The Collapse of the Old Kingdom state: current archaeological and environmental evidence

Miroslav Bártá

Egyptologists traditionally consider the era of the pyramid builders of the Old Kingdom (2700–2200 BC) as a rather monolithic and static period which was for the most part of her existence void of any significant changes. As a consequence, the demise of the Old Kingdom period has usually been explained as a sudden toppling of the centralistic state. This approach has been modified in the last twenty years or so. Now it becomes clear that major factors that contributed to the demise of the Old Kingdom state were of socio-economic nature.

Today it is possible to demonstrate that the identical, originally positive, factors that led to the evolution of the society and state during the first dynasties caused the collapse of the state. At the same time, it becomes clear that several critical factors started to influence the efficiency of the state as early as during the Fifth Dynasty. This long-term decline was during the Sixth Dynasty sped up by a critical worsening of climatic conditions.

Contemporary archaeological and environmental evidence throws fresh light on this issue and helps us better understand the principles on which the Old Kingdom state operated.

New data on mastaba core structure: Abu Rawash and Saqqara

Michel Baud

The core or inner structure of the mastaba is the least studied part of this type of tomb, although it represents most of its volume and gives important clues about the building methods of Old Kingdom masons. Even in the monumental synthesis of G.A. Reisner only a few lines are dedicated to it (the type of core is mostly restricted to the type of retaining wall), a situation which is in part the consequence of the good state of preservation of the Giza mastabas at the nucleus cemeteries.

At the necropolis “F” of Abu Rawash, where most of the mastabas date back to the 4th–5th Dynasties, intense plundering and quarrying have revealed enough to show how the cores were made, and additional tests were performed where necessary to gather more data. These cores proved not to be the simple mass of rubble thrown in disorder which is usually described, but regular strata levelled in correspondence with the stone layers of the casing, retained by one or two peripheral walls. These levels are usually sealed by a thin clay or lime plaster layer, more rarely by a sort of pavement made of blocks. In direct line with their mud brick ancestors of the 1st Dynasty, some mastabas also exhibit a casemate structure, though in this case “stratified”, i.e. made of low cross walls erected on every regularized level.

When cleared from their debris, mastabas from other necropoleis do exhibit similar features. This is especially the case at Saqqara, as visible for structures excavated in the past. It is hoped that more data of this kind could emerge through proper investigations, although this kind of archaeology is, from our own experience, a painful task mined with many problems.
The Art of Egyptian Hieroglyphs of the Akhmim Painters

V.G. Callender

Akhmim was the 9th nome of Upper Egypt which, during the 5th and 6th Dynasties and later, became one of the more important governorates in the OK. The cemetery at this time was located at the mountain known as El-Hawawish, north-east of the OK settlement at Akhmim. Today most of its tombs are very badly damaged and many are anepigraphic. There are other tombs which retain large sections of reliefs that provide us with information about these times and which, thanks to the dedicated work of an Australian team from Macquarie University in Sydney, we have access to some very interesting hieroglyphic signs: these last are the subject of this discussion.

In addition to the tombs reliefs, there are engravings and paintings on limestone stelae and a handful of wooden statuettes and, finally, there are paintings on twenty-five coffins taken from Akhmim and distributed to a number of museums within and outside of Egypt. Thus, although a huge amount of work has been lost or destroyed – the work from this region provides one of the best sources for understanding something of the aesthetic tradition from the late OK to the beginnings of the MK.

The tombs have a time span which stretches from the latter part of the 5th Dynasty to the FIP. On the other hand, the stelae conform to artistic work ranging from the 6th Dynasty up to the 9th. E. Brovarski has sorted the stelae into three groups that end with the Herakleopolitan period. In his opinion, the paintings on the coffins overlap the stelae and continue into the 11th Dynasty and, if he is correct, there is the possibility of mapping the progress of hieroglyphic writing during this time for yet one more region of Upper Egypt.

In the execution of their work the Akhmim sculptors and painters made use of the standard Egyptian hieroglyphs, and, whilst there is a known variety among standard Egyptian hieroglyphs, the Akhmim artisans also developed and adapted some of these signs to express an individualism that is unique to that place. Sometimes the changes are very subtle conversions from a standard sign into something different in nature but similar in outline. I refer to such substitutions of one known item for another one as an artistic pun – and there are many of them among the collection I have been reviewing over the past two years. Other alterations can only be described not as conversions but as new hieroglyphic signs. In the presentation offered we will examine each of those categories: adaptations,

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1 Most of those which are known are housed in Cairo Museum today. They were initially published by P. Lacau: Sarcophages antérieurs au Nouvel Empire (CG ; 28001–28126), IFAO, 1904–1906 (2 vols). Lacau’s publication uses the silhouette font developed by the IFAO, which does not exactly reproduce the original hieroglyphic signs. N. Kanawati (see following reference) has republished many of them in various volumes in his El-Hawawish series, providing very useful and exact copies of the coffin decorations and hieroglyphs.


4 Ibid., 137.

5 H.G. Fischer’s work on the inscriptions of Dendera (Dendera in the Third Millennium B.C. down to the Theban Domination of Upper Egypt, New York University, Locust Valley, New York, 1968) and E. Brovarski’s work that analysed the inscriptions from Naga ed Dér (Inscribed Material of the First Intermediate Period from Naga-ed-Der, UMI dissertation series, Chicago, 1980) will already be familiar.

6 P. Lacau (Sur le système hiéroglyphique, BD’E XXV, Cairo, 1954, 14) writes how one artist will conform to traditional colours whilst another will seek to relieve the monotony of tradition or form and revert to some other way of portraying things: this set of circumstances is particularly pertinent to the work of the Akhmim painters.
radical alternatives and new signs. In the course of the discussion, stages by which some of those changes took place will also be outlined.

It is very obvious from these and other examples that the Akhmim artists were not content just to imitate the traditional signs, but to experiment with their own versions of Egyptian hieroglyphs. As a result, they reflect the spirit of the times, in which new ideas and methods were the subject of experiment, but in creating these signs they also express themselves as bona fide artists.

**Two cemeteries for one provincial capital. Dayr al-Barsha and al-Shaykh Said in the Fifteenth Upper Egyptian Nome during the Old Kingdom**

**Marleen De Meyer**

The necropolis of al-Shaykh Said is known as the burial ground for the governors of the Fifteenth Upper-Egyptian nome during the Old Kingdom. Two Fifth Dynasty nomarchs, Serfka and Werirni, are buried there, as well as three Sixth Dynasty high officials. One of them (Uiu) carries the title ḫry-tp rš n Wst-“Great Chief of the Hare Nome”, and although for the two others (Meru/Bebi and Teti-ankh/Imhotep) this title is not preserved, it is likely they were nomarchs as well. Surrounding these large and decorated tombs a plethora of small undecorated tombs is scattered around.

A few kilometres to the north lies the tomb field of Dayr al-Barsha, where a large amount of small undecorated Old Kingdom tombs is likewise preserved. A handful of tombs stands out here, which belonged to high officials of the Fifth and Sixth Dynasties and which contain remains of inscriptions. A Fifth Dynasty royal decree dating to the reign of Neferefre forms the earliest secure date at the site.

It has been generally assumed that both these cemeteries served the population of nearby al-Ashmunayn, the capital of the Hare Nome. In addition to their geographic proximity and the fact that they are contemporary, there is another link between these two cemeteries. At the end of the First Intermediate Period a nomarch named Djehutinakht, son of Teti, placed restoration inscriptions in most of the decorated tombs in both cemeteries.

But why then are there two cemeteries to serve the population of one provincial centre, al-Ashmunayn? The few inscribed Old Kingdom tombs at both sites give an indication of the title strings that the high officials carried. Comparing the title strings of those buried at al-Shaykh Said with those from Dayr al-Barsha sheds light on the chronology of these necropoleis, and on the relative status of those buried at each site.

Additionally, the Katholieke Universiteit Leuven has recently uncovered evidence of activity in this area that predates any of the known rock tombs at either site. At al-Shaykh Said remains of a Fourth Dynasty industrial area with a bakery were found. Seal impressions and the types of ceramic associated with the bakery indicate this formed a royal domain. The Fourth Dynasty industrial area lies at the mouth of the Wadi Zabayda, where an alabaster quarry is located that closely resembles the better known one at Hatnub. The exploitation of this natural resource during the early stages of the Old Kingdom may well explain why high officials preferred al-Shaykh Said over Dayr al-Barsha as a burial ground.

**Blocks from the Unis causeway recorded in the Černý notebooks at the Griffith Institute, Oxford**

**Andrés Espinel**

In February 1944, the Czech Egyptologist Jaroslav Černý recorded with his careful and meticulous orthography more than a hundred inscriptions and scenes carved on blocks from the walls of the
causeway of the pyramid of Unis at Saqqara. His notes, now kept at the Griffith Institute, Oxford, are as valuable as neglected documents for studying the decorative programme of that pyramid complex. They are useful for correcting and completing more recent studies on the decoration of that royal monument. In many cases, Černý’s copies record figures and hieroglyphic texts now destroyed or completely illegible on in situ blocks. They mention, for example, some new titles and names of the courtiers of Unis. In other examples, information coming from currently missing reliefs offers relevant data on otherwise unknown themes in the iconographic repertoire of this monument. They include a mention of the transport of the pyramidion of the royal pyramid, a siege of a walled city, or a possible arrival of a naval expedition from a foreign country.

As a whole, first hand notes by Černý, written a few years after the discovery of the blocks by Zakaria Ghoneim and Selim Hassan in 1938–1939, underline once more again the importance of old records and archives, frequently forgotten by scholars, as vital sources for Egyptological research.

A Spatial Study of the Giza Cemetery

May Farouk

Though there is a wide scope for investigation of territory behaviour through spatial cemetery analysis in highly organized societies such as states and chiefdoms, up till now most sophisticated spatial cemetery studies have been devoted to less centralised societies represented by bands and segmentary societies. One of the most territory related questions concerning the high density cemeteries like Giza, is the degree of involvement of state organization versus the personal preference in determining the location of tombs and their sizes. Were individuals directed only by space and wealth considerations or have there been laws which were imposed by the state to regulate the space occupation? Were there other limitations, like family, service of older tombs and one’s occupation, which played a rule in forming the clusters of tombs?

Egyptologists now realize that such matters require sustained and systematic examination. Without a statistically based research many of the assertions made about the territorial policy in Old Kingdom cemeteries will remain unsubstantiated or incorrect. This research adopts a spatial approach, the central idea of which is that power has spatial correlates, for it is the essence of power relationships that they are asymmetrical.

General spatial patterning of main and secondary cores in the Giza cemetery will be investigated to clarify the principle according to which tombs cluster. Underlying this analysis is the assumption that tomb sites were assigned according to some sort of rule, the pattern of spatial organization in cemeteries corresponding hence to some administrative rules of the distribution of power in the royal court. Many GIS software packages provide well-structured descriptive and analytical tools for identifying spatial patterns such as the nearest neighbour index, the spatial autocorrelation statistics (Moran’s I), high low clustering index, hot spot analysis and multi distance spatial cluster analysis.

Using the above mentioned spatial statistics tools, it should be possible to trace the spatial patterns of distribution of cores and their change in time. The following problems about the cemetery development and how space was allocated might be answered:

• Is it possible to differentiate between different building phases based on the pattern of features?

• Was there a pattern of building where tombs concentrate in one area (around a large mastaba for example) or were tombs constructed following a flexible convention?

• Was the spatial metaphor of the pyramid and mastabas as analogues to the king and his surrounding courtiers still maintained in the later phase of the cemetery?
What rule did the local considerations and topographical features play in the organization of tombs?

How long were the funerary cults of the major mastabas still functioning? Did subsidiary tombs intrude on such cults? or was access to earlier structures preserved by some sort of legal restriction, by conventional morality, or by genealogical ties?

Are tomb type and location related?

Is the wide accepted hypothesis, that the greater the area of the cemetery ground occupied by a tomb, the higher the rank of its owner valid in Giza?

What was the comparative importance of factors such as wealth, rank at court, professional specialty, family heritage and personal preferences in determining the site and form of a tomb?

Were there sumptuary laws imposed for the cemetery?

Do collective burials have a social significance?

**The Decorative Programs of the Pyramid Complexes of Khufu and Khafra at Giza**

*Laurel Flentye*

This paper will discuss the decorative programs of the Fourth Dynasty pyramid complexes of Khufu and Khafra at Giza. Although the reconstruction of Khufu’s decorative program is somewhat problematic based on the preserved evidence, the royal reliefs excavated at Giza as well as those reused in the pyramid complex of Amenemhat I at Lisht will be discussed including their iconography and style, and how these two aspects may relate to the decoration of elite mastabas in proximity to Khufu’s pyramid complex. Fragments of statues discovered in the Eastern and Western Cemeteries are also integral to a discussion of Khufu’s decorative program. These fragments will be analyzed through their material, type, iconography, and style. Finally, Khufu’s decorative program will be placed within the context of the early Fourth Dynasty, and how the use of specific materials and overall iconography are representative of a particular ideology.

The preserved statuary from Khafra’s pyramid complex suggests that his decorative program may have focused more on statues than relief decoration, although several reliefs excavated at Giza are attributed to his complex. An analysis of Khafra’s statuary will include material, type, iconography, and style, and how these different factors relate to Khafra’s overall decorative program. Integral to this relationship is also how the various components of his pyramid complex, such as the pyramid temple and valley temple, and the cardinal directions, namely north and south (Lower and Upper Egypt), i.e. the realm of the king himself, as well as east and west (the route of the sun god Ra) relate to the statuary program.

In this respect, each individual pyramid complex may be representative of an evolving ideology focused on the king but in the process of becoming an established theology within a structure designed to ensure the rebirth of the deceased king in the afterlife.

**Issues Related to Orientation in Menkaure’s Valley Temple Sculpture**

*Florence Dunn Friedman*

This paper is one of a series on the sculpture from Menkaure’s Valley Temple at Giza. Most of the king’s intact or large fragments of sculpture are today in Cairo and Boston, with Boston also having numerous bits and pieces of more statues. The statues fall largely into two media, greywacke and alabaster (travertine). Triads, which were not found in situ, are of greywacke, and large seated
statues, found in situ in the offering room, are of alabaster. These two main sculptural groups, triads and seated statuary, are also distinguished by different types of inscriptions. Parts of the titulary found in alabaster, for example, do not appear in greywacke. One question is how different media and statue types correlated with different parts of the titulary to express different aspects of the king's nature and his relationship to the gods.

Another question relates to orientation. I suggest that the total number of triads was at least seven, a number for which I have clear evidence, and may have approached 11 or 12, given the range of broken greywacke bits with triad features. Many more triads may have been planned but not executed. Only the Valley Temple's large open court, as previously suggested by Mathias Seidel, could have accommodated the triads. If we locate the triads in the court and compare their suggested orientation with that of the seated statuary in the offering hall, multiple orientations come to light. A multiplicity of orientations for sculpture within one complex recalls precedents in the earlier Fourth, Third and maybe even First Dynasty, the reasons for which will be explored in this paper.

The Death of the Democratisation of the Afterlife

Harold M. Hays

It is a commonplace in Egyptological literature to mention the existence of a 'democratisation of the afterlife'. This is a historical model which supposes that in the earliest times the Egyptians believed that a beatified afterlife was accessible exclusively to royalty, and only in the Middle Kingdom to non-royal persons. But recent research has challenged the model. For example, H.O. Willems has challenged it from the Middle Kingdom side, above all in showing how the distribution of texts then was not at all universal. On the Old Kingdom side, K. Nordh has advanced multiple dimensions of data to assert that there was a fundamental commonality in belief between king and those of his court.

Much more can be said against the theory. Above all, it is founded on negative evidence—the (originally) exclusively royal attestation of Pyramid Texts—and it mistakes the physical distribution of text for metaphysical access to a place beyond the tomb. But according to Old Kingdom statements, such access was dependent on knowledge and ritual, and not the possession of physical copies of texts. Indeed, expressions of knowledge by non-royal persons in the Old Kingdom are abundant, as are pictorial and list-based representations of mortuary rites. The latter are telling, since they are of precisely the same order as the rites shown performed for the king and, what is more, are attested long before the inscribed appearance of the Pyramid Texts.

Given its problems, it is time to declare the 'democratisation of the afterlife' a dead concept, and to begin to replace it with a thick description of the actual state of affairs. This paper will reframe the significance of the physical distribution of mortuary texts and outline the relevant strata of facts bearing on the social relationship between king and elite, and the means and nature of access to an afterlife in the Old Kingdom.

A new tomb type in Abusir?

Jaromír Krejčí

The discussion included in the paper will be based on the new results of the Czech Archaeological Mission in Abusir, in the area of the minor tombs of the members of the royal family, located on the southern edge of the pyramid necropolis. These three tombs (twin tomb complex Lepsius no.25 and the mastaba of Prince Werkaure) represent a strange combination of the architecture of the
pyramids (more precisely, the pyramids of queens) and of the standard mastabas of the period. I shall discuss the situation which might have influenced this strange layout of these tombs and shall try to set these tombs into the development of the ancient Egyptian architecture.

**Afterworld for Netjerykhet**

*Kamil Omar Kuraszkiewicz*

Despite of over a century of exploration and study, many aspects of the funerary complex of Netjerykhet still remain a mystery, mainly due to a lack of any textual or iconographic evidence in the complex itself. The aim of the present paper is to propose an interpretation of ideological significance of some of its features. This study takes into consideration the building history of the complex, as well as results of recent archaeological work, among others done by the Polish mission. One of important parts of this interpretation is the so-called “Dry Moat”. Its existence, as a large trench encircling the temenos, was first suggested by Nabil Swelim.

It is known that the final (although unfinished) form of the Netjerykhet’s funerary complex was a result of experiments. At some stage of building work, the whole conception of the temenos was changed. The inner space has been re-arranged by dividing it into several structural units, containing new structures. It seems that such division corresponded to new, multi-layered, ideological meanings. Possibly it was at this stage of construction, that also the “Dry Moat” has been added, as an integral element of the complex.

It may be assumed that a nearby quarry, in the initial stage of construction being just a source of building material, was then intended to be converted into a meaningful feature, supplementing the newly designed architectural setting. Some aspects of this concept seem to have survived, in a modified form, in later pyramid complexes.

Such hypothesis would explain the seemingly unfinished state of the “Dry Moat”, as well as some of its characteristics which can be observed in the excavated sections.

**Re-examining the Khentkawes Town**

*Mark Lehner*

Ancient Egypt Research Associates (AERA) has completed four seasons (2005-2009) of survey, mapping, and excavation at the town associated with the monumental tomb of Queen Khentkawes at Giza, presumed to date to the 4th dynasty. This work has revealed new information about the chronological phases, features, and extent of the town, as well as its stratigraphic and chronological relationship with the Menkaure Valley Temple to the South, and the HeG (Heit el-Ghurob, Arabic for “Wall of the Crow”) settlement to the Southeast.

**New methods in recording and drawing reliefs and statues**

*Jolana Malatkova*

The paper will deal with different approaches to digital epigraphy and, especially, the methods enabling to get an undistorted template for the final work exit namely, a drawing in the vector drawing program (in this case, Adobe Illustrator). On the basis of concrete examples, it will be shown the exploitation of a plain digital photograph for drawing small objects. Subsequently, the process of documenting larger and most complex compositions by means of a combination of scanned tracings converted through special software into vector paths will be presented. Finally, the exploiting of handy-3D-scanner outputs as an undistorted template and the related problems will be
discussed. The latter method is so far only tested. At the end, the documentation of objects by a free hand vector drawing and the reconstruction of statues will be shown. All the above mentioned steps will be demonstrated by a series of pictures (all the examples date from the Old Kingdom).

**Some problems concerning the tomb of Ny-ankh-Nefertem (Saqqara, 6th Dynasty).**

**Karol Myśliwiec**

Discovered by the Polish-Egyptian archaeological mission in 2003, the tomb of Ny-ankh-Nefertem is located just beside that of Merefnebef, west of the pyramid of Netjerykhet.¹ Imitating the mastaba of the vizier in many respects, particularly regarding its architecture, it reveals many new, unusual features, especially with respect to the decoration of its cult chapel. Both the reliefs and the paintings in the latter were left unfinished, which provides interesting insights into the work of the artist. Specific palaeographic and stylistic features let associate the tomb with some mastabas found nearby the pyramid of Teti. Their affinity may also by suggested on prosopographic premises, three of the seven sons of Temi (short name of Ny-ankh-Nefertem) bearing the same name, Mereru, and some of their titles finding parallels among those of their namesakes buried in Saqqara. Remarkably, the representations of the three brothers, as well as their legends, which were subsequently recasted, differ in many respects from those of Temi’s other sons.

These and other particularities observed in the chapel of Ny-ankh-Nefertem shed some light on the period’s social atmosphere, contributing also to the dating of some late Old Kingdom mastabas in Saqqara.

**The Reserve Heads: some remarks on their function and meaning**

**Massimiliano Nuzzolo**

Of all categories of ancient Egyptian sculpture that of the so-called reserve heads certainly represents one of the most intriguing. In recent years many theories have been suggested to explain their anomalous shape and strange mutilations but none of them has found a general consensus among scholars. Starting from reconsidering the whole corpus of artefacts and confronting the evidences with other important ideological and religious elements of the same period, I will try to show how these sculptures were closely related to the political theology of the beginning of the IV dynasty and particularly of King Khufu.

**The Concept of Kheprer in Old Kingdom Religious Texts**

**Joanna Popielska-Grzybowska**

The problem of the appearance of Kheprer in the Pyramid Texts and the Coffin Texts seems to be crucial in understanding Atum’s complexity and enigmatic character as a demiurge. As far as Kheprer is concerned, scholars are not of a concerted opinion, and even the translations of the word ḫprr differ.

Even if one agrees with Anthes’ rather unlikely suggestion that Atum was only “a product of theological speculation” created to justify the divine lineage of Horus, one cannot with any degree of certitude ascertain that Kheprer was a prior concept. Both Atum and Kheprer are inextricably

linked to the solar aspect of Egyptian religion. Nonetheless it is not utterly evident how weighty the solar aspect of Atum and Kheprer used to be. Although Atum is perceived, in his solar aspect, as the setting sun – “the Finisher”, “This-who-is-perishing” – his notion was also strongly connected with the act of reviving; and on this plane “Atum” is identical to “Kheprer”.

The author of this lecture will attempt to scrutinise the concept of Kheprer, the self generated being, as expressed in the so-called Pyramid Texts, with reference to the so-called Coffin Texts.

The paper is also meant to be a discussion with the idea of Khepri presented in the monograph Der Gott Chepri. Untersuchungen zu Schriftzeugnissen und ikonographischen Quellen vom Alten Reich bis in grieschisch-römische Zeit (Leuven-Paris-Dudley, Ma 2006) by M Minas-Nerpel.

Three Mastaba Chapels in the Metropolitan Museum of Art

Ann Macy Roth

Between 1907 and 1913, the Metropolitan Museum of Art purchased from the Egyptian government three Old Kingdom mastaba chapels. These chapels belonged to a keeper of the headdress and chief of Nekheb, Perneb (13.183.3), a king’s son, Raemkai (08.201.1), and a judge and priest in the mortuary and sun temples of Userkaf, Nikauhor and his wife, a priestess of Hathor and Neith, Sekhemankh-Hathor (08.201.2). All three chapels have been dated to the Fifth Dynasty and were located in the same area of Saqqara, a triple row of sixteen mastabas just north of the pyramid complex of Djoser. The area was excavated in 1907–1908 by J. E. Quibell, who was searching for mastabas to be sold officially to museums, in hopes of discouraging illicit excavation. Two other chapels from the area were also sold to museums, that of Kaemrehu to the Ny Carlsberg Glyptothek, Copenhagen, and that of Netjeruser to the Field Museum, Chicago; in addition, a false door from the area went to the Berlin Museum.

Although the three New York mastaba chapels were cursorily published by Quibell in his annual report on his excavations,1 and various aspects of the chapels have been studied and published in both popular and specialized form,2 there has been no thorough scientific publication of the chapels and the mastabas from which they came. This preliminary paper will report on some of the initial results of a projected full publication, which will present the archaeology and architecture of the mastabas as well as their iconography and discuss their relationship with the surrounding tombs.

Initial work has included the identification of some anomalies in the decoration of the Perneb chapel, as well as an investigation of alterations made to the decoration of the other chapels.

Back to the false shaft phenomenon

Teodozja Rzeuska

During fourteen seasons of the excavation works on the western side of Netjerykhet’s funerary complex at Saqqara, Polish-Egyptian archaeological mission of the Polish Centre of the

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1 J. E. Quibell, Excavations at Saqqara III (1907–1908), Cairo: 1909

2 There is an extensive discussion of all three mastaba chapels in W. C. Hayes, The Scepter of Egypt I, New York: 1953, pp. 90–103, and a popular account of the Perneb chapel was published by A. M. Lythgoe and C. L. Ransom, The Tomb of Perneb, New York: 1916. A more technical study of the painting in the same chapel is Caroline Ransom Williams, The Decoration of the Tomb of Per-neb: The Technique and the Color Conventions, Metropolitan Museum of Art Department of Egyptian Art 3, New York, 1932.
Mediterranean Archaeology at the University of Warsaw uncovered a necropolis of the nobles. Its beginnings are dated to the early 6th dynasty and it is thought to have functioned till the very end of the Old Kingdom or beginning of the Herakleopolitan period.

Although all of the explored tombs had been robbed sometime during the First Intermediate Period, they showed no signs of a secondary use. With time the entire necropolis became hidden under a thick layer of wind-blown sand. It was more than two thousand years before this area would again be used as a burial ground. This presents a unique opportunity for an archaeologist to both work on an Old Kingdom cemetery that still bears the signs of all kinds of human activity associated with the building of a tomb, burial ceremony, mortuary cult and finally with the robbery, and study the funerary customs. The most informative material of all turned out to be pottery – the most common find. When analysing these ceramics one should keep in mind the natural division of the tomb into two distinct spheres:

• the funerary sphere where the deceased was buried; it consisted of the funerary shaft or slopping passage, the burial chamber, and the ritual shafts.

• the sphere of the mortuary cult, which comprised one or more chapels, or just the blind doors and tables, as well as additional rooms, e.g. magazines, directly associated with the functioning of the cult.

Analysis of the objects related to the first sphere can allow the reconstruction of the funerary rituals, while ceramics associated with the second sphere may help enrich our knowledge of the mortuary cult. There are three pottery assemblages related to the first sphere: vessels from the burial chamber, vessels from the funerary shaft, and those from the false shaft (i.e. shaft with no burial chamber at the bottom).

In the mastabas explored thus far the northern part appears to be reserved for the funerary shaft, whereas the false shaft was located in the southern part. In comparison with the funerary shaft, the false one was shallower and had adequately smaller mouth. Ceramics found in such shafts are fragments of the red slipped open forms i.e. bowls or plates.

Though the false shafts are frequently observed in the late Old Kingdom necropoleis, including at Saqqara, their origin is thought to reach much further back in time.

**Fixed rules versus personal choice: on the dynamics of Memphite Old Kingdom elite tomb decoration**

**Nico Staring**

Through the application of a quantitative method, the author has made an attempt to expose the mechanisms behind the composition of Old Kingdom tomb decoration.

The data of the present study comprise of the decorative themes of 118 Old Kingdom elite tombs from the greater Memphite region. These tombs have been selected on the basis of their shared inclusion of four iconographic themes. These tombs cover about one-third of all known Memphite Old Kingdom elite tombs, such as derived from the Leiden MastaBase.

The main subject of discussion is the extent to which these decorative themes were liable to fixed rules. In order to answer this question, the research data, i.e. the tomb scenes, have been studied quantitatively and in a systematic manner, to arrive at objective statements regarding the arrangement of a tomb’s decoration programme.

First, the separate scenes have been studied in their architectural context, i.e. the tomb’s superstructure. Their distribution over successive walls and spatial unities has been studied.
diachronically, over the extent of the Old Kingdom, and geographically, across the cemeteries of the Memphite region.

Second, the representational data, or the dynamics within the represented activities in these scenes, have likewise been analysed systematically. This anatomization and eventual quantitative study of scene content has led to some noticeable differences between tombs from Giza and Saqqara. The differences could be characterized as conservatism versus innovation and variation.

Some of the most striking results culminating from this research will be presented. These results will be discussed in the context of tomb construction, regarding the tomb owner as the agent to individualise his tomb. It appears that on the opposition of fixed rules versus personal choice there is an interplay, or changing interplay at stake.

**Village, town and barracks: a 4th dynasty settlement at Heit el Ghurob, Giza**

Ana Tavares

The Giza Plateau Mapping Project (GPMP) evolved from its beginnings in surveying and mapping the landscape at Giza into a large scale settlement excavation in the area known at Heit el-Ghurob (“Wall of the Crow”), after its most distinguishing feature, a 10m tall 200m long stone wall on the North of the site, below the eastern edge of the southern Giza escarpment (Gebel Qibli). Twenty years of excavation salvaged 7 ha of 4th dynasty settlement dated to the reigns of Khafra and Menkaure. After the town was abandoned and dismantled, when the Giza pyramid building projects came to an end, the forces of erosion cut essentially a section through the site before it became buried by a thick layer of sand. There was no further occupation at the site until its use as a burial ground starting in the 25th dynasty and continuing until Late Roman times. These distinct urban areas comprise the 4th dynasty settlement, as reflected in the urban layout, size and design of structures, and in the material culture, with distinct patterns emerging in the faunal, botanical, lithic and ceramic material.

**Barracks:** The central part of the settlement is a set of four blocks of Galleries, laid out orthogonally and separated by 3 broad straight roads (10 cubits wide) running east-west. The southern blocks are built back to back, creating a massive structure with north-south walls running for 70m. The central road, Main Street, separates blocks Set II and Set III and leads to the only known gate in an enclosure wall. We have excavated one gallery in its entirety, and have hound that it has a central low bench running along its length which supported columns bases. The main space is divided into two and has a series of bed platforms across the width.

**The Royal Administrative Building (RAB):** This large building is separated from the Galleries and the Eastern Town by a thick, and presumably tall, masonry wall. Access to this building and to the magazines that lined up on the west is very controlled. The enclosure wall, running south from the Wall of the Crow, curves to the east separating the southern end of the Gallery complex from the northern part of the Western town. It then turns a 90 degree angle and hugs the perimeter of the RAB creating an enclosed street.

**Village:** The Eastern Town shows a more organic urban pattern, with small courts and chambers comprising houses that are smaller than those in the western town. We excavated one small urban estate, a core house surrounded by courts about 100 metres square. Non orthogonal, small streets and passages characterise this part of the settlement which contains small hearths and silos. Our analysis of material culture from the Eastern Town reflects a village economy, with higher density and variety of plant items and evidence of pig raising. This town extend eastwards under the modern town of Nazlet es Saman.
The Western Town: The western town is an area of large houses and production units up to 400 m², to the south and west of the site. One house contains a with double bed platform, painted rooms and storage bins. A mounded dump between two of the large houses yielded high numbers of cattle bone and thousands of formal sealings, documenting administration by high-ranking scribal with ties to the vizier’s office.

Drill cores suggest that the site is part of a larger settlement along a Nile channel that flowed 200 to 300m east of the site. Our recent work to the north of the Wall of the Crow, in the wadi south-southwest of the Menkaura Valley temple and in the town of Queen Khenentkawes has enabled us to place the Heit el-Ghurob settlement in its landscape and cultural context.

An Old Kingdom Bakery at al-Shaykh Said South: Overview of the Pottery Corpus

Stephanie Vereecken

Since 2002, the Mission of Leuven University has been conducting archaeological fieldwork at Dayr al-Barsha. An important segment of the deceased buried at Dayr al-Barsha originated from the nearby town (and provincial capital) of al-Ashmunayn/Hermopolis. It has been generally assumed that some inhabitants of the same town, at least during the later Old Kingdom, chose to be buried, not at Dayr al-Barsha, but at al-Shaykh Said, where a large elite cemetery exists, as well as a number of others about which hardly any published information exists. In order to be able to compare the use of the cemeteries at the two sites, a first investigation was carried out in al-Shaykh Said by surface surveying during the 2007 season.

The survey results suggested that, whereas ceramic material from later periods (New Kingdom, Third Intermediate Period) is spread relatively evenly across the site, the Old Kingdom remains were less numerous, being concentrated in the southern part of the site, cut through by the track leading into the Wadi Zabayda. The section along this track revealed in the lower part an almost sterile layer, which, in its turn, sat on top of an in situ stratum with numerous inclusions of charcoal and ceramics, the latter consisting almost exclusively of Old Kingdom bread moulds. The combined occurrence of charcoal, ashes and bread moulds moreover suggested the presence of an early Old Kingdom food production facility, and it seemed likely that this served a work-force producing stone objects. It was however not clear how extensive the food production installations were, and while the pottery retrieved in 2007 was clearly of an early Fourth Dynasty date, the restricted amount of material collected precluded any firm conclusions on the time range of the Old Kingdom use of the site.

During the 2008 campaign, four trial trenches were therefore opened just north of the track leading into the Wadi Zabayda, revealing a huge amount of pottery, most of it related to the production of bread. Among the most characteristic elements of the material are bread moulds and flat bread trays (often with potmarks), vats and bowls with internal ledge-rim, all very similar to the types of pottery that were found at the bakery of al-Jiza. The parallelism between al-Shaykh Said and al-Jiza is also confirmed in a remarkable way by the presence at both sites of very large bread moulds with flat internal base, up to now only attested for the site of al-Jiza.

Another remarkable element is the presence of white inclusions as temper. This type of temper occurs in almost all the Nile fabrics and is the most characteristic element for the ceramic assemblage from al-Shaykh Said. Although petrographic confirmation is still needed, it seems logical that the alabaster should come from the quarry Maghara Abu Aziz. This would imply that the very large majority of the pottery found during the excavation was locally made.
Although relatively rare compared to the huge amounts of bread moulds, several fragments of Maydum bowls have been found. They occur in different fabrics: the majority is made in local Nile silt (Nile B1–B2) and has a rather rough appearance, but others are made of very fine fabrics (Nile A, Marl A1) and can be considered as examples of the high quality ceramic-production of its time and must have been imported to the site.

The presentation will give an overview of this new ceramic material originating from the bakery at al-Shaykh Said. A typology of this group will be given in comparison to other sites and the fabrics will be described according to the Vienna System.

**Why was the Fifth Dynasty cemetery founded at Abusir?**

*Miroslav Verner*

The founding of the pyramid cemetery at Abusir and the building of six sun temples in the Memphite necropolis (only two of which have been so far discovered and archaeologically examined) by the kings of the Fifth Dynasty rank prominently among the perennial questions in Egyptian archaeology. In this paper some new views concerning these problems will be presented.

**Visuality and Old Kingdom elite cemeteries**

*Deborah Vischak*

The great majority of discussions about Old Kingdom elite tombs concern the content of their programs: why the scenes (and to a lesser extent, texts) are part of the monument, their purpose and functionality, the iconography of the scenes, analyses of orientation, scene distribution, etc. What is less often discussed are the visual aspects of the monument (as distinct from scene content); or rather, how the appearance of the monument contributed to or shaped its significance and its meaning. An elite tomb comprises multiple visual qualities, including the style of an individual figure/scene or text, the style or styles of the program as a whole, the visual effect of interior spaces (based on the size and organization of rooms, afforded views and access, role of light and dark), the shape and embellishment of the exterior surfaces and spaces, the overall size and form of the tomb structure, its relationship to surrounding monuments and to the larger cemetery of which it is a part, and the broader landscape (both natural and constructed) in which the tomb and cemetery are set. All of these visual elements affect how the tomb existed in the space of reception and comprehension by the ancient Egyptian community. This paper will address how we may consider these visual qualities as products and producers of meaning in Old Kingdom elite tombs, drawing on examples from different cemeteries across the ancient landscape.

**The royal cult in the pyramid temples and the sun temples in Abusir**

*Hana Vymazalová*

The royal necropolis of Abusir offers the unique opportunity to combine a wide variety of sources on the royal cult in the time of the Fifth Dynasty. Over a century of excavations on site have not only revealed many significant archaeological remains, from pyramid complexes and sun temples to administrative and economic compounds, but also detailed administrative texts.

On the basis of the information gained from the archaeological excavations in the royal pyramid complexes in Abusir and the sun temples in north Abusir and Abu Ghurob and contained in the papyrus archives of Kings Neferirkare and Raneferef in Abusir, the paper intends to take a detailed look at the relation between the pyramid temples and the sun temples and at the economic and
religious aspects of the royal cult in the course of the Fifth Dynasty. The available information indicates that the pyramid temples and the sun temples actually functioned as two parts of a single unit, which was aimed at maintaining not only the cult of the individual deceased king, but also the concept of the kingship in general.

**Ancient Egypt Research Associates settlement site at Giza: Old Kingdom ceramic distribution**

*Anna Wodzinska*

Ancient Egypt Research Associates (AERA) has been excavating a settlement located in the southern edge of the Giza Plateau since 1988. Due to very intensive clearance we have at our disposal a large Old Kingdom site very precisely dated to the reign of Menkaure. The site can be clearly divided into smaller units – areas characterized by different plans and also diverse material cultures. The main components of the settlement are long rectangular galleries built in four regular rows with adjacent industrial areas where bakeries were discovered. These probably functioned as barracks. Directly to the east, south and west of galleries are, respectively, Eastern Town, RAB and Western Town. The towns are comprised of more or less square houses. The houses’ plans reflect characteristic Egyptian “snail-like” dwellings. Where the Galleries are clearly planned, the Towns appear to be organic. The RAB appears to have been a central administrative and storage complex.

In the course of excavations several tons of pottery have been uncovered. The ceramic material exhibits standard Old Kingdom pottery, although clear differences can be observed. The AERA settlement offers a large assemblage of domestic vessels. Over 200 pottery types were defined. The most common are conical bread moulds, beer jars, white and red carinated bowls.

Even if the ceramic types are the same across the site their distribution is not. Galleries can be generally described as places where many large conical bread moulds were found. These bread moulds are larger than the average moulds known from the late 4th dynasty. The pots were used during baking of very large loafs of bread. Moreover white carinated bowls can be found in large quantities in galleries as well. Their shapes are very similar to red, so-called Meidum, carinated bowls but they seem to be unique to certain settlements connected to workmen communities, i.e. Giza or Sheikh Said in the Middle Egypt.

Large bread moulds and white carinated bowls also occur in the Eastern and Western Towns but in smaller number. These domestic areas outside the galleries are characterized by presence of beer jars and red carinated, Meidum, bowls. The ceramic types from the towns are generally more numerous and diverse. There is clear distinction between pottery from kitchens where food was prepared, and open spaces where food was served and consumed.

I will focus on the distribution of pottery for four areas of the site that characterize the main types of occupation. Gallery III.4 represents galleries. ETH is a house from the Eastern Town. RAB is an area located to the south of galleries between Eastern and Western towns. PM (Pottery Mound) is a discard area within the Western Town. Each of the selected areas show different patterns of ceramic distribution that reflect diverse activities such as bread making, maybe beer brewing, cooking, storing/presenting of food, and finally consumption. I will attempt to answer a series of questions. Why were white carinated bowls used by workmen? Where do red slipped vessels occur and for what were they used? Why are beer jars are found in such big number in the Western Town? Is their presence connected to beer brewing or only beer consumption? Who might have drunk so much beer? And, who produced the massive amounts of bread, especially the very large loaves of bread?
The tomb owner pulling papyrus in the marshlands reconsidered

Alexandra Woods

The significance of the tomb owner shown pulling or rattling papyrus in the marshlands of Egypt has received frequent attention in the literature. Vandier was the first to use the scene in the tomb of Bqti, dating to the Middle Kingdom, to demonstrate the direct link between papyrus pulling scenes and traditional fowling scenes. Vandier suggests that papyrus pulling had a utilitarian function — to flush birds from the thicket in preparation for the bird hunt. Other scholars propose that the scene has little to do with celebrating the joys of the thicket and that papyrus pulling should be viewed as a ceremony dedicated to Hathor to ensure rebirth; as an activity with erotic overtones and that the inclusion of a scene in a tomb would guarantee the continuation of such a pleasurable experience in the afterlife. The tomb owner shown on a so-called pleasure cruise has also been interpreted by scholars as a call to Hathor, which was undertaken prior to the so-called ‘rite of passage’ by pulling papyrus in the marshes.

In an attempt to understand the meaning of the papyrus pulling scene during the Old Kingdom the following features will be considered: the gender of the major figure; the honorific or religious offices held by the tomb owner; the cemeteries (Memphite and provincial) where tombs with this scene are most frequently located; the placement of the scene within the tombs’ decorative scheme; the labels associated with each scene as well as any changes and innovations introduced into the scene’s overall composition during Dynasties 4 to 6. This paper aims to illustrate how an alternative interpretation of the tomb owner pulling papyrus in the marshes can be proposed based on iconographic, linguistic and stylistic observations.