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Title: Developments in Serving Sculptures and their Change in Location from the Serdab to the Burial Chamber

Título: Desarrollos en el servicio de esculturas y su cambio de ubicación del Serdab a la cámara funeraria

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Developments in Serving Sculptures and their Change in Location from the *Serdab* to the Burial Chamber

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Abstract

During the late 6th Dynasty, serving sculptures underwent several significant developments in production and distribution, including a change in where they were located in the tomb. Previously housed in the *serdab* in the superstructure, the sculptures began to be deposited in the subterranean burial chamber. Previous explanations for this change in funerary practice have focused on religious reasons, specifically the growth of the Osirian cult which caused greater attention to be devoted to the substructure. However, it is equally important to investigate the historical factors that may have influenced this development. As these have not yet been fully considered, this study presents the historical perspective which should be understood alongside the religious explanations. It is argued that an increased feeling of insecurity in society contributed to the burial chamber becoming the preferred location for serving sculptures. This subterranean location enabled the sculptures to no longer have any interaction with the living and to give the tomb owner direct and more secure access to the goods and services they provided.

Key-words: Serving statues; Funerary models; *Serdab*; Burial chamber; Security

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Desarrollo de las Esculturas de Sirvientes y su Cambio de Ubicación del *Serdab* a la Cámara Funeraria

Resumen

A finales de la VI Dinastía, las esculturas de sirvientes experimentaron varios cambios significativos en su producción y distribución, incluso en lo que refiere a su ubicación en la tumba. Anteriormente alojadas en el serdab de la superestructura, las esculturas empezaron a depositarse en la cámara funeraria subterránea. Previamente, las explicaciones para este cambio en la práctica funeraria se han centrado en razones religiosas, concretamente en el crecimiento del culto a Osiris, que hizo que se dedicara mayor atención a la subestructura. Sin embargo, es igualmente importante investigar los factores históricos que pueden haber influido en este desarrollo. Dado que estos aún no se han tenido plenamente en cuenta, este estudio presenta la perspectiva histórica que debe comprenderse junto a las explicaciones religiosas. Se plantea que el aumento del sentimiento de inseguridad en la sociedad contribuyó a que la cámara funeraria se convirtiera en el lugar preferido para alojar las esculturas de sirvientes. Esta ubicación subterránea permitía a las esculturas no tener ya ninguna interacción con los vivos y dar al propietario de la tumba un acceso directo y más seguro a los bienes y servicios que ellas proporcionaban.

Palabras clave: Estatuas de sirvientes; Modelos funerarios; *Serdab*; Cámara funeraria; Seguridad

1 Introduction

One of the main types of artistic representation housed in tombs from the Old Kingdom to the mid-12th Dynasty is small three-dimensional sculptures portraying figures undertaking everyday life tasks. Unlike formal statues of the tomb owner and members of his family which are characterised by static poses, the serving figures are engaged in arrested movement as they perform a wide variety of tasks (Robins 2008: 19-20). Through these activities, the sculptures produced goods and services that would benefit the tomb owner's wellbeing in the afterlife (Eschenbrenner-Diemer 2017: 134-135; Barker 2022: 191-192). In this study, the term 'serving sculptures' refers to the entire category of the serving figures, including all developments they

underwent. This terminology was selected as it conveys the primary role of the sculptures in serving the tomb owner and their categorisation as three-dimensional artworks.¹ Within this classification, the sculptures are here divided into two major categories. Firstly, the term 'serving statues' is applied to the individual limestone serving sculptures characteristic of the Old Kingdom. Previously referred to as 'servant statues', Roth (2002: 103) has convincingly argued that 'serving' is a more appropriate term than 'servant' as it prevents the identity and purpose of the figures from being assumed. Secondly, the wooden serving sculptures of the late 6th Dynasty until the mid-12th Dynasty are here designated 'funerary models', with the term 'model' reflecting the group compositions characteristic of the sculptures from this period.

Throughout the Old Kingdom to the mid-12th Dynasty, several developments occurred in the production and location of serving sculptures, including the materials from which they were fashioned, the quantity of figures included in each sculpture, the themes represented, their location in the tomb, and their distribution in cemeteries across Egypt. While serving sculptures were always intended to benefit the tomb owner, these changes reflect shifts in their role and significance. This study investigates one of the main changes of serving sculptures, namely their location in the tomb. The move of the sculptures from the *serdab* in the superstructure to the burial chamber in the substructure in the late 6th Dynasty is a significant modification to an established funerary practice which must have been motivated by a particular reason(s). While previous assessments have focused on religious explanations, which are outlined in more detail below. the historical factors have not been fully considered. This study investigates the historical situation at the time serving sculptures began to be housed in the substructure and considers how this may have influenced the change in funerary practice. It is hoped that this historical perspective will be considered alongside the religious explanations and that it offers an example of how multiple factors can influence the ways in which communities adapt to changing circumstances.

In order to investigate the reasons for the changing location of serving sculptures in the tomb, a thorough understanding of archaeological context is required. Unfortunately, this is hindered by issues of preservation and documentation. Many burials were found disturbed as a result of looting in

¹The terminology adopted here is aimed to encapsulate the different developments of this particular category of three-dimensional representation. However, further work is needed within the discipline to create a standardised terminology for serving sculptures.

both ancient and modern times, as well as destruction caused by quarrying, hermit dwellings and natural elements such as earthquakes, floods and poor organic preservation. Accordingly, the contents of many tombs, including serving sculptures, have been looted, destroyed or scattered, and in a number of cases the discovered fragments of funerary models have been re-formed into pastiches. Additionally, the majority of known serving sculptures were found during archaeological expeditions of the 19th and early 20th centuries, a period in which excavators were more concerned with acquiring pieces of 'art' than methodically recording all finds (Willems 2014: 2). The fieldnotes and reports from these expeditions regularly lack accurate descriptions of tomb architecture as well as the precise composition of burial goods and their specific placement within the tomb (Tooley 1989: xii-xiii; Podvin 2000: 277). Although these issues of preservation and documentation hinder a comprehensive understanding of the original context of all serving sculptures, there have been many important discoveries of intact tombs which have been adequately recorded in order to conduct an investigation. This study draws upon examples from tombs which are sufficiently preserved and documented.

2 Developments in serving sculptures from the Old Kingdom to the end of the Middle Kingdom

The earliest attestation of serving statues is from the 4th Dynasty tomb of Meresankh III at Giza (G 7530), where the assemblage included three limestone figures of a flour sifter, a butcher and a beer strainer, as well as fragments of others (Smith 1949: 44; Tooley 1989: 1-2).² Such sculptures are known from other elite tombs at Giza during the 4th Dynasty, though examples become more common in the Memphite cemeteries during the 5th and 6th Dynasties (Robins 2008: 75). Serving statues typically comprise single figures carved of limestone, though a small number of wooden examples are known from the end of the 5th and early 6th Dynasties.³ The figures vary significantly in size and quality and were often painted (Tooley 1989: 2-3; Roth 2002: 104). Usually, only one or two serving

 $^{^2\}mathrm{Two}$ of these serving statues are today housed in the Museum of Fine Arts, Boston: 30.1458, 30.1462.

 $^{^{3}}$ See, for example, the late 5th Dynasty tomb D63 at Saqqara, which contained the earliest known group of wooden model boats alongside limestone serving statues (Mariette 1885: 357-359; Breasted 1948: 73-74).

statues were housed in a single tomb, though there are some examples with larger assemblages known. The Nikauinpu group from Giza comprised 26 limestone serving statues, which is the largest known assemblage from the Old Kingdom (Breasted 1948: 2-3; Tooley 1995: 8).⁴ Most commonly, serving statues were housed in the *serdab* alongside statues of the tomb owner and members of his family (Tooley 1989: 2).



Figure 1: Female miller grinding grain from the Nikauinpu group from Giza. Courtesy of the Institute for the Study of Ancient Cultures of the University of Chicago: E10622 (https://isac-idb.uchicago.edu).

The themes represented by serving statues are primarily concerned with the production of food, with the most common comprising a female miller grinding grain on a quern stone (Figure 1). Following this in popularity are figures kneading dough and straining beer-mash (Tooley 1989: 3-4). Outside of the production of the staple diet of bread and beer, the other attested motifs include roasting a duck and slaughtering an ox/calf, which

 $^{^4{\}rm The}$ Nikauinpu group is today housed in the Institute for the Study of Ancient Cultures Museum in Chicago.

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are also related to food production, and only rarely portraved are boats, granaries and offering-bearers (Tooley 1989: 4-5). Both men and women are represented, though the identity of the individuals is rarely made explicit by inscriptions. The few inscribed examples that have survived mostly identify the individuals as family members or dependents of the tomb owner rather than servants or workers (Roth 2002: 115-116). The group of serving statues found in the 5th Dynasty tomb of Nikauhathor and her husband at Giza included five men and three women labelled with inscriptions (Hassan 1950: 177-181). Each of these figures is identified by name and six also hold the title of hm- k_3 .⁵ Roth (2002: 115-116) has argued that the family relationship and role in the mortuary cult expressed through the inscriptions indicate that the purpose of the serving statues was not only to serve the tomb owner but also to increase the chances of survival after death for the individuals represented by depicting them performing acts of service for someone who would presumably have influence in the afterlife. As preserving the name was essential to an individual's survival after death, the inscription of names on serving statues may have further aimed to guarantee their existence.

Significant developments in the distribution and production of serving sculptures occurred in the late 6th Dynasty. With the growing importance of provincial cemeteries at this time, serving sculptures were no longer restricted to Memphite tombs but were also interred at sites in Middle and Upper Egypt, such as Thebes, Asyut, Meir and Sedment (Tooley 1989: 7-14). In the tombs of this period, the sculptures were not housed in serdabs but were placed in the subterranean part of the tomb, in either the burial chamber or a niche in the shaft (Tooley 1989: 16). The assemblage of Niankhpepykem from Meir (A1), for example, was housed in a concealed floor niche in the substructure of his tomb (Legrain 1900: 68-69). It contained the largest group of funerary models known from the 6th Dynasty, comprising at least 25 sculptures (Tooley 1989: 11-12).⁶ The major material of manufacture for serving sculptures was no longer limestone. Instead, after a brief transition period of composite sculptures made of limestone and wood,⁷ serving sculptures began to be fashioned solely

⁵The serving statues of Nikauhathor and her husband are today part of the collection of the Egyptian Museum, Cairo.

 $^{^6\}mathrm{The}$ funerary models of Niankh pepykem are today housed in the Egyptian Museum, Cairo.

⁷In the tomb of Idu II at Saqqara (S790), for example, were found multiple wooden figures as well as stone elements such as baskets and jars, indicative of composite sculptures (Junker 1947: 92-96; Tooley 1989: 7-8).

of wood (Eschenbrenner-Diemer 2017: 137).⁸ Wooden funerary models are first identifiable in the Memphite cemeteries and while the early examples occasionally still portrayed single figures,⁹ group compositions comprising two or three figures soon became common. Usually, these group sculptures combined multiple food production tasks related to the manufacture of bread and beer. A typical example can be seen in a model of Niankhpepykem from Meir which depicts one figure grinding grain and another baking bread, positioned at either end of a rectangular baseboard.¹⁰ Activities related to the production of the staple diet retained their prime importance in the repertoire of serving sculptures in the late 6th Dynasty, but added to this were new themes, such as agriculture, and the more frequent occurrence of boats and offering-bearers (Tooley 1989: 15-16).¹¹

Wooden funerary model production continued in the First Intermediate Period. Although the surviving corpus is limited, it does exhibit greater diversity in the repertoire of themes as well as the beginnings of regional styles (Tooley 1995: 17; Eschenbrenner-Diemer 2017: 149). Boats are now the most commonly attested theme, followed by offering-bearers (Tooley 1989: 29-30). Food production remains common, though there is more variety in the processing activities represented. Baking and brewing tasks are sometimes combined to show the production of the staple diet in a single sculpture. A funerary model belonging to Ini from Gebelein, for example, depicts four figures engaged in grinding grain, straining beer-mash, baking bread and transporting the loaves (Figure 2). This is a much more expansive representation of bread and beer production than the first group funerary models of the late 6th Dynasty. Granaries, which briefly emerged in the 4th and 5th Dynasties before disappearing from the repertoire for the rest of the Old Kingdom, reappeared in the First Intermediate Period and became especially popular in the Middle Kingdom (Tooley 1989: 122-123; Barker 2022: 21). They formed the culmination of the agricultural cycle and provided a supply of grain available for the production of the staple diet.

⁸This change in the material of manufacture has been interpreted by Tooley (1989: 5) as a means to meet the increased demand for serving sculptures by using a less costly material.

⁹Single figures of the late 6th Dynasty usually display a superior quality of craftsmanship (Tooley 1989: 16).

¹⁰This funerary model is today housed in the Egyptian Museum, Cairo: CG 243 (Borchardt 1911: pl. 243).

¹¹In the late 6th Dynasty, offering-bearers are known as both single figures and pairs, and the repertoire of boats comprised four different types according to Reisner's (1913) classification.



Figure 2: Funerary model showing the production of bread and beer from the tomb of Ini at Gebelein. Museo Egizio, Turin; S.13271. Creative Commons License by 2.0 IT. (https://collezioni.museoegizio.it/).

Like the serving sculptures of the late 6th Dynasty, those found in intact tombs of the First Intermediate Period were located in the substructure of the tomb (Breasted 1948: 3).

The peak period of funerary model production in terms of distribution, quantity and repertoire is found in the early Middle Kingdom, from the reunification of Egypt in the 11th Dynasty until the mid-12th Dynasty. Funerary models are known from most major cemeteries across Egypt and are found in burials of royalty, the ruling elite and lower officials. However, the extent to which each of these groups interred funerary models is uncertain due to the plundered and/or damaged state of many burials, particularly those of the kings.¹² The typical elite funerary model assemblage

¹²The discovery of funerary models in the mortuary complex of King Mentuhotep II at Deir el-Bahri demonstrates that royalty did house serving sculptures in their tombs (Arnold 1981: 11-51), but the extent to which other Middle Kingdom rulers adopted this practice is unknown due to the plundered and/or damaged state of their complexes (Tooley 1989: 373-374). For the non-royal population, it is clear that individuals from different strata of elite society also had access to funerary models. At Beni Hassan, a multitude of funerary models was discovered in the Lower Cemetery which contained the

of the early Middle Kingdom consisted of two boats, a granary, a pair of offering-bearers, the production of bread and beer, and butchery (Tooley 2001: 425), but this could be reduced or expanded upon according to each tomb owner's resources and priorities, with the largest known group belonging to the governor Djehutynakht and his wife at Deir el-Bersha (10A), which comprised over 100 models (Freed and Doxey 2009: 151-152).¹³ This core repertoire of themes provided tomb owners with essential goods and services for the afterlife, especially nourishment and transport (Barker 2022: 178).



Figure 3: Funerary model of a cattle stable from the tomb of Meketre at Thebes (TT280). The Metropolitan Museum of Art, New York: 20.3.9. Open Access: Creative Commons Zero License.

In addition to this core repertoire, some themes gained greater prominence in the early Middle Kingdom, such as granaries and butchery, while new themes also appeared, including animal husbandry, craft production, music and entertainment, and soldiers (Tooley 1989: 61-62).

burials of the lower administrative officials and the family members of the ruling elite, and fragments of funerary models were found among the contents of the plundered tombs of the provincial governors in the Upper Cemetery (Newberry 1893b: 79-80; Garstang 1907: passim; Barker 2022: 187-188).

¹³Today, the assemblage of Djehutynakht and his wife is housed in the Museum of Fine Arts, Boston.

These new themes are not as commonly attested and can be considered supplementary themes which were only included among more expansive assemblages in order to provide wealthy tomb owners with desirable commodities and services in addition to the essential provisions (Barker 2022: 179). The burial of the chancellor Meketre at Thebes (TT280) incorporated a range of these supplementary themes in his assemblage, including craft production, the inspection and feeding of cattle, and houses (Winlock 1955: 17-24, 29-38) (Figure 3).¹⁴ Such large and diverse assemblages reflect the wealth and status of particular funerary model owners and their desire to maintain access to immense resources in the afterlife.

The vast majority of funerary models are uninscribed, which has caused scholars to refer to them as representations of anonymous, generic servants (e.g., Tooley 1989: 85; Kroenke 2010: 4; Eschenbrenner-Diemer 2017: 172). When inscriptions do appear, they mostly comprise labels specifying the type and quantity of grain being stored in granaries or short captions that identify the tomb owner on boats or offering-bearers, such as in a female offering-bearer of Hepikem from Meir (A4) where the name and title of the owner is transcribed on the load carried on the figure's head (Jurman 2018: 104-105).¹⁵ However, there are some exceptions where the figures depicted are individually identified. The crew on board a model boat belonging to the official Mentuhotep from Thebes are each labelled with their own name as well as the name of their mother (Steindorff 1896: 34-37), while two offering-bearers from the tomb of the Two Brothers at Rifeh are inscribed with their names and positions within the household (David 2007: 83).¹⁶ Such inscriptions demonstrate that funerary models could represent known individuals and they raise the possibility that the uninscribed examples may have also portrayed specific people (Barker 2020: 75-76; 2022: 186).

The manufacture of funerary models rapidly declined in the late Middle Kingdom, with the quantity and diversity of the sculptures significantly diminishing around the reigns of Senusret II and Senusret III. Examples from this period are only known from a limited number of sites, including Thebes, Qau el-Kebir, Rifeh, Deir el-Bersha and Beni Hassan (Tooley 1989:

¹⁴The funerary models of Meketre are today divided between the collections of the Egyptian Museum in Cairo and the Metropolitan Museum of Art in New York.

 $^{^{15}\}mathrm{This}$ funerary model is today housed in the Museum of Antiquities, Eton College, Windsor: ECM.1591-2010.

¹⁶These funerary models are part of the collections of Staatliche Museen zu Berlin: ÄM 12; and the Manchester Museum: 4734, 4738.

63-66). Most of the known examples comprise representations of boats and offering-bearers, though a few examples of granaries and food production are found, such as those from the tombs of Sepi III at Deir el-Bersha (E14) and Ma at Beni Hassan (BH 500) (Tooley 1989: 64-67).¹⁷ After the Middle Kingdom, funerary models are found only rarely, with the known New Kingdom serving sculptures restricted to boats, a granary and mourners, all of which are from royal Theban tombs, demonstrating a possible restriction of the practice to royalty (Tooley 1989: 67-68).¹⁸

3 Location of serving sculptures in the tomb

One of the main developments serving sculptures underwent during the period from the Old Kingdom to the mid-12th Dynasty was their location in the tomb. As outlined above, the limestone serving statues of the 4th and 5th Dynasties were housed in the *serdab* in the superstructure, whereas the wooden funerary models from the late 6th Dynasty onwards were deposited in the substructure. This development has been given little attention in scholarship, but it forms a significant change in funerary practice. Understanding the characteristics and function of each location is essential for determining the reasons behind this development.

The *serdab* is an enclosed chamber in the tomb's superstructure which housed statues of the tomb owner and members of his/her family. It was a common architectural element of Old Kingdom tombs, though its placement in the tomb shifted over time from an exterior location to an interior position, usually near the false door (Bárta 1998: 74-75; Warden 2017: 478-480). The earliest known example is from the pyramid complex of Djoser at Saqqara, and the first private *serdabs* also date to the reign of this king (Brovarski 1984: 874-875; Bolshakov 1997: 106). The *serdab* was regularly connected to the tomb-chapel or offering place through an aperture. This slot allowed the statues to 'view' and receive the benefits of the offerings presented and the rituals performed in the cult ceremonies, particularly the burning of incense (D'Auria et al. 1988: 88; Roth 2002: 107-108). Intact *serdabs* reveal that the statues were almost invariably positioned to face towards the aperture, providing a clear association between the ceremonies and the

 $^{^{17}{\}rm These}$ two examples are housed in the institutions of the Egyptian Museum, Cairo: JE 32831; and the University of Aberdeen: ABDUA:22166.

¹⁸For discussion on the reasons for the disappearance of funerary models, see Tooley 1989: 63-68; Roth 2002: 118-119; Eschenbrenner-Diemer 2017: 166-168; Barker 2022: 176.

sculptures (Brovarski 1984: 877; D'Auria et al. 1988: 88). The number of statues per *serdab* and the number of *serdabs* per tomb varied, with the most expansive known example belonging to Rawer whose tomb at Giza (G 8988) included 25 *serdabs* and over 100 statues (Brovarski 1984: 877; Bolshakov 1997: 107-108). The walls of *serdabs* remained bare except for a few 6th Dynasty examples decorated with rows of statues, such as in the tombs of Nekhebu at Giza (G 2381) and Pepyankh the Black at Meir (A2) (Blackman and Apted 1953; pls. 37.46; Kanawati and Evans 2014; pls. 75.78; Simmons

Nekhebu at Giza (G 2381) and Pepyankh the Black at Meir (A2) (Blackman and Apted 1953: pls. 37-46; Kanawati and Evans 2014: pls. 75-78; Simmons 2016: 196-203). This rare decoration, however, was directly linked with the function of the *serdabs* (Bárta 1998: 73). Serving statues were added to *serdabs* firstly in the late 4th Dynasty and then more commonly after the mid-5th Dynasty (Lehmann 2000: 92-93,

and then more commonly after the mid-5th Dynasty (Lehmann 2000: 92-93, 99-100; Roth 2002: 103). Although these sculptures are often not considered to be cult statues like the formal statues of the tomb owner due to the fact that they represent serving figures, their placement in the *serdab* would have caused them to benefit from the incense and ceremonies performed at the aperture. Hidden in the darkness of the *serdab*, the statues would not have been easily seen by the living, and so they did not have a function in publicly memorialising the individuals represented (Roth 2002: 108). However, their location in the superstructure did give them a close association with the living as they received the offerings and incense presented in the mortuary cult. Roth (2002: 109, 114-115) has shown that the virtually intact *serdab* of Nikauhathor at Giza, which was unusually found to contain serving statues without any statues of the tomb owner, demonstrates that serving sculptures could function as cult statues and that, whether inscribed or uninscribed, they probably represented known individuals.

In the 6th Dynasty, both the formal statues of the tomb owner and serving sculptures were housed in the substructure, and the *serdab* began to disappear as an architectural element of the tomb. The subterranean part of the tomb became the preferred location of serving sculptures from this period until their disappearance from the archaeological record in the mid-12th Dynasty. Most commonly, funerary models were deposited within the burial chamber itself. Intact burials reveal that their precise location in the chamber was dependent upon the size and shape of the chamber as well as the scale of the models but that close proximity to the deceased was important (Tooley 1989: 76). Tooley (1989: 82-83) has demonstrated that the ideal location was to the east of the coffin, immediately next to the eye-panel, as it allowed the deceased to view the activities performed and receive the goods and services the figures offered. All of the funerary models

in the intact tomb 374 at Sedment were found in this location (Tooley 1989: 50). A position on top of the coffin was also popular, though this location usually could not accommodate tall funerary models like offering-bearers. In the tomb of Djay at Beni Hassan (BH 275), for example, all of the funerary models were placed on the lid of the coffin except for the offering-bearer which was positioned to the side (Garstang 1907: 221; Tooley 1989: 44-45). Alternatively, funerary models could be concealed within a niche in the substructure. Sometimes these niches were in the burial chamber itself, such as in the tomb of Niankhpepykem at Meir (A1) where the models were concealed in a floor niche, and in tomb 2107 at Sedment where they were deposited in an eastern wall niche (Legrain 1900: 68-69; Petrie and Brunton 1924: 11; Tooley 1989: 11, 50). In other instances, the niches were cut within the shaft, as in tomb 213 in the Teti pyramid cemetery at Saqqara (Firth and Gunn 1926: 40; Tooley 1989: 9). A location in the burial chamber enabled funerary models in many cases to maintain their association with the statue of the tomb owner but also to develop a close connection with his/her body. Such close proximity to the deceased presents a direct connection between the services offered by funerary models and the tomb owner's afterlife (Barker 2022: 192).

Only occasionally were wooden funerary models housed in the superstructure, and in most of these instances, the sculptures were still concealed. An assemblage of wooden funerary models was found in a wall niche in the tomb-chapel of Hogarth Tomb 35 at Asyut, for example (Tooley 1989: 37; Zitman 2010: 337). Alternatively, in the tomb of Meketre at Thebes (TT280), the 24 funerary models were deposited in a small chamber cut into the floor of the tomb's corridor which was sealed with bricks and stone slabs (Winlock 1955: 12-14) (Figure 4). Although only just below the surface, to some extent this location can be considered subterranean. In rare instances, however, funerary models were placed directly in the tomb-chapel without any concealment. In the tomb of Nakhti at Asyut (CPA 7), the most refined funerary models were housed in the superstructure while the others were deposited in the burial chamber to the east of the coffin (Podvin 2000: M15: Zitman 2010: 209-212).¹⁹ This practice is surprising considering the common desire to keep serving sculptures concealed. By placing the highest quality funerary models in the accessible tomb-chapel, Nakhti publicly conveyed his superior social status and access to resources

 $^{^{19}\}mathrm{The}$ funerary models of Nakhti are today distributed across multiple collections, including the Egyptian Museum in Cairo, the Louvre in Paris and the Museum of Fine Arts in Boston.

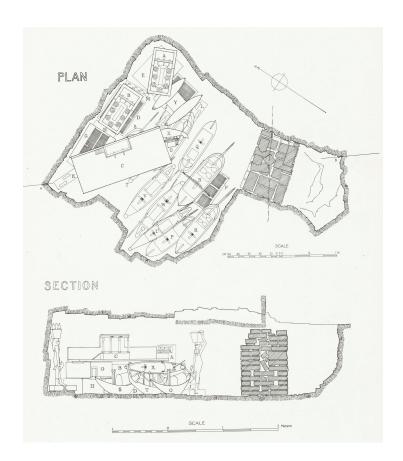


Figure 4: Plan and section of the niche housing the funerary models in the tomb of Meketre at Thebes (TT280). Winlock 1955: pl. 55 (https://library.metmuseum.org/record=b1047121).

(Eschenbrenner-Diemer 2017: 178-179). However, it heightened the threat of theft or damage to the sculptures. It is possible that the funerary models in the superstructure were deposited by the living as a form of offering to the tomb owner after his death. The plundered state of tomb-chapels prevents knowledge whether this practice of placing funerary models in superstructures was more commonly adopted.

There are some parallels between *serdabs* and burial chambers, enabling both to be suitable locations for serving sculptures. Both spaces housed the deceased's presence, enabling serving statues and funerary models to maintain close proximity to the tomb owner (Roth 1995: 57). However, the form of the tomb owner's presence differed between the two locations. In the *serdab*, the serving statues accompanied statues of the tomb owner, whereas

in the burial chamber, funerary models were positioned close to the body and sometimes also to the statues (Eschenbrenner-Diemer 2017: 176-178). This role of accompanying the tomb owner enabled both types of serving sculptures to perform acts of service for his/her benefit.

Additionally, both spaces are dark and enclosed, causing the sculptures placed within to remain unseen (Warden 2017: 468). As a result, both serving statues and funerary models did not have a role in publicly promoting or memorialising the individuals represented. Instead, their primary purpose was to serve the tomb owner by providing him/her with desired goods and services. Placing the sculptures in enclosed spaces also shows a desire to keep them secure. The ancient Egyptians implemented several security measures in the construction, decoration and furnishing of their tombs with the aim of ensuring access to a suitable dwelling and provisions for eternity (Kanawati 2010: 13-19). As an important means of provisioning the deceased with goods and services in the afterlife, serving sculptures needed to be protected. Both the *serdab* and burial chamber offered enclosed spaces which would ideally keep their contents secure.

However, the protection of *serdabs* and substructures could not be ensured. Housing objects of value, both locations were regularly targeted by thieves. Additional measures of security were often implemented in an attempt to further safeguard the contents, especially for those in the burial chamber. Several architectural measures were adopted to make the substructure more secure, including extending the depth of the shaft, using a portcullis to block the entrance and placing the mouth of the shaft outside the chapel (Kanawati 2010: 13-19). Within the burial chamber, funerary models were often further protected by being concealed within a niche. If the substructure was entered and violated, this niche would hopefully keep the sculptures protected. In the case of Niankhpepykem at Meir (A1), this measure of security was successful as, when uncovered by excavators, the burial chamber was found robbed, but the funerary models remained secure in the one-metre-deep niche cut in the floor of the chamber which had been sealed with a stone slab (Legrain 1900: 68-69; Tooley 1989: 11). Measures of security were also adopted for funerary models housed in the superstructure. As outlined above, these sculptures were almost exclusively hidden in niches. This measure of security was successful for Meketre at Thebes (TT280) whose funerary models remained secure until they were revealed by excavators in 1920 (Winlock 1955: 12-14). It is clear that security was of paramount importance for serving sculptures.

Although security and concealment were important characteristics of both *serdabs* and burial chambers, allowing both to function as appropriate homes for serving sculptures, there are some notable differences between the two locations. Both formed dark and enclosed spaces, but each had a different level of interaction with the living. According to Roth's (2002: 116) argument that serving statues could represent actual individuals known by the tomb owner, their location in the *serdab* allowed them to receive the incense and offerings presented in the mortuary cult while also providing acts of service for the tomb owner's benefit. As such, serving statues had a direct relationship with the priests, family and other community members who visited the tomb. In contrast, funerary models were completely separated from the living, being located in the subterranean burial chamber. The sculptures no longer functioned as cult statues and instead were solely focused on provisioning the deceased (Roth 2002: 118-119). Funerary models did not maintain their role in the mortuary cult as they were placed in the part of the tomb that was not accessible for ritual activities after interment (Lehmann 2000: 248; Roth 2002: 107-108). Instead, this subterranean location was the concealed home of the body of the tomb owner. The practice of housing funerary models in the burial chamber demonstrates a greater desire to position serving sculptures in close proximity to the body and to remove their association with the living.

4 Reasons for the change in location of serving sculptures

Previous explanations for this change in location of serving sculptures have focused on religious reasons. The growth of the Osirian cult in the late 5th and 6th Dynasties caused greater attention to be devoted to the subterranean part of the tomb (Grajetzki 2003: 27). As ruler of the realm of the dead, Osiris had a strong association with funerary beliefs and practices. From the reign of Nyuserre onwards, the traditional offering-table scene commonly displayed in elite tombs acquired a stronger symbolic association with the Osirian myth, with the depiction of reeds as the primary offering on the table instead of bread-loaves (Bárta 2019: 142-143). The 'democratisation of the afterlife' theory proposed that at first the king alone could identify with the god after death, until after the Old Kingdom when the previously restricted Pyramid Texts became accessible

to the non-royal population in the form of the Coffin Texts.²⁰ More recently. however, this theory has been dismantled by scholars, particularly by Smith (2017: 264-266) who has demonstrated that royal aspirations for the afterlife did not differ significantly from non-royal ones and that non-royal individuals did have access to spells for the afterlife in the Old Kingdom. Rather, the change occurred in how the spells were displayed, and Smith (2017: 265) attributes this to "a shift in the configuration of customary practice" rather than a strict dictation by royalty. The spells enabled the deceased, both royal and non-royal, to interact with Osiris and enjoy the benefits of associating with him (Smith 2017: 266-267). A stronger emphasis on the chthonic symbolism related to Osiris in the late 6th Dynasty is attributed by scholars as the reason why both the formal statues of the tomb owner and serving sculptures were moved to the burial chamber (Roth 2002: 118; Eschenbrenner-Diemer 2017: 176-178). In this location, it is followed, serving sculptures could be more closely associated with, and effective in their service for, the afterlife.

Not only were there these changes in religious beliefs in the late Old Kingdom, but there were also significant developments in kingship, the administration, economy, climate, and Egypt's relationship with its neighbours. It is important to consider how these historical factors may have impacted burial practices alongside the religious explanations. Much research has been conducted on the late Old Kingdom and First Intermediate Period and the various internal and external forces to which Egyptian society was adapting. Some of the main historical factors identified by scholars will be briefly summarised here in order to consider the changing historical circumstances during the period in which serving sculptures began to be housed in the burial chamber.

One aspect of the changing nature of kingship during the late Old Kingdom which has been identified by scholars is the weakening image of divine kingship. This has been attributed to a number of factors, including the ascension to the throne of the young kings Pepy I and Merenre during a time when the central administration was facing severe challenges, and similarly the young age and subsequent long reign of Pepy II at the end of the 6th Dynasty (Goedicke 1989: 111-116; Kanawati and Swinton 2018: 125, 165-170). It has also been demonstrated that some of the kings suffered from a lack of support from their high officials, such as Teti who was

 $^{^{20}}$ For discussion on the 'democratisation of the after life' theory, see Sørensen 1989: 109-125; Hays 2011: 115-130; Willems 2014: 125-133; Smith 2017: 166-270; Nuzzolo 2021: 111-146; Nyord 2021: 199-210.

most likely assassinated, and Pepy I who probably endured two conspiracies against him, including one from within the palace (Kanawati 2003: 169-171, 177; Afifi 2013: 28-29). During the 5th Dynasty, there was an increasing royal emphasis on the solar cult, which also had an impact on kingship. Association between the king and the sun-god was already well-established in the 4th Dynasty, but a stronger emphasis on this relationship developed in the 5th Dynasty with the construction of sun temples (Shalomi-Hen 2015: 456-458; Nuzzolo and Krejči 2017: 375-376). Nuzzolo (2015: 366-392) has demonstrated that the sun temples served as the setting not only for the celebration of the solar cult, but also for the symbolic celebration of the Heb-Sed rituals in which the pharaoh's kingship and association with the sun-god were reconfirmed. The priesthood of Re not only had to ensure the maintenance of the solar cult celebrations, but also had the important role of contributing to the supply and perpetuation of the king's funerary cult (Nuzzolo 2018: 288-289). With this close connection between the king's legitimation and the solar cult, it has been suggested that the priesthood of Re was able to attain more power and influence, which may have challenged the authority of the king (Verner 2014: 245-246). However, the sun temples disappeared at the end of the 5th Dynasty, and this has been attributed by Shalomi-Hen (2015: 462) to the growth of the Osirian cult. Such developments changed the image of divine kingship and Nuzzolo (2018: 467-468) suggests would have "provoked a further weakening of his divinity and power."

Alongside this decline was a growth in the power of officials, which changed the balance of power in the administration. Bárta (2019: 101-149) has demonstrated that as early as the reign of Nyuserre, a rise is seen in the influence, power and wealth of the elite. Memphite tombs of the highest officials were large and richly decorated and some even adopted royal architectural elements (Bárta 2009-2010: 145).²¹ An increasing number of duties was concentrated in the hands of individual officials, and those of non-royal origin began to occupy the highest administrative positions (Bárta 2013b: 270-272). This growth in the power of the elite seems to have caused some concern for the king, with each ruler from Djedkare onwards introducing administrative reforms to preserve the image of centralised

 $^{^{21}}$ Bárta (2013b: 267-269) has demonstrated that the vizier Ptahshepses, who served under Nyuserre, was the first to adopt several royal architectural elements in his tomb at Abusir, including a monumental columned portico, a statue room with three niches, a large open offering court, an east-west offering chapel, a boat room, and an angular vaulted ceiling over the burial chamber.

kingship (Kanawati 1980: 128-131; Bárta 2013a: 170-173; 2013b: 272-274). One of the significant changes in administration that occurred was that the Memphite officials who had governed the provinces began to reside and be buried in the regions they administered from the late 5th Dynasty onwards. These officials were given greater power, as reflected by their new titles such as 'overseer of Upper Egypt' and 'great overlord', and by their positions becoming hereditary (Moreno García 2013: 133; Kanawati and Swinton 2018: 65-67, 70-73). By the end of the 6th Dynasty, some of the provincial elite had acquired great power and independence, and although this does not seem to have been a direct challenge to the king, it did create an environment which stimulated the emergence of local, ambitious leaders who had access to significant resources and the capacity to raise their own armies (Grajetzki 2006: 7; Moreno García 2013: 144, 148; Kanawati and Swinton 2018: 190-191).

Scholars have also highlighted economic changes in late Old Kingdom Egypt. The monumental building projects of the early Old Kingdom and the on-going maintenance of the pyramid complexes would have required significant treasury resources. Bárta (2014: 28) argues that this would have led to a strain on the economy. This seems to have contributed to the reduction in the size and grandeur of the pyramid complexes of the later Old Kingdom (Verner 2014: 238-239). That of Pepy II was completed before the middle of his reign and without any additions for one of his later wives who was the mother of one of his successors (Kanawati and Swinton 2018: 197-198, 201-202). A general decline in size and quality is also seen in the tombs of the Memphite officials, with the lower levels of the administration no longer able to build tombs for themselves by the end of the 5th Dynasty, and the highest officials unable to construct individual tombs by the end of the 6th Dynasty (Kanawati and Swinton 2018: 172-173, 199). The burials in the cemetery of Pepy II display impoverishment in building materials and construction, with tombs mostly fashioned of mudbrick and the decoration primarily restricted to the burial chamber (Kanawati and Swinton 2018: 173). Such limitations on economic resources would have impacted the central administration's ability to govern.

It has also been demonstrated that climatic changes impacted society and economy during the late Old Kingdom. The annual flood of the Nile was integral to the functioning of Egypt and any drastic changes in the height of the flood would have had significant consequences. Evidence of a climatic decline is first attested as early as the reign of Teti and continued over a period of almost two centuries (Bárta and Bezděk 2008:

221-222). The flow of the Nile declined dramatically, leading to a prolonged hydrological drought in which the river was unable to carry its nutrients beyond its edges (Butzer 1984: 106-109; Stanley et al. 2003: 401; Burn 2021: xvi-xviii). As a result, society could not rely upon the inundation to consistently fertilise the land. Alongside this were periods of torrential rains near the end of the 6th Dynasty, which Welc and Marks (2014: 129-132) have shown had further devastating consequences, including the decline in use of particular cemeteries, such as Saqqara where intensive runoff resulting from heavy rains damaged funerary structures. Society had to respond to these changing climatic conditions and Burn (2021: 125-127) has argued that the ancient Egyptians adapted the way they exploited local food resources as they could not consistently rely upon agricultural productivity. Although society was resilient in the face of these climatic changes, the inability to rely upon consistent floodwaters for food supplies must have elevated feelings of insecurity within the administration, economy and society as their strength was intimately connected with the health of agricultural productivity.

Alongside these growing challenges, Egypt was coming into increased contact with its neighbours and the role of the military grew in prominence. Although Egypt had enjoyed a peaceful and stable position in its region of the world in the early Old Kingdom and did not require a permanent standing army, the need to recruit troops seems to have increased in the 5th and 6th Dynasties. It is during this period that we find the first examples of military battles in royal and elite tomb scenes. Fragments from the causeway of the pyramid of Unis at Saggara illustrate the existence of a battle scene (Hassan 1938: 519-520, pl. 95),²² while the late 5th Dynasty elite tombs of Inti at Deshasha and Kaemheset at Saqqara portray siege scenes which probably depict actual campaigns to the Levant (Kanawati and McFarlane 1993: pl. 27; McFarlane 2003: pl. 48; Moreno García 2010: 31; Mourad 2011: 148-149). Multiple expeditions led by Weni are recorded in the 6th Dynasty which aimed to deal with rebels in the region to the north-east of Egypt (Urk. I, 98-110; Moreno García 2010: 31-32; Shaw 2017: 13-15; Kanawati and Swinton 2018: 207). Additionally, tensions with Nubia were increasing, as attested by the texts of Harkhuf and Sabni which record increased difficulties when travelling south (Lichtheim 1988: 17-18;

²²Only one other royal military scene is known from the Old Kingdom, and it is found on a re-used block from the pyramid of Amenemhat I at Lisht (Goedicke 1971: 74-75), though it is quite possible that other examples originally existed but have been lost (Schulman 1982: 165).

2019: 55-60; Kanawati and Swinton 2018: 207). While Egypt was becoming weaker internally, its neighbours were gaining strength.

All of these changing internal and external conditions towards the end of the Old Kingdom would have created significant instability in society. Bárta (2013a: 174-175) describes these conditions in terms of different types of crises, namely those of the identity of the ruling group, the participation of those who took part in the administration, the ability of the rulers to control the administration and economy, the legitimacy of the authority, and the distribution of economic resources. Such crises would have been felt across the population and contributed to a feeling of insecurity for many.

It appears that instability and insecurity continued in the First Intermediate Period when Egypt was no longer unified under a single ruler but was divided into several units with provincial rulers acting more or less independently of the central government. Two main centres of power emerged around Herakleopolis and Thebes, with those in the north loyal to the royal family and those in the south independent of the royals (Spalinger 2013: 437; Moreno García 2015: 84; Shaw 2017: 33). With this division came conflict between the two regions as well as between the provinces. Provincial rulers developed local troops for their own use and values associated with military leadership entered the realm of ideology (Moreno García 2010: 29; Spalinger 2017: 95). Although conditions varied across Egypt, with certain provinces and social groups able to flourish in the changed conditions, some regions suffered from limited food supplies, economic crisis and civil war (Seidlmayer 2000: 110-122; Moreno García 2015: 79-94). The autobiography of Ankhtifi from Mo'alla, though exaggerated to showcase the author's personal success in re-establishing order and prosperity, evokes the atmosphere of the period. It describes how "Upper Egypt was dying of hunger and people were eating their children" and that in response to the violence, Ankhtifi "caused a man to embrace (even) those who had killed his father or brother" (Vandier 1950: 163-164, 220-222; Seidlmayer 2000: 118-123).

The increased importance of the military is witnessed in the growing prevalence of military themes in funerary decorative schemes. More representations of military battles are known from elite tombs during the First Intermediate Period and early Middle Kingdom, with 10 known scenes portraying military activity (Schulman 1982: 165-166; El-Khadragy 2008: 227-229; Barker forthcoming).²³ In royal contexts, the surviving evidence

²³The known military scenes are found in the tombs of Setka at Qubbet el-Hawa (QH 110), Ankhtifi at Mo'alla, Intef at Thebes (which included two scenes) (TT386), Iti-ibi

is limited, but fragments from the mortuary temple of Mentuhotep II at Deir el-Bahri show an attack on a fortified palace (Naville 1907: pls. 14-15; Schulman 1982: 165-166). In addition to this, the military theme appears in the repertoire of funerary models for the first time and model boats begin to be equipped with weapons (Kroenke 2010: 277-278; Barker 2022: 88).²⁴ It is also during this period that the custom of interring weapons and models of weapons in the burial became significant for individuals from different strata of society (Seidlmayer 1990: 194; Barker forthcoming). At Asyut, the official Nakhti (CPA 7) interred full-sized models of bows and arrows, quivers with spears, and a shield among his elaborate tomb equipment, while in the more humble burial of Hogarth Tomb 11, a bow and arrows were deposited on top of an undecorated coffin (Chassinat and Palanque 1911: 47, 51; Zitman 2010: 167-168). The increased number of funerary representations and practices associated with the military conveys an enhanced desire for continual access to security and protection in the afterlife.

The religious changes that occurred at the time serving sculptures began to be housed in the substructure during the late Old Kingdom cannot be considered in isolation. These changes occurred alongside significant developments in historical circumstances. As outlined above, these include changes in kingship, the administration, economy, society and climate as well as an increased presence of military activity. Although we cannot be certain of the extent to which these changes impacted each individual, it seems probable that such changing circumstances would have increased feelings of insecurity for many in society. With the importance the ancient Egyptians placed upon maintaining access to a secure supply of provisions in the afterlife, it seems reasonable to suggest that a period of instability would have impacted burial practices.

⁽Tomb III) and Iti-ibi-iqer (N13.1) at Asyut, and Baqet III (no. 15), Khety (no. 17), Khnumhotep I (no. 14) and Amenemhat (no. 2) at Beni Hassan (Newberry 1893a: pls. 14, 16, 47; 1893b: pls. 5, 15; Vandier 1950: figs. 61-63; Fischer 1961: fig. 5; Jaroš-Deckert 1984: pl. 17; El-Khadragy 2007: fig. 3; Kahl et al. 2007: fig. 2; Kanawati and Evans 2016: pls. 97-98, 102; 2018: pls. 76-78; 2020: pls. 102-104; Lashien and Mourad 2019: pls. 73-74).

²⁴Six funerary models representing the military are known: one from Pit 5 at Deir el-Bahri, two from the tomb of Mesehti at Asyut (Hogarth Tomb 3), and three from the tomb of Djehutynakht at Deir el-Bersha (10A) (Egyptian Museum, Cairo: CG 257, 258; Museum of Fine Arts, Boston: 21.803, 21.806, number unknown; Naville 1907: 43, 36). Three main weapons are included on model boats: shields, quivers and javelins, with shields being the most common (Barker 2022: 88-89).

The change in location of serving sculptures from the above-ground *serdab* to the below-ground burial chamber can be considered as one such response to heightened feelings of insecurity. Serving sculptures formed an important safeguard for the tomb owner's eternal wellbeing. The two most important provisions offered by funerary models were nourishment and transport, which are encapsulated by the most commonly represented themes of granaries, bread-making, brewing beer, offering-bearers and boats (Barker 2022: 178). These provisions were essential for the tomb owner's eternal wellbeing and so ensuring continual and secure access to them would have been integral for tomb owners.

Although both the *serdab* and burial chamber comprised concealed sections of the tomb in which to house serving sculptures, it is here argued that the burial chamber was considered a more suitable location during a period of instability. Unlike the *serdab*, it was positioned below ground, sometimes at significant depths, and there was no interaction between funerary models and the living once interred in this location. Instead, the representations were solely accessible to the deceased. It is this close relationship with the body that seems to have been of great significance during a period of instability. Depositing funerary models alongside the body in the substructure gave the tomb owner immediate access to the supplies and services they offered. It also meant that the tomb owner did not have to rely solely upon the living to continually present offerings in the tomb-chapel, an activity that may have been more hindered than usual due to the heightened insecurity felt in society. The increased desire for security can thus be considered one of the factors that influenced the decision to house serving sculptures in the burial chamber instead of the *serdab*.

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Bibliography

AFIFI, Mahmoud (2013) "The conspiracies in the first half of the Sixth Dynasty", Études et Travaux 26 (1): 25-29.

ARNOLD, Dieter (1981) Der Tempel des Königs Mentuhotep von Deir el-Bahari. Band III: Die königlichen Beigaben. Mainz am Rhein: Verlag Philipp von Zabern.

BARKER, Georgia (2020) "Animate decoration in the burial chamber: A comparison of funerary models and wall scenes", *Journal of the American Research Center in Egypt* 56: 71-81.

BARKER, Georgia (2022) Preparing for eternity: Funerary models and wall scenes from the Egyptian Old and Middle Kingdoms. Oxford: BAR Publishing.

BARKER, Georgia (forthcoming) "Elite military representations from the First Intermediate Period and Middle Kingdom and their historical significance".

BÁRTA, Miroslav (1998) "Serdab and statue placement in the private tombs down to the Fourth Dynasty", *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 54: 65-75.

BÁRTA, Miroslav (2009-2010) "Filling the chambers, rising the status: Sixth Dynasty context for the decline of the Old Kingdom", *Cahier de Recherches de l'Institut de Papyrologie et d'Égyptologie de Lille* 28: 145-155.

BÁRTA, Miroslav (2013a) "Kings, viziers, and courtiers: Executive power in the third millennium B.C.", in: Moreno García, J.C. (ed.), Ancient Egyptian administration. Leiden/Boston: Brill, pp. 153-175.

BÁRTA, Miroslav (2013b) "Egyptian kingship during the Old Kingdom", in: Hill, J.A., Jones, P. and Morales, A.J. (eds.), *Experiencing power,* generating authority: Cosmos, politics, and the ideology of kingship in Ancient Egypt and Mesopotamia. Philadelphia: University of Pennsylvania Press, pp. 257-283.

BÁRTA, Miroslav (2014) "Collapse hidden in success: Rise and fall of the Old Kingdom", *Kmt* 25 (1): 18-28.

BÁRTA, Miroslav (2019) Analyzing collapse: The rise and fall of the Old Kingdom. Cairo: American University in Cairo Press.

BÁRTA, Miroslav and BEZDĚK, Ales (2008) "Beetles and the decline of the Old Kingdom: Climate change in ancient Egypt", in: Vymazalová, H. and Bárta, M. (eds.), *Chronology and archaeology in Ancient Egypt (the third millennium B.C.)*. Prague: Charles University, pp. 214-222.

BLACKMAN, Aylward M. and APTED, Michael R. (1953) The rock tombs of Meir. Part V: The tomb-chapels of A, No. 1 (that of Ni-'ankh-Pepi the Black), A, No. 2 (that of Pepi'onkh with the 'good name' of Heny the Black), A, No. 4 (that of Hepi the Black), D, No. 1 (that of Pepi), and E, Nos. 1-4 (those of Meniu, Nenki, Pepi'onkh and Tjetu). London: Egypt Exploration Society.

BOLSHAKOV, Andrey O. (1997) Man and his double in Egyptian ideology of the Old Kingdom. Wiesbaden: Harrassowitz Verlag.

BORCHARDT, Ludwig (1911) Statuen und Statuetten von Konigen und Privatleuten im Museum von Kairo, Nr. 1-1294. Berlin: Reichsdruckerei.

BREASTED, James Henry (1948) *Egyptian servant statues*. Washington: Pantheon Books.

BROVARSKI, Edward (1984) "Serdab", *Lexikon der Ägyptologie* V: 874-879.

BURN, John W. (2021) A river in 'drought'? Environment and cultural ramifications of Old Kingdom climate change. Oxford: BAR Publishing.

BUTZER, Karl W. (1984) "Long-term Nile flood variation and political discontinuities in Pharaonic Egypt", in: Clark, J.D. and Brandt, S.A. (eds.), From hunters to farmers: The causes of consequences of food production in Africa. Berkeley: University of California Press, pp. 102-112.

CHASSINAT, Émile and PALANQUE, Charles (1911) Une campagne de fouilles dans la nécropole d'Assiout. Cairo: l'Institut Français d'archéologie orientale.

D'AURIA, Sue, LACOVARA, Peter and ROEHRIG, Catharine H. (1988) Mummies and magic: The funerary arts of Ancient Egypt. Boston: Museum of Fine Arts.

DAVID, Ann R. (2007) The Two Brothers: Death and afterlife in Middle Kingdom Egypt. Bolton: Rutherford.

EL-KHADRAGY, Mahmoud (2007) "Some significant features in the decoration of the chapel of Iti-ibi-iqer at Asyut", *Studien zur Altägyptischen Kultur* 36: 105-135.

EL-KHADRAGY, Mahmoud (2008) "The decoration of the rock-cut chapel of Khety II at Asyut", *Studien zur Altägyptischen Kultur* 37: 219-241.

ESCHENBRENNER-DIEMER, GERSANDE (2017) "From the workshop to the grave: The case of wooden funerary models", in: Miniaci, G., Betrò, M. and Quirke, S. (eds.), Company of images: Modelling the imaginary world of Middle Kingdom Egypt (2000-1500 BC). Proceedings of the international conference of the EPOCHS Project held 18th-20th September 2014 at UCL, London. Leuven: Peeters, pp. 133-191.

FIRTH, Cecil M. and GUNN, Battiscombe G. (1926) *Excavations at Saqqara: Teti Pyramid Cemeteries*. Cairo: l'Institut Français d'archéologie orientale.

FISCHER, Henry G. (1961) "The Nubian mercenaries of Gebelein during the First Intermediate Period", *Kush* 9: 44-80.

FREED, Rita E. and DOXEY, Denise M. (2009) "The Djehutynakhts' models", in: Freed, R.E., Berman, L.M., Doxey, D.M. and Picardo, N.S. (eds.), *The secrets of Tomb 10A. Egypt 2000 BC*. Boston: MFA Publications, pp. 151-177.

GARSTANG, John (1907) The burial customs of Ancient Egypt as illustrated by the tombs of the Middle Kingdom. London: Constable.

GOEDICKE, Hans (1971) Re-used blocks from the Pyramid of Amenemhat I at Lisht. New York: The Metropolitan Museum of Art.

GOEDICKE, Hans (1989) "The death of Pepy II-Neferkare", *Studien zur Altägyptischen Kultur* 15: 111-121.

GRAJETZKI, Wolfram (2003) Burial customs in Ancient Egypt: Life in death for rich and poor. London: Duckworth.

GRAJETZKI, Wolfram (2006) The Middle Kingdom of Ancient Egypt: History, archaeology and society. London: Duckworth.

HAYS, Harold M. (2011) "The death of the democratisation of the afterlife", in: Strudwick, N. and Strudwick, H. (eds.), *Old Kingdom, new perspectives: Egyptian art and archaeology 2750-2150 BC*. Oxford: Oxbow Books, pp. 115-130.

HASSAN, Selim B. (1938) "Excavations at Saqqara 1937-1938", Annales du service des antiquités de l'Égypte 38: 503-521.

HASSAN, Selim B. (1950) Excavations at Giza: The mastabas of the Sixth Season and their description. Volume 6, Part 3, 1934-1935. Cairo: Government Press.

JAROŠ-DECKERT, Brigitte (1984) Das Grab des Jnj-Jtj.f: Die Wandmalereien der XI. Dynastie. Mainz am Rhein: von Zabern.

JUNKER, Hermann (1947) *Gîza VIII: Der Ostabschnitt des Westfriedhofs.* Vienna: Rudolph M. Rohrer.

JURMAN, Claus (2018) "To show and to designate: Attitudes towards representing craftsmanship and material culture in Middle Kingdom elite tombs", in: Miniaci, G., Moreno García, J.C., Quirke, S. and Stauder, A. (eds.), *The arts of making in Ancient Egypt: Voices, images, and objects of material producers 2000-1550 BC*. Leiden: Sidestone Press, pp. 101-116.

KAHL, Jochem, EL-KHADRAGY, Mahmoud, VERHOEVEN, Ursula and ZÖLLER, Monika (2007) "The Asyut Project: Fourth season of fieldwork (2006)", Studien zur Altägyptischen Kultur 36: 81-103.

KANAWATI, Naguib (1980) Governmental reforms in Old Kingdom Egypt. Warminster: Aris and Phillips Ltd.

KANAWATI, Naguib (2003) Conspiracies in the Egyptian palace: Unis to Pepy I. London/New York: Routledge.

KANAWATI, Naguib (2010) Decorated burial chambers of the Old Kingdom. Cairo: Supreme Council of Antiquities.

KANAWATI, Naguib and EVANS, Linda (2014), *The cemetery of Meir. Volume II: The tomb of Pepyankh the Black.* Oxford: Aris and Phillips Ltd.

KANAWATI, Naguib and EVANS, Linda (2016), *Beni Hassan. Volume III: The tomb of Amenemhat.* Oxford: Aris and Phillips Ltd.

KANAWATI, Naguib and EVANS, Linda (2018), *Beni Hassan. Volume IV: The tomb of Baget III.* Oxford: Aris and Phillips Ltd.

KANAWATI, Naguib and EVANS, Linda (2020), *Beni Hassan. Volume VI: The tomb of Khety.* Wallasey: Abercromby Press.

KANAWATI, Naguib and MCFARLANE, Ann (1993) *Deshasha: The tombs* of *Inti, Shedu and others*. Sydney: Australian Centre for Egyptology.

KANAWATI, Naguib and SWINTON, Joyce (2018) Egypt in the Sixth Dynasty: Challenges and responses. Wallasey: Abercromby Press.

KROENKE, Karin Roberta (2010) The provincial cemeteries of Naga ed-Deir: A comprehensive study of tomb models dating from the late Old Kingdom to the late Middle Kingdom. Unpublished PhD dissertation, University of California, Berkeley.

LASHIEN, Miral and MOURAD, Anna-Latifa (2019) *Beni Hassan. Volume V: The tomb of Khnumhotep I.* Oxford: Aris and Phillips Ltd.

LEGRAIN, Georges (1900) "Notes sur la nécropole de Meir", Annales du service des antiquités de l'Égypte 1: 65-72.

LEHMANN, Katja (2000) Der Serdab in den Privatgräbern des Alten Reiches. Unpublished PhD dissertation, Universität Heidelberg, Heidelberg.

LICHTHEIM, Miriam (1988) Ancient Egyptian autobiographies chiefly of the Middle Kingdom: A study and an anthology. Göttingen: Vandenhoeck u. Ruprecht.

LICHTHEIM, Miriam (2019) Ancient Egyptian literature. Oakland: University of California Press.

MARIETTE, Auguste (1885) Les mastabas de l'ancien empire: Fragment du dernier ouvrage. Paris: F. Vieweg. MCFARLANE, Ann (2003) Mastabas at Saqqara: Kaiemheset, Kaipunesut, Kaiemsenu, Sehetepu and others. Oxford: Aris and Phillips Ltd.

MORENO GARCÍA, Juan C. (2010) "War in Old Kingdom Egypt (2686-2125 BCE)", in: Vidal, J. (ed.), *Studies on war in the Ancient Near East: Collected essays on military history.* Münster: Ugarit-Verlag, pp. 5-41.

MORENO GARCÍA, Juan C. (2013) "The territorial administration of the kingdom in the 3rd millennium", in: Moreno García, J.C. (ed.), Ancient Egyptian administration. Leiden/Boston: Brill, pp. 85-151.

MORENO GARCÍA, Juan C. (2015) "Climate change or sociopolitical transformation? Reassessing late 3rd millennium BC in Egypt", in: Meller, H., Arz, H.W., Jung, R. and Risch, R. (eds.), 2200 BC: A climatic breakdown as a cause for the collapse of the Old World? 7th archaeological conference of Central Germany, October 23-26, 2014 in Halle (Saale). Halle: Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt, pp. 79-94.

MOURAD, Anna-Latifa (2011) "Siege scenes of the Old Kingdom", Bulletin of the Australian Centre for Egyptology 22: 135-158.

NAVILLE, Edouard (1907) The XIth Dynasty Temple at Deir el-Bahri. Part I. London: Egypt Exploration Fund.

NEWBERRY, Percy E. (1893a) *Beni Hasan. Part I.* London: Egypt Exploration Fund.

NEWBERRY, Percy E. (1893b) *Beni Hasan. Part II.* London: Egypt Exploration Fund.

NUZZOLO, Massimiliano (2015) "The Sed-Festival of Niuserra and the Fifth Dynasty sun temples", in: Der Manuelian P. and Schneider, T. (eds.), Towards a new history for the Egyptian Old Kingdom: Perspectives on the Pyramid Age. Leiden: Brill, pp. 366-392.

NUZZOLO, Massimiliano (2018) The Fifth Dynasty sun temples: Kingship, architecture and religion in Third Millennium BC Egypt. Prague: Charles University Faculty of Arts. NUZZOLO, Massimiliano (2021) "The appearance of Osiris: A case of royal patronage or a bottom-up process?", in: Franci, M., Ikram, S. and Morfini, I. (eds.), *Re-thinking Osiris: Proceedings of the international conference Florence, Italy, 26-27 March 2019.* Rome: Arbor Sapientiae, pp. 111-146.

NUZZOLO, Massimiliano and Krejči, Jaromír (2017) "Heliopolis and the solar cult in the third millennium BC", Ägypten und Levante 27: 357-379.

NYORD, Rune (2021) "Motile mythologies: (Re)constituting Ancient Egyptian ritual knowledge in the early 2nd millennium BCE", in: Schmidt, N., Pissis N. and Uhlmann, G. (eds.), *Wissensoikonomien. Ordnung und Transgression vormoderner Kulturen.* Wiesbaden: Harrassowitz Verlag, pp. 199-210.

PETRIE, William M. F. and BRUNTON, Guy (1924) Sedment I. London: British School of Archaeology in Egypt.

PODVIN, Jean-Louis (2000) "Position du mobilier funéraire dans les tombes égyptiennes privées du Moyen Empire", *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 56: 277-334.

REISNER, George A. (1913) *Models of ships and boats*. Cairo: l'Institut Français d'archéologie orientale.

ROBINS, Gay (2008) *The art of Ancient Egypt.* Revised edition. Cambridge: Harvard University Press.

ROTH, Ann M. (1995) A cemetery of palace attendants including g 2084-2099, g 2230+2231, and g 2240. Boston: Museum of Fine Arts.

ROTH, Ann M. (2002) "The meaning of menial labor: 'Servant statues' in Old Kingdom serdabs", *Journal of the American Research Center in Egypt* 39: 103-121.

SCHULMAN, Alan R. (1982) "The battle scenes of the Middle Kingdom", Journal of the Society for the Study of Egyptian Antiquities 12: 165-183.

SEIDLMAYER, Stephan (1990) Gräberfelder aus dem Übergang vom Alten zum Mittleren Reich: Studien zur Archäologie der Ersten Zwischenzeit. Hirschberg: Heidelberger Orientverlag. SEIDLMAYER, Stephan (2000) "The First Intermediate Period (c.2160-2055 BC)", in: Shaw, I. (ed.), *The Oxford history of Ancient Egypt.* Oxford: Oxford University Press, pp. 108-136.

SETHE, Kurt (1932) Urkunden des Ägyptischen Altertums I: Urukunden des Alten Reiches. Leipzig: Hinrichs.

SHALOMI-HEN, Racheli (2015) "The dawn of Osiris and the dusk of the sun-temples: Religious history at the end of the Fifth Dynasty", in: Der Manuelian P. and Schneider, T. (eds.), *Towards a new history for the Egyptian Old Kingdom: Perspectives on the Pyramid Age.* Leiden: Brill, pp. 456-469.

SHAW, Garry J. (2017) War and trade with the pharaohs: An archaeological study of Ancient Egypt's foreign relations. Barnsley: Pen and Sword Archaeology.

SIMMONS, Frank (2016) "Innovation in serdab decoration in the late Sixth Dynasty", *Journal of Egyptian Archaeology* 102: 196-203.

SMITH, Mark (2017) Following Osiris: Perspectives on the Osirian afterlife from four millenia. Oxford: Oxford University Press.

SMITH, William S. (1949) A history of Egyptian sculpture and painting in the Old Kingdom. 2nd edition. London: Oxford University Press.

SØRENSEN, Jørgen P. (1989) "Divine access: The so-called democratization of Egyptian funerary literature as a socio-cultural process", in: Englund, G. (ed.), *The religion of the Ancient Egyptians: Cognitive structures and popular expressions*. Uppsala: S. Academiae Ubsaliensis, pp. 109-125.

SPALINGER, Anthony J. (2013) "The organisation of the Pharaonic army (Old to New Kingdom)", in: Moreno García, J.C. (ed.), Ancient Egyptian administration. Leiden/Boston: Brill, pp. 393-478.

SPALINGER, Anthony J. (2017) "The armies of Re", in: Creasman, P.P. and Wilkinson, R.H. (eds.), *Pharaoh's land and beyond: Ancient Egypt and its neighbors*. Oxford: Oxford University Press, pp. 93-111.

STANLEY, Jean-Daniel, KROM, Michael D., CLIFF, Robert A. and WOODWARD, Jamie C. (2003) "Nile flow failure at the end of the Old Kingdom, Egypt: Strontium isotopic and petrologic evidence", *Geoarchaeology* 18 (3): 395-402.

STEINDORFF, Georg (1896) Grabfunde des Mittleren Reichs in den Königlichen Museen zu Berlin. I: Das Grab des Mentuhotep. Berlin: W. Spemann.

TOOLEY, Angela M. J. (1989) Middle Kingdom burial customs: A study of wooden models and related material. Volume I. Unpublished PhD dissertation, University of Liverpool, Liverpool.

TOOLEY, Angela M. J. (1995) *Egyptian models and scenes*. Princes Risborough: Shire.

TOOLEY, Angela M. J. (2001) "Models", in: Redford, D.B. (ed.), *The Oxford encyclopedia of Ancient Egypt*. New York: Oxford University Press, pp. 424-428.

VANDIER, Jacques (1950) Mo'alla: La tombe d'Ankhtifi et la tombe de Sébekhotep. Cairo: l'Institut Français d'archéologie orientale.

VERNER, Miroslav (2014) Sons of the sun: Rise and decline of the Fifth Dynasty. Prague: Charles University.

WARDEN, Leslie A. (2017) "Serdab, cult and 'home': Domestic life and relationships in Old Kingdom mastabas", in: Bárta, M., Coppens, F. and Krejčí, J. (eds.), *Abusir and Saqqara in the Year 2015*. Prague: Charles University, pp. 467-488.

WELC, Fabian and MARKS, Leszek (2014) "Climate change at the end of the Old Kingdom in Egypt around 4200 BP: New geoarchaeological evidence", *Quarterly International* 324: 124-133.

WILLEMS, Harco (2014) Historical and archaeological aspects of Egyptian funerary culture: Religious ideas and ritual practice in Middle Kingdom elite cemeteries. Leiden: Brill.

WINLOCK, Herbert E. (1955) Models of daily life in Ancient Egypt from the tomb of Meket-Re' at Thebes. Cambridge: Harvard University Press. ZITMAN, Marcel (2010) The necropolis of Assiut: A case study of local Egyptian funerary culture from the Old Kingdom to the End of the Middle Kingdom. Leuven: Peeters.