Nine Bows.

The Pyramid Texts also bring the first attestations of the obelisks, which are usually defined as thn and explicitly connected to the sun, but not to Heliopolis:127

<sup>&</sup>lt;sup>123</sup> See PT 215 (§ 145cd), PT 217 (§ 152ab), PT 606 (§ 1686): translations after Allen 2005, 32-33.

<sup>124</sup> PT 222 (§ 207ab), 527 (§ 1248), PT 599 (§ 1647): translation after Allen 2005, 40, 164, 270.

<sup>125</sup> Translation after Allen 2005, 58.

<sup>126</sup> See PT 535 (§ 1289), PT 468 (§ 895 and § 904), PT 532 (§ 1262), PT 600 (§ 1655), respectively: translations after ALLEN 2005, 103, 123-124, 165, 269.

<sup>&</sup>lt;sup>127</sup> PT 515 (§ 1178): translation after Allen 2005, 158. FAULKNER 1969, 190, proposes a different reading where, at the second stanza, the "dazzling ones" are read as sphinxes.

Pepi is one who belongs at the two obelisks of the Sun that belong to the earth, Pepi is one who belongs at the two dazzling ones of the Sun that belong to the sky.

On the contrary, the benben stone is associated with Atum and Heliopolis, but not explicitly with Ra:128

Atum Beetle! 129 You became high, as the hill; you rose as the benben in the Benben Enclosure in Heliopolis.

The obelisk and the benben stone thus appear separated in the Pyramid Texts as two different religious concepts and it cannot be excluded that their later association might have been the result of a syncretism or fusion of two originally separated objects, each of them entailing a specific idea and meaning.<sup>130</sup>

The key to the enigma must thus probably to be searched for in the right interpretation of the figures of Ra and Atum. A direct association of the two figures as two creative and absolute deities, somehow associated to the sun ever since the beginning of the Egyptian history, 131 as well as to their being mythological representations of the two aspects of time and eternity, of 'non-existence' and 'coming into existence by himself', 132 may favour a view of Heliopolis as the only primary and original centre of the sun cult, in all its aspects and forms.

Conversely, an interpretation of Ra and Atum as two originally distinct divine figures who were theologically united later, i.e. by the end of the Fifth Dynasty, 133 as to represent different aspects of the Egyptian mythology of creation as well as to build a complete cycle of the sun cult (rising and setting sun),134 may support a vision of Heliopolis as a cult centre originally focused on the concept of the ancestors and the idea of the creation of the world.<sup>135</sup> This idea is not directly related to the sun god Ra and the solar cult, but rather to the origins and the creation of mankind as well as to the uniqueness of the institution of kingship, an element which has of course always been a fundamental step in the royal legitimisation.<sup>136</sup>

The other official royal source, i.e. the Palermo Stone, also connects Heliopolis mostly with the "souls" (b3w) and not with Ra,137 who is instead directly mentioned in connection with the sun temples, at least in the case of Sahura and Neferirkara (Fig. 4).<sup>138</sup> We have to note, however, that in the

<sup>&</sup>lt;sup>128</sup> PT 600 (§ 1652): translation after Allen 2005, 269. See also FAULKNER 1969, 246, for a slightly different translation. See also Martin 1977, 10-12, and Moursi 1972, 169, for the primary association of the "benben stone" with

The original word which Allen translates as "Beetle" is here "Kheper" which probably referred, already in this period, to a form of the morning sun god Ra equated with Atum: see Anthes 1959, 21; Assmann 2001, 119-123.

 $<sup>^{130}</sup>$  See also Martin 1977, 8–12, 28–29; Martin 1982, 242, although he says that the obelisk is also usually associated with Atum in the Pyramid texts, which is indeed not the case, as we have just seen.

Frankfort 1948, 148–161. In note 1 he further specifies: "Attempts to treat Ra and Atum not as different aspects of a single god, manifest in the sun, but as two deities who were originally distinct, rely on purely hypothetical constructions and must do so since the earliest texts do not allow the distinction to be made." On the same line of arguments see also Myśliwiec 1983, 297–306.

<sup>&</sup>lt;sup>132</sup> Assmann 2001, 120. In fact, Assmann speaks of Atum and Kheper rather than Atum and Ra. In his arguments, however, it is also clear that Ra was a central part of this concept/divine figure from the earliest phases, and was finally actualised as the sun at midday, iconographically rendered as a falcon-headed man: Assmann 2001, 102-110.

According to Myśliwiec 1983, 298, the first joint representation of Ra and Atum is to be found in the pyramid complex of Pepi II in Saqqara. Here, on two pillars of the courtyard introducing to the inner part of the temple, the king is represented in an intimate embrace with two deities, i.e. Ra and Atum. Voss 2004, 169, also mentions the same article as an evidence of the joined cult of Ra and Atum. In fact, however, as we can see in the original picture of the publication of the funerary temple of Pepi II (JÉQUIER 1940, pl. 45), only one of these deities is certain, notably Ra-Harakhte, whose iconography as a falconheaded man recalls clearly that of the sun temple of Niuserre (for the latter, see Nuzzolo 2015a, 383, fig. 9.9). There is no evidence that the second figure may be identified with Atum, since we have no pictorial representation of this god throughout the Old Kingdom. It is more probable instead that the two figures were two identical and symmetrical representations of the sun god with the king, as quite common in all pyramid temples.

Anthes 1959, 180-182, 185-188, 201-212.

Helck 1984, 70.

On this subject see Nuzzolo 2018 (chapter II and excursus), forthcoming.

Helck 1984, 70-71; Bárta 2016, 65.

For the original text and the translation of the royal annals, see Schäfer 1902, 34-41; Wilkinson 2000, 152-180. See also Strudwick 2005, 69-74, for some slightly different translations of the same sources.

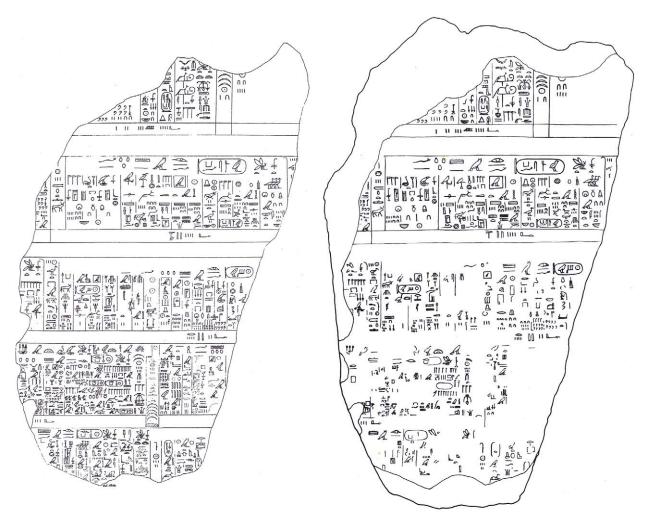


Fig. 4 The Verso of the Palermo Stone, as it was documented in 1900 (left) and in 2000 (right) (after WILKINSON 2000, pls. 2-3).

case of Userkaf, the offerings the king devoted during the year of the third cattle count to the "Souls of Heliopolis" are placed on the same line as those reserved for the "Gods of the Sun Temple Nhn- $R^{c}$ ", whereas the god Ra, alone, is mentioned in the following line and is not associated directly with the sun temple. 139 This may entail a prominent position of Ra at the forefront of the "Souls of Heliopolis" which, for the ancient Egyptians, may not have been necessary to specify, for there can be no doubt that Ra was at the head of the "Gods of the Sun Temples", although his name was not mentioned in that specific part of the Palermo Stone.

Whatever the case, in the Palermo Stone Heliopolis only appears in connection with the early

Fifth Dynasty kings (i.e., Userkaf, Sahura, and Neferirkara), who made consistent land donations to the "Souls of Heliopolis." These donations are always mentioned at the beginning of a regnal year, so as to emphasise the religious and historical importance, for the royal ideology, of the donations to these deities.140

A very interesting element also concerns the construction of the snwt shrine/temple. The identity of this building is not entirely clear, although it is widely accepted that it was a cult building located in Heliopolis and associated with Ra.141 In the Palermo Stone, the *snwt* is possibly already mentioned in the time of Netjerykhet, 142 and then again in the reigns of Shepseskaf, Sahura and Neferirka-

See Schäfer 1902, 34-35; Wilkinson 2000, 152-155.

See Schäfer 1902, 34–35; Wilkinson 2000, 152–155.

WILKINSON 2000, 138, with further bibliography.

Schäfer 1902, 28, is uncertain in regard to the attribution of this regnal year to this king; WILKINSON 2000, 138, on the contrary, suggests this dating. Strudwick also mentions a "snwt temple" in connection with Snefru, but this is certainly a mistake: see Schäfer 1902, 30-32; Wilkinson 2000, 140-147.

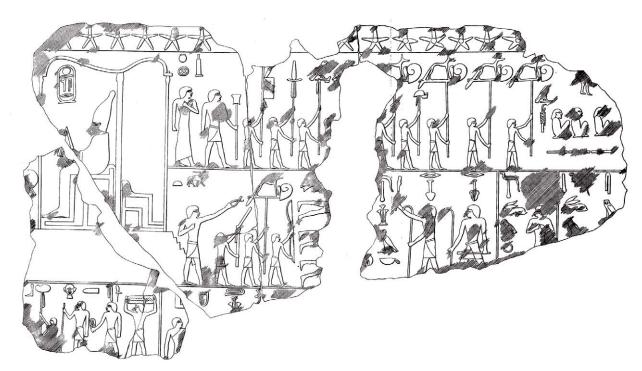


Fig. 5 The Sed-festival depiction in the sun temple of Niuserra: the procession of the standards of the "Followers of Horus" (šmsw-Hr) in front of the enthroned king (after Bissing and Kees 1923, pl. 11). The first figure on the left, behind the king's throne, is "The Heliopolitan" (Twnwj).

ra.<sup>143</sup> While in the two pre-Fifth Dynasty cases the snwt shrine/temple is not associated to any deity and/or city, in the case of Sahura the association with Ra is clear, whereas in the case of Neferirkara the building is associated with the Ennead.

Additionally, in Neferirkara's first regnal year of the Palermo Stone, we may have the first mention of the title "Greatest of Seers of Heliopolis" (wr m3 Twnw) in an official source. In fact, the title - here documented only as "Greatest of Seers" (wr m3) – seems to be placed in direct relation with the "Souls of Heliopolis" and the management of donations of arable lands (probably estates) dedicated to them and other gods.<sup>144</sup>

A final source must be also taken into account, although it is not a proper textual source but rather a decorative one, i.e. the depiction of the Sed festival of Niuserre in his sun temple. Here, on a fragment of the so-called "kleine Hebseddarstellung" (Fig. 5), coming from the southern chapel of the sun temple, 145 a figure called "The Heliopolitan" (*Iwnwi*) is represented immediately behind the king's throne as part of a long procession of standard-bearers personifying the so-called Šmsw-Hr (Followers of Horus), namely the entire assembly of gods of the Predynastic era, which are also equated with the deified ancestors.<sup>146</sup>

His presence in the context of the Sed festival is not strange: several other figures – directly identified by means of their geographical provenance (e.g. the "Hermopolitans", Wnwj)147 or indirectly linked to other important local cult centres (e.g. the so-called "Shepherd", B3ty, probably associated to Herakleopolis or Mendes) - are also mentioned in the same block and elsewhere in the depiction. According to Bissing and Kees, they all embodied the main local cult centres paying homage to the pharaoh during the main ceremony of the king's power renewal and for this reason they are represented in a larger size compared to the other people in the same scene.148

However, the iconography of the "Heliopolitan" is evidently different from that of the other characters: in fact, while the "Hermopolitans" and the "Shepherd" are dressed in a short kilt, which is typical of most of the main figures of the represen-

Schäfer 1902, 32, 36-37, 39-40.

See Schäfer 1902, 39; Wilkinson 2000, 172-173. See also Helck 1984, 68.

BISSING and KEES 1923, 5, Bl. 11, no. 27; BISSING and KEES

Nuzzolo 2015a, 370-371, fig. 9.3.

This character is actually mentioned and represented twice in the same scene, in relation to the northern and southern Hermopolis, which are also known from the pyramid texts: Bissing and Kees 1922, 79.

BISSING and KEES 1922, 79-81.

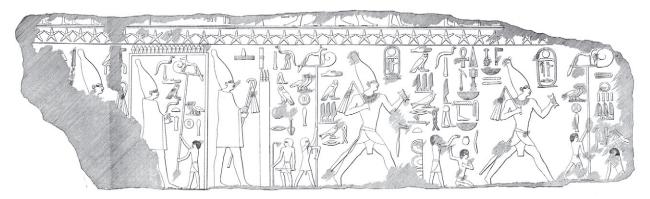


Fig. 6 The Sed-festival depiction in the sun temple of Niuserra: the ritual running of the king (after BISSING and KEES 1923, pl. 13).

tation, the iconography of the "Heliopolitan" is absolutely unique insofar as he wears a long robe which covers the entire body except for the right shoulder and the head. Moreover, he is the only one to be directly associated to the cortege of the "Followers of Horus" which is moving towards the sitting king, whose figure on the right is now lost on the relief. The "Heliopolitan" has, therefore, a different and more important position with respect to all the other figures in the same scene, including the two "Hermopolitans" and the "Shepherd", who are, in fact, represented in a different register.

No one else has the iconography and dressing of the "Heliopolitan" in the entire Sed festival, except for a female figure, called "iry.t wpwt" (She who opens the Ways). She is represented on another block of the festival (scene of homage to the king sitting on the throne) in a quite similar way (although not identical), but her cultic role and meaning in the festival is still unclear.<sup>149</sup>

It is also worth noting that the "Souls of Heliopolis" are completely absent in the Sed festival depiction of Niuserre, whereas the southern "Souls of Hierakonpolis" (b3w Nhn), are often represented in the feast, particularly during its most crucial moment, i.e. the ritual run. 150 The scene is depicted on one of the best preserved fragments of the entire representation (Fig. 6), which is nowadays kept in Cairo Museum (cat. no. CG 57110), as well as on a more erased and fragmentary block, now in the Egyptian Museum of Munich (cat. no. GL 188A-B). On the Cairo block, which is complete and quite clearly readable, we can see, on the left

The role of the "Souls of Hierakonpolis" (b3w) *Nhn*) in the process of legitimisation and renewal of the king's power is thus fairly clear – especially in an archaising context as the one of the Sed festival of Niuserre – and one would expect the "Souls of Buto" (b3w P) to play the role as the Lower Egyptian counterpart, as it is testified by the existence of the juxtaposed titles of "Prophet of the Souls of Hierakonpolis" (hm b3w Nhn) and "Prophet of the Souls of Buto" (hm b3w P).153 In fact, however, the "Souls of Buto" (b3w P) are not documented in any of the preserved scenes from

side, the king inside the Wepwawet chapel, wearing the ceremonial robe and making the consecration with oil "(w)d(i) mdt" of the standard of Wepwawet, held by the "Priest of the Souls of Hierakonpolis" (hm b3w Nhn). This consecration consists in the anointing of the standard of the god by means of the king's little fingers. This gesture, certainly referring to the ritual of the Opening of the Mouth, 151 is aimed at establishing a connection between the king and the gods or more precisely the entire community of the deified ancestors represented by the standard bearer. The king consecrates the standard of the gods/ancestors, making them alive. These ancestors/gods, in turn, assist and protect the king during the most important part of the ceremony, i.e. the ritual run, by giving him divine legitimisation and authority. By acquiring magical rebirth and powers from them, the king is eventually able to accomplish the ceremonial running and to confirm his claim to the rule of Egypt.<sup>152</sup>

<sup>&</sup>lt;sup>149</sup> Bissing and Kees 1923, 3, Bl. 5, no. 12c. In the representations, such as the one of Osorkon II at Bubastis, the role of this figure is evidently played by Bastet: see NAVILLE 1982, pl. 23, nos. 5-8.

BISSING and KEES 1923, 3, Bl. 13, no. 33b.

On the role and meaning of the little fingers in this last rite as well as the common ground between the opening of the mouth and the ceremony of giving birth to the statue, see Rотн 1992, 113-147; Rотн 1993, 57-79.

BISSING and KEES 1922, 85-90.

See Jones 2000, 501 [1876–1877].

the Sed festival of Niuserre and are maybe attested only on a very small fragment from the southern corridor, whose exact reading is not so clear cut as it may seem.154

Whatever the case, the role of the "Heliopolitan" remains quite unique in the Sed festival of Niuserra and testifies, once more, the prominent role the city held in the royal ideology of the Fifth Dynasty.

#### **IV. Conclusions**

The analysis of the textual and archaeological sources considered in this article gives us a quite complex picture of the role of Heliopolis during the Old Kingdom.

Textual sources seem to indicate that Heliopolis was indeed an important cult centre at least from the very beginning of the Fourth Dynasty and throughout the rest of the Old Kingdom. This connection is particularly evidenced by the presence of several bearers of the title of "Greatest of the Seers of Heliopolis", who were high-ranking officials already during the Fourth Dynasty (in this period they were also the king's sons). However, up to the end of the Fifth Dynasty, with the reign of Unis, when we have the first (and actually only one) explicit textual reference associating Ra with Heliopolis, we cannot affirm with certainty that the city was either connected with the solar cult or directly with Ra. We might rather assume that the city was originally connected to a collective group of deities (the Ennead?), probably presided over by Atum, and that its role was mainly that of representing the primary northern cult centre in opposition to Hierakonpolis in the south, as we can see in both the Palermo Stone (the b3w of Heliopolis versus the  $b \ge w$  of Hierakonpolis) and in Niuserre's Sed festival, both with an evident significance for the royal ideology.

At the same time, however, the absence of the bearers of the title of "Greatest of the Seers of Heliopolis" during most of the Fifth Dynasty, and especially in the period of the construction of the sun temples, seems to prove that the king centralised in his hands the primary role as priest, representative and direct link of the sun god with mankind. This would indirectly testify that the role of the "Greatest of the Seers of Heliopolis" might indeed have been that of "High Priest of Ra" ever since the beginning, with the king taking it over for a certain period.

Finally, in the early Sixth Dynasty, the role of Ra as main god in Heliopolis becomes clearer archaeologically. His importance is manifested by the erection of Teti's obelisk (probably a pair of obelisks), perhaps accompanied by a shrine, as well as by the presence of the tombs of several "Greatest of the Seer of Heliopolis" at the site. At the same time, however, the dating of the construction of a pivotal feature of the site – i.e. the mudbrick temenos wall, within which the oldest solar temple is supposed to have been located – is a problematic issue in the current state of our knowledge, due to the uncertain find situation, and the relief fragments of Netjerykhet's naos are also not conclusive in this regard. Although it is thus fully plausible that the solar temple might have been built here already in the early Old Kingdom, the only available dating at the moment is to the Saite Period, an epoch which is very far from the period discussed in this article.

Throughout the Sixth Dynasty the solar cult activities at the site were evidently thriving under the royal patronage, although we may not forget that in the textual sources of the period (mostly the Pyramid Texts) it is mainly Atum who is associated explicitly with Heliopolis, whereas Ra is frequently mixed and merged with Atum as two aspects of a single divine entity.<sup>155</sup>

In this sense, and with all due differences, we may perhaps imagine for Heliopolis a situation similar to what seems to have occurred in Abydos during the late Sixth Dynasty and the First Intermediate Period, with an originally 'local' god, i.e. Khenty-amentyw, gradually being absorbed and replaced by a new (possibly royal) god, i.e. Osiris. 156 In Heliopolis too, the primary and original

See Kees 1928, Bl. 17 [284]

Seidlmayer has emphasised how the Sixth Dynasty is characterised by an increasing royal interest in local religious centres across Egypt, with the kings paying more and more attention to provincial temples by means of consistent endowments and land donations, as well as through the enlargement of local temples and the construction, therein, of royal ka-houses (Seidlmayer 1996, 115-119; see also Bussmann 2010, 471-475). Heliopolis might thus also

have benefited from this phenomenon, although it still remains to be fully explained how Heliopolis may fit the above model, for its temple neither presents the same historical and archaeological features as the other provincial temples, nor was it ever hosting, at least in the current state of our knowledge, a royal ka-house.

O'CONNOR 2009, 30-40. See also Nuzzolo 2018, forthcoming (excursus C).

'local' god Atum might thus have been gradually absorbed by, or simply united with, a new (and mostly royal) god, i.e. Ra. This phenomenon may have taken several decades before eventually and clearly surfacing in the late Fifth–early Sixth Dynasty.

Unfortunately, in the current state of our knowledge, both the archaeological and textual sources do not bring more data concerning this issue of the identity of Atum and Ra as well as their mutual cultic and ideological relationship. It will thus be worth continuing this religious investigation to completely clarify the matter and to define something clearer on the role of Heliopolis and its associated deities in the Old Kingdom solar religion.

## **Bibliography**

ALLEN, J.P.

2005 The Ancient Egyptian Pyramid Texts, WAW 23, Atlanta

ANTHES, R.

1959 Egyptian Theology in the Third Millennium B.C., *JNES* 18, 169–212.

Arnold, D.

1992 Tempel Ägyptens: Götterwohnungen, Kultstätten, Baudenkmäler, Zürich.

Assmann, J.

2001 The Search for God in Ancient Egypt, Ithaca/New York (original title: Ägypten: Theologie und Frömmigkeit einer frühen Hochkultur, Munich 1984).

Aufrère, S.

1991 L'univers minéral dans la pensée égyptienne, 2 vols. Bibliothèque d'étude 105, Cairo.

Barsanti, A.

1916 La necropole des grands prêtres d'Heliopolis sous l'ancien empire, II - rapports sur le deblaiment, *ASAE* 16, 213–220.

Bárta, M.

2013 Kings, Viziers, and Courtiers. Executive Power in the Third Millennium BC, 153–176, in: J.-C. Moreno Garcia (ed.), *Ancient Egyptian Administration*, Leiden/Reston

2016 Abusir Paradigm and the beginning of the Fifth Dynasty, 51–73, in: I. Hein I., N. Billing and E. Dietrich-Meyer (eds.), The Pyramids: Between Life and Death. Proceedings of the Conference held at the University of Uppsala, Sweden, May 31 - June 01, 2012, BOREAS 36, Uppsala.

BAUD, M.

2007 Djéser et la IIIe dynastie, Paris [Grands pharaons].

At the same time, we can only hope that the ongoing archaeological research by the German and Egyptian colleagues in the area may contribute to rescuing the last remaining pieces of information on the third millennium BC settlement, since they may significantly contribute to confirm or dismiss the available textual and archaeological data.

#### Acknowledgments

The article was written with the support of the Grant Agency of the Czech Republic (GAČR) project "The rise and development of the solar cult and architecture in Third Millenium BC. Egypt," project no. 17-10799S.

BICKEL, S.

1994 La cosmogonie égyptienne: avant le Nouvel Empire, OBO 134, Fribourg (Suisse).

2010 Heliopolis in Antiquity, 26–30, in: A. van Loo and M.-C. Bruwier (eds.), *Heliopolis*, Brussels.

VON BISSING, F.W.

1907 Steingefässe, CG Vol. 17, Vienna.

VON BISSING, F.W. and KEES, H.

1922 Untersuchungen zu den Reliefs aus dem Re-Heiligtum des Rathures, München.

1923 Das Re-Heiligtum des Königs Ne-Woser-Re. II Bd. Die kleine Festdarstellung, Leipzig.

BORCHARDT, L.

1928 Ein Bildhauermodell aus dem frühen Alten Reich, *ASAE* 28, 43–50.

Brugsch, H.F.K.

1883–1991 Thesaurus inscriptionum Aegyptiacarum, Leipzig. Brůna, V.

2008 Metoda ověření orientace staveb v Gíze, Abúsíru a Héliopoli, 58–67, in: J. Krejčí and L. Varadzinová, Kapitoly z dějin egyptské archeoastronomie, Prague.

Bussmann, R.

2010 Die Provinztempel Ägyptens von der 0. bis zur 11.

Dynastie: Archäologie und Geschichte einer gesellschaftlichen Institution zwischen Residenz und Provinz, Leiden.

BUTZER, K.W.

1976 Early Hydraulic Civilization in Egypt: A Study in Cultural Ecology, Chicago.

CAPART, J.

1927 Documents pour servir a l'etude de l'art egyptien, Paris. ĆWIEK, A.

2003 Relief Decoration in the Royal Funerary Complexes of the Old Kingdom, Warsaw (internet publication).

DARESSY, G.

1916 La nécropole des grands prètres d'Héliopolis sous l'Ancient Empire, ASAE 16, 193-212.

DE DAPPER, M. and HERBICH, T.

Heliopolis: geomorphological and geophysical survey, EA 46, 12-13.

DEBONO, F. and MORTENSEN, B.

The Predynastic Cemetery at Heliopolis, Mainz am Rhein.

Dobrowolska, A. and Dobrowolski, J.

2006 Heliopolis. Rebirth of the City of the Sun, Cairo.

EDEL, E.

2008 Die Felsgräbernekropole der Qubbet el-Hawa bei Assuan, I. Abteilung, Band 2, Paderborn.

ABD EL-GELIL, M., SAADANI, A. and RAUE, D.

Some inscriptions and reliefs from Matariya, MDAIK 52, 143-156.

FAULKNER, R.

1969 The Ancient Egyptian Pyramid Texts, Oxford.

Frankfort, H.

1948 Kingship and the Gods. A Study of Ancient Near Eastern Religion as the Integration of Society and Nature, Chicago.

GOEDICKE, H.

1995 Giza: Causes and Concepts, BACE 6, 39-40.

2000 Abusir - Saggara - Giza, 397-412, in: M. Bárta and J. Krejčí (eds.), Abusir and Saggara in the Year 2000, ArOr Supplementa IX, Prague.

GILLISPIE, C.C. and DEWACHTER, M.

Monuments of Egypt: the Napoleonic edition: the complete archaeological plates from La description de l'Egypte, Princeton.

Habachi, L.

1988 The obelisks of Egypt: skyscrapers of the past, Cairo.

HELCK, W.

1954 Untersuchungen zu den Beamtentiteln des ägyptischen Alten Reichs, ÄgForsch 18, Glückstadt/Hamburg/ New York.

1984 Heliopolis und die Sonnenheiligtümer, 67-72, in: Studies in Honour of Torgny Säve Söderbergh, BOREAS 13, Uppsala.

1991 Überlegungen zum Ausgang der 5. Dynastie, in: MDAIK 47, 163-168.

HORNUNG, E.

1982 Conceptions of God in Ancient Egypt. The One and the Many, Ithaca (original title: Der Eine und die Vielen, Darmstadt 1971).

JEFFREYS, D.

1998 The Topography of Heliopolis and Memphis: Some Cognitive Aspects, 63-71, in: H. Guksch and D. Polz (eds.), Stationen. Beiträge zur Kulturgeschichte Ägyptens, Rainer Stadelmann gewidmet, Mainz am Rhein

1999 Joseph Hekekyan at Heliopolis, in: A. LEAHY and J. TAIT (eds.), Studies on ancient Egypt in honour of H.S. Smith, EES Occasional Publications, London.

JONES, D.

2000 An index of Egyptian Titles, Epithets and Phrases of the Old Kingdom, BAR/IS 866/I-II, Oxford.

JUNKER, H.

1955 Gîza: Grabungen auf dem Friedhof des Alten Reiches bei den Pyramiden von Gîza (12 Bde.), Wien/Leipzig.

KAISER, W.

Zu den Sonnenheiligtümern der 5. Dynastie, MDAIK 1956 14, 104–116.

Kees, H.

1928 Das Re-Heiligtum des Königs Ne-Woser-Re. III Bd. Die grosse Festdarstellung, Leipzig.

1961 Ancient Egypt. A Cultural Topography, London.

KLEMM, D. and KLEMM, R.

2010 The stones of the pyramids: provenance of the building stones of the Old Kingdom pyramids of Egypt, Berlin.

Krejčí, J.

2010 Abusir XVIII: the royal necropolis in Abusir, Prague.

2016 Foundation of the royal necropolis at Abusir, 75–90, in: I. Hein, N. Billings and E. Meyer-Dietrich (eds.), The Pyramids: Between Life and Death, BOREAS 36, Uppsala.

KUENTZ, CH.

1932 Catalogue général des antiquités égyptiennes du Musée du Caire: Nos. 1308-1315 et 17001-17036, Cairo.

LEPSIUS, K.R.

1849 Denkmaeler aus Aegypten und Aethiopien. Abt. 1., Bd. 1., Topographie und Architectur. Blatt 1-32 / nach den Zeichnungen der wiss. Expedition hrsg. und erläutert von C. R. Lepsius, Leipzig.

MACKAY, E.J.H, WAINWRIGHT, G.A. and PETRIE, W.M.F.

1915 Heliopolis, Kafr Ammar and Shurafa, ERA, London. Magli, G.

2010 Topography, astronomy and dynastic history in the alignments of the pyramid fields of the Old Kingdom, Mediterranean Archaeology and Archaeometry 10/2, 59-74

MARTIN, K.

1977 Ein Garantsymbol des Lebens: Untersuchung zu Ursprung und Geschichte der altägyptischen Obelisken bis zum Ende des Neuen Reiches, HÄB, Hildesheim.

1982 Obelisk, in: *LÄ* IV, coll. 542–545.

Maystre, C.

1992 Les grands prêtres de Ptah de Memphis, OBO 113, Fribourg (Suisse).

MORENZ, L.D.

2002 Die Götter und ihr Redetext: Die ältestbelegte Sakral-Monumentalisierung von Textlichkeit auf Fragmenten der Zeit des Djoser aus Heliopolis, in: H. BEINLICH, J. HALLOF, H. HUSSY and CH. VON PFEIL (eds.), 5. Ägyptologische Tempeltagung: Würzburg, 23. - 26. September 1999, Akten der Ägyptologischen Tempeltagungen, Teil 3, Wiesbaden.

Moursi, M.I.

1972 Die Hohenpriester des Sonnengottes von der Frühzeit Ägyptens bis zum Ende des Neuen Reiches, MÄS 26, Munich.

Myśliwiec, K.

1983 Die Parallele von Atum und Re-Harachte, SAK 10, 297–306

NAVILLE, E.

1892 The Festival-Hall of Osorkon II in the Great Temple of Bubastis (1887–89), EES Exc.Mem., London.

Nuzzolo, M.

2007 Sun Temples of the Vth Dynasty, *SÄK* 36, 217–247.

2010 The Vth Dynasty Sun Temples Personnel: an overview of titles and cult practice through the epigraphic evidence, *SAK* 39, 289–312.

2015a The Sed-Festival of Niuserra and the Fifth Dynasty Sun Temples, 364–388, in: P. Der Manuelian and Th. Schneider (eds.), *Towards a New History of the Egyptian Old Kingdom. Perspectives on the Pyramid Age*, HES 1, Leiden.

2015b Royal Authority, Divine Legitimization. Topography as an element of acquisition, confirmation and renewal of power in the Fifth Dynasty, 289–304, in: F. Coppens, J. Janák and H. Vymazalová (eds.), Royal versus Divine Authority Acquisition, Legitimization and Renewal of Power, Staat und Gesellschaft früher Hochkulturen 4/4, Wiesbaden.

2018 Sun Temples and the Royal Ideology of the Old Kingdom, Prague, forthcoming.

O'CONNOR, D.P.

2009 Abydos. Egypt's First Pharaohs and the Cult of Osiris, London.

PAPAZIAN, H.

2010 The Temple of Ptah and Economic Contacts between Memphite Cult Centers in the Fifth Dynasty, 137–153, in: M. Dolinka and H. Beinlich (eds.), 8. Ägyptologische Tempeltagung Interconnections between temples, Warschau. 22.-25. September 2008, KSGH 3/3, Wiesbaden.

Posener-Kriéger, P., Verner M. and Vymazalová, H.

2006 Abusir X – The Pyramid Complex of Raneferef: The Papyrus Archive, Prague.

Quirke, St.

2001 The cult of Ra: sun-worship in Ancient Egypt, London.

RAUE, D.

1999 Heliopolis und das Haus des Re: eine Prosopographie und ein Toponym im Neuen Reich, ADAIK, Berlin.

RAUE, D. and ASHMAWY, A.

2015 The temple of Heliopolis: excavations 2012–14, *EA* 468–16.

RICKE, H.

1935a Der Hohe Sand in Heliopolis, ZÄS 71, 107–111.

1935b Eine Inventartafel aus Heliopolis im Turiner Museum, ZÄS 71, 111–133.

Romer, J.

2007 The Great Pyramid, Cambridge.

**R**отн, А.М.

1992 The *psš-kf* and the 'Opening of the Mouth' Ceremony: A Ritual of Birth and Rebirth, *JEA* 78, 113–147.

1993 Fingers, Stars and the 'Opening of the Mouth': The Nature and Function of the *ntwj* Blades, *JEA* 79, 57–79.

SALEH, M. and Sourouzian, H.

1986 Die Hauptwerke im Agyptischen Museum Kairo. Offizieller Katalog, Mainz.

SBRIGLIO, A.M. and UGLIANO, F.

2015 Re-excavating Heliopolis: Unpublished Archaeological Data from the Archives of Ernesto Schiaparelli and Missione Archeologica Italiana, 278–293, in: M.S. Pinarello, J. Yoo, J. Lundock and C.Walsh (eds.), Current research in Egyptology 2014: proceedings of the fifteenth annual symposium, University College London and King's College London, April 9–12, 2014, Oxford.

Schäfer, H.

1902 Ein Bruchstück altägyptischer Annalen, Berlin.

SEIDLMAYER, ST.

1996 Town and State in the early Old Kingdom: A View from Elephantine, 108–127, in J. Spencer (ed.), Aspects of Early Egypt, London.

SHALOMI-HEN, R.

2015 The Dawn of Osiris and the Dusk of the Sun Temples. Religious History at the End of the Fifth Dynasty, 456–469, in: P. DER MANUELIAN and TH. SCHNEIDER (eds.), Towards a New History of the Egyptian Old Kingdom. Perspectives on the Pyramid Age, HES 1, Leiden.

SMITH, W.S.

1946 A history of Egyptian sculpture and painting in the Old Kingdom, Oxford.

VERNER, M.

2002 The pyramids: their archaeology and history, Lon-

2008 Abúsír a Héliopolis - k orientaci některých významných staveb na memfidské nekropoli, 43-57, in: J. Krejčí and L. Varadzinová, Kapitoly z dějin egyptské archeoastronomie, Prague.

VERNER, M. and BRŮNA, V.

Why was the Fifth Dynasty cemetery founded at Abusir?, 286-294, in: N. Strudwick and H. Strudwick (eds.), Old Kingdom, New Perspectives. Egyptian Art and Archaeology 2750-2150 BC, Oxford.

Voss, S.

2004 Untersuchungen zu den Sonnenheiligtümern der 5. Dynastie. Bedeutung und Funktion eines singulären Tempeltyps im Alten Reich, Hamburg (internet publication).

WEILL, R.

1911 Monuments nouveaux des premieres dynastie. Un temple de Noutirkha-Zosir á Héliopolis, SPHINX 15, 9-26.

WILKINSON, T.A.H.

2000 Royal Annals of Ancient Egypt, New York.

WINTER, E.

1957 Zur Deutung der Sonnenheiligtümer der 5. Dynastie, WZKM 54, 222-233.

ZIEGLER, CH.

1999a Chapelle de Djéser à Héliopolis: scènes religieuses, 153-154, in: J.P. Allen et al. (eds.), L'art égyptien au temps des pyramides, Paris.

1999b Stèle du roi Qahedjet, 155, in: J.P. Allen et al. (eds.), L'art égyptien au temps des pyramides, Paris.