

Journey to the West

The world of the Old Kingdom tombs
in Ancient Egypt

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**The world of the Old Kingdom tombs
in Ancient Egypt**

Charles University in Prague

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Reviewers

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For Gae

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CHRONOLOGICAL TABLE (all dates are BCE)

Predynastic Period		Early Dynastic Period c.2900-2592		
Lower Egypt	Upper Egypt	First Dynasty c.2900-2730	Second Dynasty c.2730-2590	Third Dynasty c.2592-2544
Neolithic 5300-4000 Maadi culture 4000-3200	Badarian Period c.4400-4000 Naqada I Period c.4000-3500 Naqada II Period/ Dynasty 0 c.3150-2900	Narmer Aha Djer Djet Den Andjib Semerkhet Qa'a	Hotepsekhemwy Raneb Ninetjer Peribsen Sekhemib Senedj Khasekhemwy	Netjerikhet (Djoser) Sekhemkhet Khafu Nebka Huni
				

Old Kingdom c.2592-2120

Fourth Dynasty c.2543-2536	Fifth Dynasty c.2435-2306	Sixth Dynasty c.2305-2118	Eighth Dynasty c.2250-2118	First Intermediate Period c. 2118-1980
Sneferu c.2543-2436 Khufu c.2509-2483 Radjedef c.2482-2473 Bikheris c.2474-2473 Khafra c.2472-2448 Menkaura c.2447-2442 Sheseskaf c.2441-2436	Userkaf c.2435-2429 Sahura c.2428-2416 Neferirkara c.2415-2405 Raneferef c.2404 Shepseskara c.2403 Nyuserra c.2402-2474 Menkauhor c.2373-2366 Djedkara c.2365-2322 Unas c.2321-2306	Teti c.2305-2279 Userkara? Pepy I c.2276-2228 Merenra c.2227-2217 Pepy II c.2216-2153 Nemtyemsat II c.2152		



Foreword

Virtually any traveller to Egypt visits some of the most famous Old Kingdom sites. Beside seeing one of the seven wonders of the world, the pyramids, the tombs of high officials of the time, literally hidden in the shadow of the tombs of the once mighty kings, most probably grasp one's attention. Their monumental architecture, splendid decoration, mysterious inscriptions and magnificent statues of their owners take our imagination back in time. Yet what were the roots and essential principles that underlay this journey?

This book is intended as a summary of some of the major trends and most important features that can be likely encountered when analysing Old Kingdom tombs and society. We have to bear in mind that around 3000 BCE one of the first centralised states in our recorded history rose, and the Old Kingdom represents certainly one of its apogees. Moreover, there is hardly any comparable society that left behind such a wealth of archaeological and literary evidence, a welcome companion for our journey back in time.

My primary goal for writing this book was to outline general trends in the history of the non-royal tomb development of the period. Why did I focus upon the tomb? The reason is rather simple and straightforward: ancient Egyptians considered the tomb to be their afterlife residence for eternity. In the afterlife they replicated the life they experienced during the lifetime. Thus the tomb architecture, decoration, inscriptions and equipment paradoxically represent a major tool for our understanding of the everyday life of the ancient Egyptians and enable a better comprehension of the development and dynamics of the Old Kingdom.

The book is divided into nine chapters covering, step by step, the development of the Egyptian tomb and society from the Predynastic Period to the end of the first six Egyptian dynasties, a lengthy period of time which covers the Early Dynastic and the Old Kingdom periods. These six chapters are accompanied by three additional chapters on religious aspects of the Old Kingdom society, its economy and natural environment. Being involved for some twenty years in archaeological research on the pyramid fields, it has been my aspiration to include the latest research and to also include unpublished material. It is my hope that I have been able to indicate the importance and make comprehensible at least some of the most significant phenomena of the third millennium BCE Egypt, a marvellous and inviting world that existed so long ago and yet is here with us.

I wish to mention many people that helped me during the writing process, a painful journey in this particular case. Prof. Anthony Spalinger, University of Auckland, New Zealand, carefully proofread the English of the manuscript and contributed with many observations and suggestions. I have to thank many Egyptians colleagues and

friends with whom I had many opportunities to discuss various issues connected to the book and who always proved to be helpful – Dr. Zahi Hawass, former Director General of the Supreme Council of Antiquities, Dr. Tarek El-Awady, Director of the Egyptian Museum, Dr. Mohammad Ismail, Director of the Foreign Missions Department of the SCA, Dr. Ramadan Hussein, Hisham El-Leithy – chief of the publication department of the SCA, Directors of the Saqqara Inspectorate of Antiquities – Kamal Waheed and Ussama Shimy, Nasser Ramadan – Director of Dahshur, and many colleagues and true friends in the field – Mohammad Megahed (my doctoral student now), Mohammad Yousuf – chief inspector of South Saqqara, Hamdi Amin – chief inspector of Abusir, Hatem El-Kereti, Mashhour Aziz El-Din, Ragab Tourk, Hany El-Tayib, Hossam El-Din Aboud and many others. It has been my home institution, the Czech Institute of Egyptology, (Charles University in Prague), where I have had the privilege to enjoy and share the expertise of many of my colleagues. Photographers Martin Frouz, Sandro Vannini, Miroslav Ottmar, Kamil Voděra and draftspersons Lucie Vařeková and Lisa Majerus proved extremely helpful when plates and figures needed to be prepared. If it were not for Ludvík Hegrlík and his company INSET, Jiří Melzer and MIBCON and Josef Jíša, Jíša company, and their extensive and long-standing trust, help and support with my projects, I would never have been able to accomplish as much as I actually could. Last but not least I wish to thank my wife Lenka for her incredible patience with me and my preoccupation with the world of ancient Egyptians.

Prague, December 6, 2011



Map of Egypt

People from the desert



The emergence of ancient Egyptian civilization is closely connected with a major depredation of climate which started more than 10,000 years ago. As a consequence, populations of cattle herders grazing their animals across vast areas of what is today known as the Western Desert, started to colonise the Nile valley.

The beginnings of religious ideas relating to life after death are found in the Nile Valley as far back as the end of the sixth millennium BCE. They appear in connection with the simplest forms of burial. It is to this period that Egyptologists usually date the origins of ancient Egyptian civilisation, by means of the presence of a number of phenomena that are considered, at a later date, to be typical features of the culture – a marked duality of thought and perpetual antitheses. These reflected the original independence of and developmental differences between southern and northern Egypt. There would be a continuing need to distinguish between Upper and Lower Egypt, the desert and the fertile floodplain of the Nile valley, and death and life, good and evil. Egyptian culture was born in the desert, and from time immemorial the ancient Egyptians returned to it after death.

The discovery of Egyptian civilisation

One of the oldest antitheses that can be traced through Egyptian history is the relationship between Upper, or southern, and Lower, or northern Egypt. The prehistoric cultures of Egypt developed in these two regions independently of each other. It was only in the fourth millennium BCE that they gradually began to influence each other and mingle. The result of this melting was the ancient Egyptian state. The journey to a united Egypt was maybe as long as the period between the murder of Julius Caesar in the Roman Senate (44 BCE) and the changes of 1989 in Central and Eastern Europe. It took approximately this long for the carriers of the prehistoric cultures on the territory of Egypt to arrive at the creation of a unified ancient Egyptian state.

The oldest burials on the territory of Upper Egypt can be dated to the end of the sixth millennium BCE. They represent the oldest Neolithic culture in general, known to us mainly through a number of preserved settlements and burial sites on the eastern bank of the Nile close to the village of Badari, south of Asyut. This is the village from which the Badarian culture takes its name. Its beginnings date from the period around 5400 BCE, a time when the Merimda culture was beginning to develop in the north of the country. Its carriers came to the Nile valley from the upland areas of Egypt's Western Desert, driven away by the gradual desiccation of the Sahara. They brought with them their ideas not only about the world that surrounded them, but about the things that ineluctably awaited man after physical death. These ideas about the afterlife will be of considerable importance in understanding the paths taken by ancient Egyptian civilisation in the third millennium BCE.

The discovery of the Badarian culture can be rightly ascribed to English archaeologist Guy Brunton, his wife, and Gertrude Caton-Thompson, a researcher also known for her discoveries in the Fayum oasis. Their research in Upper Egypt took place between 1922 and 1929, when they discovered over 600 tombs and many settlements built sufficiently high above the regularly-flooded Nile valley. The best known of these are Hamamiya and Badari. From the ceramics found, it soon



Since early times, the landscape of Upper Egypt has been characterized by a sharp transition between the fertile valley and the barren desert. The area of Gebelein, south of Luxor.

became clear that this was an as yet unknown culture, characterised above all by a totally new, previously unattested type of ceramics. Most of the vessels had thin walls, but they were made by hand, like all the other prehistoric ceramics on Egyptian territory. Among the chief types of vessels were pots with a red or black burnished surface and pots with a black rim, achieved by firing using a reducing method, and red or brown burnished walls. Most of the vessels had surfaces decorated using “combing” techniques. Large, coarsely-made ceramic vessels predominated in the settlements, while finer, more beautiful vessels were stored in tombs. That these settlers were relatively new to the Nile valley, and were not well-acquainted with the available resources in their area (above all of raw materials for the production of stone implements) is shown by their use of local, less appropriate stone materials.

The Badarian settlement consisted mainly of a number of smaller villages, which grew up on flat bands of desert on the border of its transition to fertile soil. The remains of huts, storage pits in the floor and storage jars, together with layers of settlement detritus, indicate that as well as being engaged in agriculture, breeding cattle, hunting and fishing, the inhabitants also engaged in a wide spectrum of other activities. The beginnings of agriculture here did not involve any exceptional effort; the farmers made use of the natural system of dams and reservoirs created each year as a result of the Nile floods. These geographical characteristics of the natural environment, especially the annually, naturally-flooded lower areas, would later, in combination with an artificially-created system of small dams, become the mainstay of Egyptian agriculture.



Precisely as the eponymous settlement was located beyond the Nile valley to be safe from the unpredictable Nile floods, so was the cemetery of Badari.

The creators of this culture believed deeply in life after death. The dead were buried in small burial grounds on the edges of the villages, in oval pits dug in the geological subsurface of the desert. They were always buried lying on the left side, in a contracted position with the head to the south and face to the west. Even at this point it is possible to recognise the solar orientation of the nascent ancient Egyptian religion and the symbolism of the setting sun as a symbol of the netherworld, the west, where the sun goes, to be “born again” in the morning in the east. A cogent message relating to ideas about death is also concealed in the contracted position of the body. During this period the ancient Egyptian concept of the afterlife was only just being created, but at least one of its fundamental ideas was already present: the contracted position of the body of the dead person may be defined by the “foetal position,” the position of the foetus in the mother’s womb. One of the transition rituals is thus completed: death has been successfully overcome and the dead person is reborn for life in the other world. Dead people were usually wrapped in matting, and accompanied by a wealth of burial equipment, dominated by pottery made specially for putting in the tomb. The dead owners of rich tombs were buried in their clothes. A broad selection of items connected with makeup and physical adornments were also placed in the tomb, including ostentatious bone and ivory carvings. The utility items are frequently covered in figural decoration; makeup palettes of stone, carved spoons for ointment, bone hairpins and necklaces with turquoise stones, glazed steatite, shells and various stones. Copper also appears on occasion, in the form of pins and beads. This is the first point in Egypt at which the cult of rich tombs appears, with tangible evidence of societal differentiation as reflected in burial equipment.



Remains of circular houses in Hamamiya (Badari culture).

The hungry expedition, the dirty professor Petrie and the missing skulls

At the end of the fifth millennium BCE the Badarian culture passes into the first phase of the culture of Naqada, the carriers of which would, much later, contribute to the unification of Egypt. The culture takes its name from the eponymous locality in Upper Egypt, on the west bank of the Nile. This is the place where William Matthew Flinders Petrie (1853–1942), the legendary English archaeologist and one of the fathers of modern Egyptology, worked. He started his research here in 1894.

The creators of the culture might have been surprised at the man who returned it to life. Although Petrie achieved many research successes and became a professor of Egyptian archaeology, in the eyes of his colleagues and contemporaries he was an eccentric whose way of dealing with his assistants was barely tolerable. Some of them soon left him and retained a lifelong hatred of him. Henry James Breasted, the future famous American Egyptologist and founder of the renowned Oriental Institute in Chicago, described a meeting with him at the end of the nineteenth century with following words:

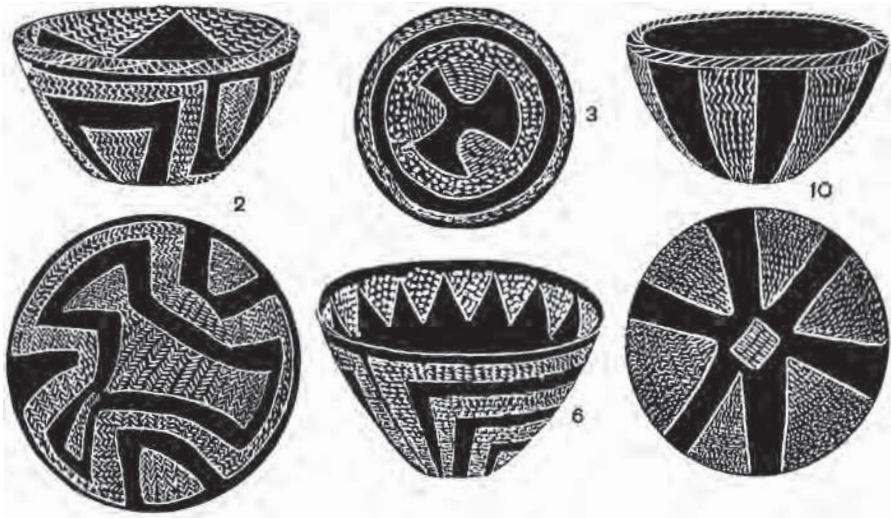
'Petrie was a man of forty-one...with a genial face, kindly eyes and the agility of a boy. His clothes confirmed his universal reputation for being not merely careless but deliberately slovenly and dirty. He was thoroughly unkempt, clad in ragged, dirty shirt and trousers, worn-out sandals and no socks. It was one of his numerous idiosyncracies to prefer that his assistants should emulate his own carelessness, and to pride himself of his own and his staff's Spartan ability to "rough it" in the field. He served a table so excruciatingly bad that only persons of iron constitution could survive it, and even they had been known on occasion stealthily to leave his camp in order to assuage their hunger by sharing the comparatively luxurious beans and



This model of a house from the site of Amra is representative of the Badari culture. The houses of the period were rather narrow and without windows as most of the activities were performed outside, mostly in the open area delineated by the settlement.

unleavened bread of the local fellabin...but with all his eccentricities... established in the end a record of maximum results for minimum expenditure which is not likely to be surpassed.'
(Drover 1995, 216).

The burial ground at Naqada extended over some 7 hectares and contained over 2 200 tombs, dug under the surface of the local gravel terraces. On the basis of topography and the richness of the burials, the site has been formally divided into the “basic” burial ground with 1 953 tombs, burial ground B with 133 tombs, burial ground T with 57 tombs and finally burial ground G with 6 tombs. It is accessible to the present-day visitor via a little-used asphalt road, which passes through a cemetery itself reminiscent of a bombed military training ground. In the days following the discovery of the burial ground, Petrie was surprised by the remarkable forms and decoration of Naqada pottery. It made such a strong impression on him that at first he believed he had found the burial ground of a “new race,” which according to the then prevalent diffusionist theory could have caused the disintegration and general collapse of the Old Kingdom in the twenty-second century BCE. The famous archaeologist was unable to fathom the sudden cultural leap of the Naqada culture that was apparent at every step in the form of archaeological finds.



Black pottery with incised decoration is typical of the Badari culture.

Most of the inhabitants of the area that is now Naqada were buried in rectangular pit-tombs of about a metre deep. They were placed on their left side, with head to the south and face to the west, as in the Badarian culture, on which the inhabitants of Naqada clearly drew considerably. Above the tomb itself they built a ceiling of sticks and mats, covered with soil, and most likely visible on the surface of the desert. From the outside, the burial ground might have resembled a field covered in small, low mounds. In sharp contrast to developments in the northern part of Egypt at the same time, the tombs were relatively richly furnished with burial equipment. In this culture the dead were wrapped in woven mats and surrounded by burial equipment. These reflected not only the person's position in society, but also his everyday life. Items found in the graves include numerous flint knives, scrapers and stone spear tips, palettes of green slate for making up cosmetic powders, with remnants of hematite and malachite, copper punchers, awls and adzes. Burial equipment also included ornaments of shell and stone, often using imported materials, and stone vessels of diorite, porphyry and syenite. Pottery with an exceptional wealth of forms and decoration, was also an essential item.

This culture is the first to provide evidence of a custom that accompanies the whole of ancient Egyptian civilisation, being handed on from generation to generation even a thousand years after the last sentence of Ancient Egyptian was spoken by a native speaker: organised tomb-robbing. Petrie found that some graves had been violated only in the parts where the dead person's personal burial equipment and jewellery were stored. They must have been robbed by people with a detailed knowledge not only of the topography of the burial site, but who knew all about how the items were arranged in the grave.

Even in its beginnings, the culture of Naqada displays in full something that later becomes one of the pillars of archaeological analyses of ancient Egyptian society: the



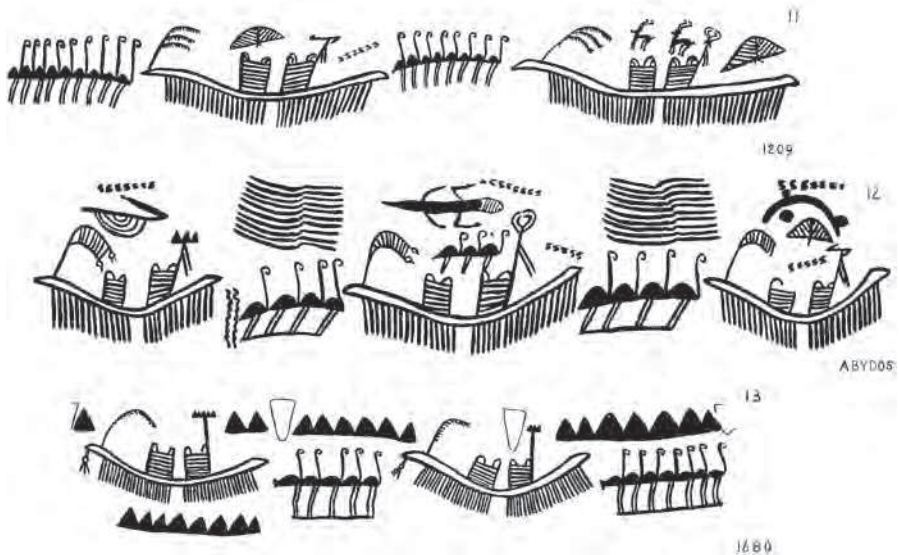
Naqada II pottery is typified by vessels decorated with images of boats, animals and schematic outlines of the landscape.

manifold complexity involved in the building and equipping of the graves. We can form a relatively complete three-dimensional picture of the social stratification of the society and of the kinds of artefacts used to express the position of a specific individual in society. For research of this kind, the important data include the size of the grave, the way in which the grave roof is designed and constructed, the care

devoted to the placing of the body in the grave, the different types of items that composed the burial equipment and the way they were laid out, and the economic availability of the materials involved.

A paradox stands at the birth of the Naqada culture, however. The most significant grave from the beginnings of the culture probably belonged not to a chieftain, as one would be tempted to expect, but to a high-status woman. The grave is located in Abadiya in Upper Egypt, and was discovered by Flinders Petrie in the 1898–1899 season. As usual, the burial pit was dug into the desert bedrock, with a ceiling made of small beams about 3–5 cm in diameter, which were arranged at 20 cm intervals. Mats were placed on top. This type of construction gradually became more popular, reaching its peak several centuries later in the First Dynasty. In the northern part of the grave were nineteen different types of ceramic vessels, slate palettes for mixing makeup – one in the shape of a hippopotamus and another diamond-shaped, six clay models of ostrich eggs, ivory combs, three small models of hippopotami and six human figures, over five hundred clay beads and other items. According to the report on the excavation published by Petrie, the actual female burial had been badly damaged, although one hand with a bracelet of cornelian beads had been preserved.

The neighbouring grave, labeled B 102, was also very unusual: it contained a total of five people buried in various positions. One male body lay stretched out on his back, but with the chest, shin bones and upper limbs in a heap in the middle of the body. The second man was missing his head, and his long bones were also piled in a heap. Of the third body only the bones of the lower limbs remained, while the fourth male burial consisted of a skull and another pile of bones. The fifth buried person was a small child. Next to these five individuals, two female skulls were found. The grave was unique in other ways, too. It was one of the first in which six stone vessels



Naqada II pottery.

were discovered, three stone battle clubs, five flint palettes and dozens of smaller items made of ivory. We can be certain that at its time, these were exceptional burials of exceptional people, whether because of their personal qualities or kinship (the latter being most likely in the case of the child, at least). Why, however, were these people buried in the way they were?

On the basis of the secondary position of some parts of the body and of the missing skulls or bodies, it is likely that the dead bodies were exposed to a gradual natural breakdown before burial. Only once the individual parts of the body had separated naturally had the right moment come to bury them. Similar burial methods have been found in archaeological research from present-day Africa, and it may be considered the start of attempts at mummification. Evidence of it will still be found at the beginning of the Fourth Dynasty.

Evidence from Jericho in present-day Israel, one of the oldest settlements in the Near East, from layers dating from the ninth–seventh millennia BCE shows the deliberate dismembering of the bodies of the dead and the separation of the skulls. The skulls were then covered in clay and plaster and modeled so that they captured the individual human features as faithfully as possible and the eyes were replaced by shells. The skulls appear to have been used in the cult of venerable and exceptional ancestors – in the hope that their abilities would be passed to the worshipper, and as an expression of personal piety. It is remarkable to note that most of the skulls belonged to women, which rules out the later tradition of preserving the skulls of powerful opponents as relics of victorious battles. Similar methods or options for dealing with the dead, resulting in some of the parts of the skeleton being separated, have been shown, for example, in the case of the Fali tribe in modern Cameroon. Here, too, there is a ritual focusing on the skull of the dead person. Three years after a more or less standard burial (although in this case the ritual concerns only men) the grave is opened and the skull removed. The skull is kept in the house of the bereaved for several months, after which it is removed to the holy place of the clan in question, where it joins other skulls. This is usually in a cave behind the village or a similar place. However, the problem remains that in Egypt we do not know of skulls being used in a secondary way, as in the neighbouring area. This does not necessarily mean that the practice could not have existed in Egypt. Yet there are not enough settlements from the prehistoric period for us to rule out this possibility. The discovery of a cave with skulls somewhere in its rocks on the edge of the Nile valley would be a totally chance affair.

Findings lined with fragments

Although Petrie published reports on only a fraction of the sources from the Naqada burial grounds (around six percent of the total number of graves investigated) several graves indicate customs with which we are also familiar from the period after the creation of the Egyptian state. One such object is a grave in the T burial ground (T 5), a large rectangular pit with brick-lined walls, divided by a partition into two parts. Inside Petrie found six human bodies in a disturbed state, although the grave itself showed no signs of having been robbed or any other secondary interference.



W.M. F. Petrie produced a basic classification for the Predynastic period of ancient Egypt. Petrie's pottery classification was based on the major dominating shapes of individual vessels and diachronic changes in their decoration.

Two explanations appear possible. It might be a repeatedly used grave belonging to one family. In such case, however, the bones of at least the last person buried could be expected to be in a specific anatomical position. However, they were clearly not. The second possibility, that it was a ritual burial of several individuals who had been

put to death, is supported by the fact that the bones bore traces of jaw prints (whether human or animal could not be identified) and the bone marrow had been carefully removed. We also have evidence of a ritual called *sati*, which reached the peak of its popularity under the First Dynasty ruler Den. When he was buried, 133 people were put to death and buried at the same time in the vicinity of his grave.

On the basis of the frequency of certain phenomena, Petrie managed to discover regularly repeated characteristics that were typical of the afterlife beliefs of the time. One of the more remarkable is that the afterlife cult drew an artefactual difference between the northern and southern parts of the grave. High, conical vessels were placed against the northern wall of the grave (there were two types of vessels – red burnished or with a black burnished rim). These contained grey ash made from burnt wood and plant debris, possibly the remnants of a combustible sacrifice that formed part of the funeral rite. It was often covered by a further, thicker layer, possibly the result of beer having been poured over. Vessels with these contents were found in practically all graves except those of the poorest people. At the southern wall, however, close to the head of the dead person, there were wavy-handled jars containing perfumed animal fats. With the passing of time, the fats disappeared and were replaced by clay, so that at the end of the predynastic period only clay is found in these vessels. While on the general level we can see this process as an ordinary phenomenon involving making the afterlife cult more economic, Michael A. Hoffmann, the American archaeologist who worked for many years in Hierakonpolis, believes it is one of the first pieces of evidence of a gradual “opening of the scissors,” in which the rich became richer and the poor poorer. It is worth mentioning that vessels filled with clay are found in many cemeteries from the third millennium BCE. The custom retained its significance for centuries, although it is difficult to say whether its original meaning did not, over the course of time, undergo modifications and considerable changes in significance.

Petrie’s genius undoubtedly lay in his ability to evaluate the detailed documentation of his research and of the artefacts found, and, on the basis of the relationships between them, to arrive at more general findings. His most significant achievements include the sequential dating method, which he published in 1901. The method relied on a thorough analysis of grave units and ceramics. Petrie divided Naqada pottery into nine groups, tracking their occurrence and metamorphoses over time in individual graves. This allowed him to draw up a diachronic scale of development for these ceramics from 0 to 80. Each stage had ten degrees, and the closer to 80, the closer to the unification of Egypt around 3100 BCE. Petrie left grades 0–30 empty, and divided the rest into the developmental stages of Naqada culture. His foresight became clear twenty years later, with the discovery of the Badarian culture that allowed the preceding grades of the scale to be filled.

The pottery typical of the first phase of Naqadian culture is red burnished with white geometrical patterns of intersecting lines or with a black edge. Also typical are stone vessels and rhomboidal slate palettes. During the second phase, beige ceramics predominated, with pictures of boats, temples, geometric motifs and symbols, which with a certain degree of risk we may consider the predecessors of nome symbols.

This is an important step forward in the Egyptians' representation of the environment in which they lived: schematic pictures of mountains, foothills and rivers and of animals such as crocodiles and ostriches. The nome symbols with their typical emblems indicate that ancient Egyptian society was stratified not only socially, but also spatially. A particular symbol was a clear indication that a certain person was associated with a specific territory. This fact must have manifested itself both economically and politically in this period at the latest. It is also possible to state with confidence that the ceramics of this period were a means of communicating and transmitting ideas. They were no doubt also a gauge of social status, which explains why they were placed in graves, but are not found frequently in the settlement layers. Copper and precious metals such as silver and gold, and slate palettes in the shape of animals and fish also begin to appear more frequently in burial equipment.

The nameless kings

From the closing phase of this predynastic culture (Naqada III) we know of approximately one hundred graves. Only one of them, however, belonged to a king, and only one of them augured a real change of conditions in the country and in the balance of power on the territory of the future united Egypt. It is located on the territory of Abydos, where the Nile valley starts to become the Western Desert, close to the place where one of the oldest burial grounds of the Egyptian rulers of the First and Second dynasties was later to be established. The modern Arabic name of the site is Umm el-Qa'ab, or "Mother of Sherds", from the millions of fragments of ceramics used for cult that cover the surface of the desert here. At first glance they are



Cemetery of Predynastic chieftains and Early Dynastic kings in Abydos.

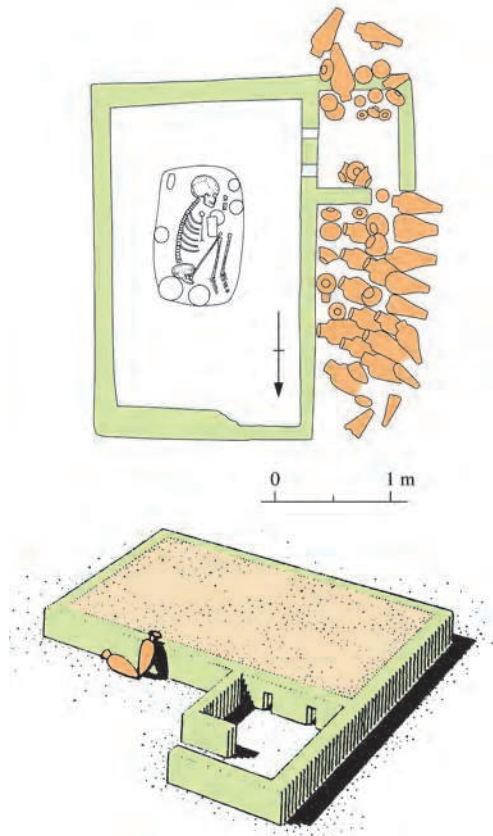
the only indication of the former glory of this sacred place. It is only relatively recently, in 1988, that the grave was investigated in detail, during research by the German Archaeological Institute led by Günther Dreyer.

The tomb-pit was lined with bricks and measured approximately 10×8 m. It lay on an approximately northeast-southwest axis, and was over two metres deep. Inside the pit the whole space was divided by brick walls into ten, later twelve rooms. In the southwestern corner was the burial chamber itself, and to the north of it nine storage rooms of smaller dimensions. In the eastern part were two further rooms, longish in shape, which were added at a later date. The greatest area was naturally taken up by the above-mentioned burial chamber, with a ground plan of 5×3 m. In its centre was a wooden construction that protected the buried ruler. It might be imagined as a large wooden cube turned upside down, with strengthened corners. In addition, many imprints of ceramic vessels were found in the chamber. Dreyer estimates that over five hundred vessels were stored here, mainly containing wine. The adjoining rooms 2–10 were used as storage space, and in some of them a large concentration of vessels was also ascertained. In storage room no. 2, for example, there must originally have been over 250 vessels, in no. 7 over 120 imported ceramic bottles, in no. 10 approximately 175. Storage room no. 11 held a big surprise – in addition to unique tablets with early hieroglyphic writing, there was also evidence that over 40 wooden boxes had originally stood here. The most historically interesting findings were those of the paleobotanical nature: the boxes were made of cedar wood. This could only have come from the territory of modern-day Lebanon, from the foothills of Lebanon and Anti-Lebanon. This means that by this period someone in Egypt was already capable of organising and financing an expedition to the area of modern Byblos in order to acquire cedar wood. The boxes were the same size (around 50×125 cm) and appear to have held hundreds of pieces of clothing, textiles, jewellery and so on. Sacks of wheat and several board games with playing stones were also found here. Such games were among the favourite pastimes of the elite of the time, as is also shown by later pictures of high officials engrossed in games. The last storage room, labeled no. 12, contained around another 40 imported vessels from the Syro-Palestine region. We do not know exactly what was imported in them, but it was most likely wine.

In this grave, at first sight relatively small (at least by later historical standards), approximately 1 500 various vessels have been identified. Given that most of the rooms in the grave were discovered in a plundered state, it cannot be ruled out that they may have contained up to 2 000 vessels, all with one purpose – to ensure a suitable afterlife for one exceptionally-important man. The underground layout of the grave is reminiscent of a royal palace, and this is another unique aspect. The grave was built so as to include an entrance area, a room for a guard, store rooms, private space for the ruler and above all a large central room (no. 6), a court room with the throne of the local chief, where his subjects gathered and where important affairs of power were discussed. The discovery of some of the earliest hieroglyphic signs in this grave significantly expand our knowledge of the development of the Egyptian writing system, which grew up autonomously on Egyptian territory around 3320 BCE. The owner of this grave may have had ambitions to conquer the whole country. However, someone else managed to do it instead.

The creation of protochapels

The most important event in the history of the non-royal burial architecture of ancient Egypt was the creation of a clearly-defined, separate room with one sole function – the afterlife cult in the honour of the dead tomb owner. We first see these rooms in the burial ground in Tarkhan, a prehistoric site not far from the traditional connection between the Nile valley and the Fayum oasis. Powerful local dignitaries still lived here at the start of the third millennium. The graves here can be dated to the closing phase of Naqadian culture, and are remarkable above all in that they are among the oldest graves with clearly-defined places of worship in the above-ground parts. These places were regularly visited, meaning that the cult of the afterlife was maintained by the family members of the deceased. A typical tomb of this period consisted of a small oval pit, in which the dead person was placed in the traditional foetal position – on the left side, head to the south and face to the west. In addition to the body, the pit usually contained only very poor burial equipment. On the level of the surrounding desert terrain, a brick construction was erected over the grave, filled with waste material. Since the dead person looked towards the west, the places of worship were attached to the outer wall of the above-ground part of the grave on the western side. They usually consisted of a small brick enclosure that could be entered from the north. In this way a kind of “protochapel” was created, a holy place artificially separated from the rest of the burial ground, and in it sacrifices were made to the dead person. The grave was connected to the chapel at this point by two openings cut into the wall, through which the dead person and the person making the sacrifices in the chapel were joined in symbolic communication. Both in the chapel and the surrounding area, especially in front of the entrance, lay ceramic vessels, the remnants of a longer-lasting cult. They were mostly bowls (for sacrificing food) and beer jugs (for sacrificing food) and beer jugs



**Tombs at Tarkhan and their cult places:
the clearly visible chapels feature
beer jars used during the practice
of the funerary cult. (LM).**

(for sacrificing drink). These two ceramic classes may be considered icons of the offering rituals. The above-mentioned “protochapels” show the gradual creation and formation of the oldest currently-known evidence of the living paying homage to the dead, and the mingling of their worlds.

The last step to a united Egypt

In prehistoric times there were four power centres in upper Egypt: Thinis, with its burial ground at Abydos; the large agglomeration of settlements with many burial grounds at Hierakonpolis, which benefited from its position close to the route to the gold mines of the Eastern Desert; and then Naqada and Gebelein. During the Naqada II phase, however, these last two stopped being local centres of leadership, leaving Thinis and Hierakonpolis to clash in the struggle to unify Egypt.

From the very beginnings of the Naqadian culture, Hierakonpolis had played an important role in the formation of the upper Egyptian elites. The first modern-era excavations of this huge locality took place in 1897–1899, and were led by British archaeologists James A. Quibell and F. W. Green. Their interest focused on the area of the temple and town, where among other things they discovered a collection of cult artefacts known in Egyptology as the “Main Deposit.” However, truly modern research was not carried out here until 1967. It was spearheaded by Walter A. Fairbairn, American archaeologist and specialist in the beginnings of the Neolithic in



Cemetery HK 6 belonging to some of the most outstanding burials of Predynastic chieftains, dominates the burial area of Hierakonpolis. The latest research by American archaeologist Renée Friedman, shows that the cemetery was designed within a clearly demarcated compound and contained, among other prominent features, one of the oldest hypostyle halls of history.

the Middle East, assisted by Michael A. Hoffman. Core borings made in 1984 showed that even in the fourth millennium BCE (Naqada II), cultural layers had accumulated to a thickness of four metres. At one time this must have been a truly imposing place, with settlements developing at an unprecedented pace.

On the basis of the settlement structures it is estimated that during the Naqada I period (sites 29 and 29A) the local population might have reached some 10 000 people, settled over an area of about 35–40 hectares. Although most of the sites mentioned in the text had one burial ground each, in Hierakonpolis several significant burial grounds arose at different times and in different places over a period of more than a thousand years. Each of them represented some sort of milestone in historical development. One of them is the HK 6 burial ground, situated at the mouth of Wadi Sufian, approximately 2.5 km into the desert from the settlement of the time, and used in two separate time periods to bury the ruling elite. During the first period (3700–3500 BCE) several large rectangular graves were built, at the time among the largest on Egyptian territory. The first large enclosure also dates from this period. From this type of structure, over the course of the third millennium BCE, there developed the valley temples, integral parts of the pyramid complexes. During the period 3500–3300 BCE, the development of the burial site was interrupted as a result of activity having shifted to burial site HK 43, which is where Tomb 100, also known as the Painted Tomb, is situated. The burial ground was not developed further until the period 3300–3000 BCE.

In burial ground HK 43, situated at the mouth of Wadi Khamsini, anthropological analysis has ascertained around three hundred people buried in a total of 260 graves. Their robust skeletons and strong muscle attachments suggests that they were from



Hierakonpolis, workshops and the area with vats.

a lower social echelon, probably local farmers. Most of the graves also contained almost no burial equipment, underscoring the poverty of their owners. No weapons were found in the graves, and only half of them had some pottery, by far the most common burial equipment item. Only in three male graves copper pins were found. A grave containing seven vessels might be considered rich. The vessels found in these graves can be divided into two groups. There are coarse jars containing the remains of beer, and conical vessels containing ash, clearly of the same origin as the ash found by Petrie in similar vessels at Naqada. The richest grave, no. 209, belonged to a woman who died at the age of about forty-five. In her grave, as votive sacrifices, were three vessels with red burnished surfaces, a deep bowl and two bottles, the necks of which were broken before they were placed in the grave (in this way the bottle was ritually excluded from the world of the living). Also found in the grave were two stone vessels made of basalt and calcite, and a damaged bone comb.

According to American anthropologist Amy Maish, who analysed the anthropological material from the cemetery, many skeletons show signs of particular treatment after death. In the case of seven individuals, clear cuts to the neck were documented, while in two cases there is evidence of decapitation after death. This is indicated by a large number of lacerations to the first and second neck vertebrae, something difficult to do while the individual is alive because these vertebrae join the skull and the spine. The purpose of these interventions remains a mystery, but it may have been an effort to magically neutralise the power of the dead, thus preventing them from doing harm to the living. If this was the case, then family relationships were not always ideal in ancient Egypt, either. A further interesting phenomenon is the wrapping of the skull and limbs that was ascertained in the case of a number of females. This may be the oldest evidence



Remains of the Hierakonpolis fortress reach even today a height of 10 m.

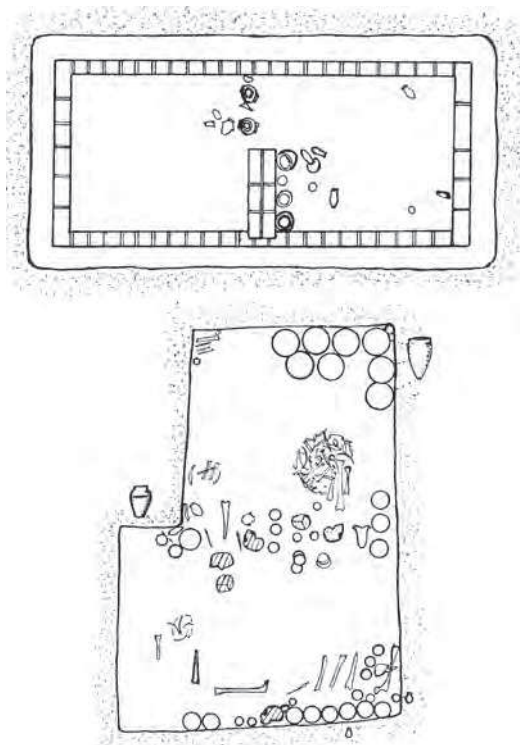
**Tomb ground plans
for Hierakonpolis Tomb 100
and Naqada Tomb T 5.**

of mummification (about five millennia old). According to as yet unpublished information, it is even likely that in some cases the internal organs were removed from the body and placed in the stomach cavity after the body had been treated with hot resin.

The famous Painted tomb from Hierakonpolis (100) can also be dated to the same period. This is a serendipitous discovery that illuminates the role of the growing predynastic elite on the territory of Hierakonpolis. It was discovered to the south of the settlement area, where it clearly formed part of a prestigious burial ground from the Naqada II period that has unfortunately

never been systematically investigated. Architecturally, the grave is fairly conventional, although notably large: it is a rectangular pit grave, 5 m long, over 2 m wide and approximately 1.5 m deep. Its walls were lined with unfired bricks and the space created was divided by a partition in such a way as to create a burial chamber and one adjoining room for burial equipment. The preserved remains have been dated to the second half of the Naqada II period (phase IIc). What is unique is above all the painting on the plaster of the burial chamber walls – some of its elements were soon to become the domain of the ruler and the ruling ideology.

The main composition runs across three adjoining walls. Its basic motif is six boats under way. Five of them are painted white, with sickle-shaped hulls, while the sixth is black and, unlike the others, has a high prow. They are surrounded by hunting scenes: hunters and dogs going after gazelles and ibexes, and animals caught in traps. However, the whole scene does not relate merely to everyday hunting experiences. In one case we see a hero with a battle mace stepping towards two lions; in another place he is tying up two lions like a “lord of the animals.” In this case we appear to be dealing with a clear Near Eastern motif, showing that there existed close ties between these two areas as far back as the fourth millennium BCE. We also find depictions of people fighting, and under them, in a small vignette, a picture of a victorious military leader with three bound captives, whose heads he is smashing with a mace. This motif of “killing enemies” becomes an icon of the power and sovereignty of the Egyptian





Tomb 100: the reconstruction of its decoration. It features boats and motifs representing the defeat of enemies by a Hierakonpolis chieftain. The same meaning can be associated with the animal hunting scenes – it refers to the subjugation of the forces of evil and chaos. Large boats signify the fact that the victorious chieftain gained control of a major traffic artery connecting different parts of Egypt.

ruler, and, endlessly repeated, will come to represent the ruler's prerogative until the end of Pharaonic Egypt.

The whole composition of the boats, the successful hunt and the victorious battles may be considered a kind of schematic abbreviation of the nascent governing ideology. The boats reflect control over the only transport artery in Egypt of the time, the river Nile. Victory over wild desert animals indicates the local chief's control over the evil forces of chaos. The battle scenes have a similar significance: the subjugation of surrounding rivals and the acquisition of military dominance was a key factor in the rapid expansion of the mature Naqadian culture in a southerly direction, and above all to the north through the Nile valley towards the Delta, which formed a major entryway for luxurious goods from abroad.

During the period just before the unification of Egypt, there was further development of a burial ground for the ruling elite at Site HK 6. Here, the outstanding grave is Tomb no. 1, consisting of a rectangular pit with walls lined with unfired bricks. The ceiling was made of wood and matting. The above ground part of the grave was enclosed by a wall, with one entrance on the northeastern side. This entrance and the existence of a wall enclosing the grave area indicates that some sort of cult of the dead person must have taken place inside, whether regularly or occasionally. This grave comes from the Naqada II period, and according to Barbara Adams, may be connected to the predynastic ruler Scorpion (not the ruler from Abydos). Going by the finds of many luxury items – beads of gold, turquoise, copper, cornelian, faience and silver, and blades of obsidian, as well as other items, the tomb could have belonged to a local ruler of Hierakonpolis.

At the far western end of the burial ground lies Tomb no. 2, in the vicinity of which some very unusual animal graves have been found. To the west of the tomb, the burials of three cattle were found, to the northwest the burial of a dog, and to the

southeast a grave with baboons. According to Hoffman, Site HK 6 represents the ancient Egyptian microcosmos: the presence of animals means it can be considered a symbol of Upper Egypt, while the tomb with the enclosure wall to the north may be considered representative of Lower Egypt. The whole burial ground would then be a foreshadowing of the united Egyptian state on the symbolic level.

In 2000 one of the last unique finds was made: in one of the tombs and close by it, fragments of a limestone statue of a human were found – fragments of the nose and earlobes. That research into Hierakonpolis is far from over was clearly shown by a wave of media interest in the site at the start of July 2005. Egyptian culture minister Farouk Hosni announced the discovery of the tomb of one of the oldest rulers on Egyptian territory. It was not only a tomb, however, but a whole tomb complex, surrounded by a well-preserved wall of wooden beams. The complex consisted of a large, rectangular pit covered with the oldest known preserved above ground tomb construction. Although the tomb had been robbed in ancient times, it still contained four undisturbed bodies lying on a floor paved with limestone blocks. This is the largest tomb complex of its kind to date, with a ground plan measuring 16×9 m.

The first body lay in a contracted position on the left side, face to the west. The second was partially stretched out, while the third and fourth lay perpendicular to the other two. No burial equipment was found near the bodies, nor matting that was usually used to wrap bodies. However, their position indicates that they were probably the bodies of sacrificed servants or captives, who were buried close to the dead owner of the tomb. He himself was buried in the eastern part of the tomb, where part of his original burial equipment was also found.

Along the longer walls of the burial chamber were eight deep, round pits, four on each side. These served to hold the wooden beams that carried the roof construction and the superstructure of the tomb. This is the oldest known construction of this type in Egypt. In the eastern part of the above ground tomb construction were another six round pits, arranged in two rows, which indicated that here was an offering chapel.

Burnt ostrich egg shells were discovered in the northwestern corner of the complex. They were probably part of a basic collection of items connected with the desire to ensure rebirth through magic, according to a preliminary statement by Hierakonpolis project director Renée Friedman from the British Museum in London. The entrance to the complex was on the northeastern side, where the foundation ditch for the enclosure wall is interrupted, with large round pits at the edges of the gap. In one of the pits fragments of ritual vessels and bones of newborn sheep and goats were found in an ash layer. Close to the enclosure wall, in a layer of ash and burnt material, archaeologists found the complete head of either a ram or goat skillfully carved from flint. It is similar to a flint figure of an ibex that had been found in the same tomb earlier, and which is now on display in the Egyptian Museum in Cairo. During the excavations, archaeologists also found 46 limestone fragments belonging to the oldest Egyptian life-sized statue of a person (other fragments of the same statue were found earlier by Barbara Adams). In addition, fragments of two ceramic burial masks were located. The complex had been set on fire at a later date,

and the stone statue deliberately broken into dozens of pieces. Nevertheless, this last find brings promise of further finds.

There has been one another significant archaeological find recently. A palace and ritual building from the same period have been identified on the border of the desert, close to the settlement in Hierakonpolis. As reconstructed by archaeologists, the temple's large, oval ground plan was surrounded by imposing constructions made of wooden beams and matting. The arrangement and style of the constructions is reminiscent of the royal ritual precincts from the early dynastic period, above all the yard designated for celebration of the Sed festival in Netjerikhet's complex in Saqqara. It is one of the oldest forerunners of the dynastic buildings that symbolised the idea of royalty and royal power.

The beginnings of the northern kingdom

In Lower Egypt the archaeological sources relating to the history of prehistoric burials are not nearly as rich and informative as they are in southern Egypt. The main reason for this is the current population explosion and extensive construction projects, particularly in the Nile Delta. This is associated with an extensive growth in industry, intensive building activity and a high level of ground water, causing salinization of the fields. As a result, farmers have used the unfired mud bricks from the ancient monuments to improve the soil. The consequence has been the notably fast disappearance of monuments over the whole area.

Probably the oldest culture to have been identified as yet on the territory of Lower Egypt is that connected with the Merimda Beni Salama site. This lies on the western edge of the Nile Delta, in its southern part, about 50 km northwest of Cairo. During recent excavations of this extensive site, five archaeological layers have been discovered. The oldest is from the sixth millennium BCE, while the younger phases mostly cover the period of the fifth millennium BCE. The oldest cultural layer of Merimda is fairly distinctive. The basic pottery shapes that characterise it are plates, bowls and deep cups, delicately smoothed or burnished ceramics with carved decoration in the shape of fish bones, pointing to contacts with the Near East. In the second cultural layer there are present bone harpoons and stone axes from Nubian stones, a sign of contacts with the south. This suggests that we should not limit ourselves to the Near East when searching for the background to the prehistoric cultures of the Nile Delta.

From the oldest layers discovered come only a few round pits used as houses, measuring 2–3 m in diameter on average. By all appearances, most of the daily activities of the inhabitants of the village were carried out in the open air, and the small houses were used only for sleeping. The collection of stone instruments consists above all of wide lumps of stone made from the boulders collected on the settled terrace. There are unusual finds in the shape of clay figures, one human and several of cattle: this is the first evidence of its kind to be dated, using radiocarbon dating, to the beginning of the fifth millennium BCE. Also of great significance is the wealth of animal remains – of domesticated sheep, cattle, pigs and also a dog. It appears that domesticated pigs, first shown in Cayönü in southeastern Anatolia from around

7200 BCE, may have reached Egypt via Kurdistan and the Zagros Mountains. Thus, once again, we find significant evidence, even in this early period, of intensive contacts between Egypt and the wider world.

In its younger phase this culture differed mainly in its ceramics, but also in the quantity of settlement remains, which indicates more extensive settlement strategy. Ceramics were strengthened mostly with reeds and chaff. Moreover, this method made it easier to produce large vessels, including cups and bottles as well as bowls of various sizes. In contrast to earlier times, however, no ceramics are decorated. In the settlement part of the site, the remains of large houses have been found, partly dug into the earth and with additional reed walls to protect against the wind. Large baskets buried in the floor served as storage places for grains and similar commodities. Sheep, goats and pigs were kept. The production of stone implements also appears to have played an important role. Here, on the edge of the desert, there was a plentiful supply of the sought-after flint nodules. Since the inhabitants of the settlements of the central Nile Delta did not have access to these raw materials, there was the possibility of a market for early barter trade.

There is also remarkable evidence of nascent artistic activity – small figures of cattle made of fired clay, and a very effective sculpture of a human head. In the area of the Merimda settlement a considerable number of burials have also been discovered. The dead bodies were placed on their sides in shallow pits, in a contracted position. Burial equipment was sporadic, and, when present, does not point to any social differentiation. It used to be believed that the dead were buried in the middle of an existing settlement. However, new excavations have shown that in reality, settlement shifted continuously over long periods, and so the younger settlement parts would partly overlap with older burial sites.

Helwan, the forerunner of Memphis

Finds approximately similar to those from Merimda have also been found in Fayum and El Omari, near Helwan to the south east of Cairo. They represent the younger phase of the prehistoric cultures on the territory of Lower Egypt, dating to the first two thirds of the fourth millennium BCE. Together they are included in the Maadi culture, which gained its name from excavations of a settlement in the Cairo suburb of Maadi, not far from Helwan. The fairly spread-out settlement and the two burial grounds associated with it provide a broad cross-section of the material culture of the time. Ceramics indicate its characteristic features, and there are also numerous copper implements, pins, fishing hooks and axes, while bone and stone tools are starting to recede. Copper ore has also been found in Maadi; it was used to colour cosmetic preparations.

The above-mentioned finds of copper items indicate intensive trade relations and contacts with southern Palestine and the Near East. There is also evidence of relationships with contemporary Upper Egyptian cultures. These are reflected in imported ceramics and their locally-made copies, as well as imported slate palettes. In general, this locality appears to have been a key trading point between the Nile valley



Omari, tomb of a local chieftain (Tomb A 35). Note the remains of the wooden construction (left) and the chieftain's staff in front of the face of the deceased (right).

and the Near East, and through it the early Upper Egyptian cultures would also have been able to gain connections to this area.

In the Omari site a total of three settlements were found, labelled A, B and C. Omari A is approximately contemporary to Naqada I, with one radiocarbon dating putting this settlement at the start of the fourth millennium BCE. Omari B is contemporary to Naqada II, while Omari C and its burial ground can be dated to the end of the fourth millennium BCE and the first two dynasties of the united ancient Egyptian state. The position of the settlement, close to the fertile floodplain in the area of modern Helwan, indicates that agriculture was economically significant to its inhabitants. Helwan was a unique natural area, which until the advent of heavy chemical industry in the 1950s was known for its spas. Today the area is one of the most polluted in Egypt.

It is now very hard to imagine that in this area lay the strategic fore-field of the united Egypt of the Old Kingdom. It was crossed by caravans heading for the shores of the Red Sea, and onward to the Sinai peninsula, from whence they returned with valuable mineral treasures. It was such important territory that one of the largest and best-known cemeteries on Egyptian territory later grew up here. All this (and the existence of the settlement and burial grounds at Maadi and Wadi Digla) means that in a certain sense the wider Helwan area may be called the forerunner of Memphis, the first capital of the united Egypt. The city would be artificially founded around the year 3000 BCE on the opposite, western bank of the Nile, as the chief administrative centre. From the Omari A settlement there are also archaeological finds showing

a certain amount of contact with nomadic tribes from the mountain areas between the Nile and the Red Sea. Such finds include the shells of sea snails of the gastropod genus and various types of hard stones.

Houses in Omari have round, sunken floors, covered in matting. Outside the house there are often round pits, which originally held the stakes that held up the above-ground construction of the house. In the vicinity of each house there are usually storage pits, which indicate that the family (father – mother – child/children) was the foundation of the community. Research into burials has shown that tombs were situated within the bounds of the settlement of the time, possibly very close to the house of the dead person's family. Surprisingly, no burials of foetuses or newborn babies have been discovered, something to which the aggressive geological substratum may have contributed. A role may also have been played by the social ideology of the time – it may have been that an individual was only considered a person once a certain age was attained. Given the high level of child mortality at the time, this would have been logical. It is also not possible to find any sort of structure in the internal division of the burial ground, which may also stem from our assumption that individuals of each family were buried not far from their houses.

Several burial grounds have been identified and researched (with varying degrees of quality and completeness). The dead were buried in round pits in a contracted position, on their left sides, heads to the south and faces to the west. This is reminiscent of the burial practice of Upper Egypt and is sometimes interpreted as a cultural loan. The bodies were usually wrapped in mats or animal skins. Burial equipment usually consisted of a single ceramic vessel. One remarkable tomb is A 35, the tomb of an adult man buried at the bottom of a pit forty centimetres deep. This was in fact one of the deepest tombs in the burial ground. His burial equipment consisted of a single vessel placed in front of his face. The overall situation is complemented by the unique find of a carefully-worked “chieftain's” stick, which is interpreted as evidence that this was the burial of a local chief, thus confirming a limited social differentiation within an otherwise relatively homogenous community. The tomb is also remarkable because to the north of the actual tomb pit the remains have been found of twenty small wooden poles arranged in a semicircle, with another five pits empty. The poles were around five centimetres in diameter on average. A similar structure was found to the south of the pit. It is possible that this was a wooden construction, enclosure wall or something similar that clearly defined the space of the tomb itself.

The Omari C burial ground, with tumuli, is considered typical of the predynastic cultural tradition and continuity of northern Egypt, which lasted until shortly after unification. Here, however, the situation is more complicated. The site as such has been very badly investigated and its documentation is even worse, so we have to limit ourselves to a few simple conclusions. The tomb pits were oval, and the dead were placed on their sides with arms bent so that their hands were right in front of their faces. Unlike in the previous periods, there is no predominant astronomical orientation. The bodies were wrapped in matting or fabric. Burial equipment continues to be very limited, and usually consist of one vessel, microlithic blades,

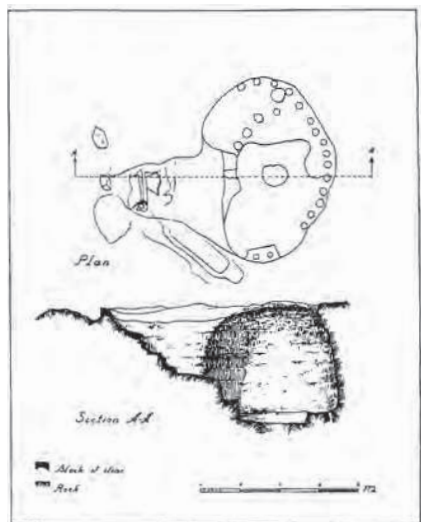
sometimes snail shells. In one case an agate necklace has been documented. It is interesting that in some cases the above-ground parts of the tombs included stone circles and fireplaces, evidence of a regular afterlife cult of the dead.

Courting the Near East

Maadi was investigated later than Omari, but may nevertheless be described as a more sophisticated form of the same culture, dated to the last quarter of the fourth millennium BCE. It is interesting that it is located close to the Omari A-C settlements. Several centuries later an Early dynastic burial ground would arise on the territory of what is now the city of Helwan, with ten thousand tombs of people of various statuses and origins. The very position of the settlement, extending over an area of 18 hectares, is highly impressive. Moreover, the settlement is very close to the mouth of a large valley, Wadi Tih, the starting point of a trade route that led across the Eastern Desert to Sinai and vitally important sources of copper ore.

Over the extensive settlement, three different types of dwellings were identified. The first, very unusual in Egypt, consisted of underground dwellings hewn into

the rock, with ground plans of approximately 3×5 m. There were also dwellings with oval hollowed-out floors. Then there were typical above ground structures with a trench around the perimeter that provided the foundation for walls of light organic materials, mostly wooden beams, planks and matting. The subterranean dwellings, which also used to be called troglodyte dwellings, are now thought to have been inhabited by foreign traders. It was something of a merchant colony, organising foreign trade directly from Egyptian territory. The telltale factor is the characteristic dwellings themselves. Based on the specific features of these sunk dwellings, they were probably built by people from the nearby Negev desert who belonged to the Beersheba culture. It is in the area around modern Beersheba (the capital of the Negev) that most of the well-known sites with this type of dwelling are found. In Egypt they are an entirely inorganic element.



Sunken houses in the settlement at Maadi.

The ceramics typical of the site are round, flat-bottomed bowls. Occasionally they are decorated, and sometimes we can distinguish symbols on the vessel walls that were engraved after firing, including serekhs (small rectangular frames) containing the Horus names of the predynastic rulers. There are also attested stone vessels and zoomorphic palettes. Copper items are also very common in this period. A large number of these artefacts naturally appear in the burial equipment of people from the Maadi culture. Their living seems to have been based on long-distance foreign trade, as shown by the imported ceramics found. These include bowls with legs, cups, and jars with handles for importing oils and animal fat. Two storage areas have been identified in the settlement. To the south there was a long pit, about four metres long, in which stone vessels of calcite, limestone, basalt, granite, gneiss and diorite were found. There were even vessels made of cornelian. To the north there were large jars buried up to their mouths, and containing remains of wheat and barley, as well as fish and cattle bones and the shells of water snails. The culture excelled at breeding a large number of domestic animals; sheep, goats and pigs, while relatively few fish were found (around 10 percent) in strong contrast to the Fayum and Merimda cultures. The chief grains naturally included wheat and barley. Since the site has been very well explored archaeologically, we may surmise that it was one of the places on which the chiefs of Upper Egypt fixed their sights and ambitions as they moved north. The culture's wealth, long-distance trade and knowledge of trade routes must have represented an irresistible temptation.

The burial ground in Maadi contained a total of 76 burials of men, women and children. Once again the dead were laid in pits, the deepest of which were for men. They were buried on their left or right sides in a contracted position and with their heads to the south. Burial equipment was very poor, usually consisting of everyday household ceramics. In some cases, demonstrably damaged ceramics were buried. This suggests that it was not considered necessary that these items should be fully functional in the afterlife. Given that in at least one case a younger tomb has been found to intersect an older one, it seems likely that the tombs had no superstructures indicating the site of the burial.

The second distinct burial ground, situated in the mouth of the long Wadi Digla valley, close to the Maadi settlement, comprised two unequal parts, and gradually extended to the east and west. In total, 471 burials, including 14 animal ones, have been found and documented here. The bodies typically lay on their right sides, heads to the south and faces to the east, in contrast to Upper Egypt where the face was mostly turned to the west. Some tombs were even topped with stone blocks. Although there is strong evidence that the inhabitants of Maadi were partly engaged in copper-working, copper instruments do not appear in tombs. They might have been considered too valuable to be buried.

Rich tombs may be considered those with at least three or four pottery vessels. Only a few tombs contained slate cosmetic palettes or stone vessels as part of their burial equipment. In addition to their relative wealth of burial equipment, these tombs were notable for being in the centre of the burial ground. In this part of the burial ground vessels have also been found buried in the earth. They may have been



Traders from Palestine – this rare depictions indicates that long-distance trade played a significant role at this time.

connected with the activities of the bereaved after the actual funeral since the vessels served to store the sacrifices brought to the tombs. In terms of form, this was an entirely different approach to the cult of the dead, or to the area where it took place, than has been ascertained in Tarkhan. The poorest tombs here were in the eastern part of the burial ground, which is also where the animal tombs were. This may indicate that at the start of the burial ground's development, the society was still relatively poor and homogenous (the burial ground developed from east to west). The complexity of the society gradually increased, and the custom of burying animals in a human burial ground was thus abandoned.

In the case of the burial grounds in Maadi and Wadi Digla it was also found that very young individuals – newborn babies and babies only a few months old – were buried in the settlement; clearly they did not have the right to be accepted into the communal burial ground. The proportion of older children in the burial grounds themselves is not inconsiderable, and going by the location of these burials, it seems likely that at the time

when the burial grounds were in use there were parts reserved for children's tombs.

Another important site was Buto in the eastern Nile Delta. New excavations here have captured an archaeological layer that corresponds to the Maadi culture, confirming that the culture extended over a fairly large geographical area. Here, too, significant evidence of contact with the Near East has been found. It includes small cones of fired clay, painted black, white or red, which were used to create mosaic ornaments on the walls of important buildings, as with Sumerian temples. The pointed ends were stuck into the brick walls, and the cones thus created rich and mesmerising decorative patterns. The cones date from the Uruk VII–VI period. Several burial grounds, including the one at Merimda, show that the burial customs of the Maadi culture were on the whole simple. The dead lay in flat, oval pits, wrapped in matting. Burial equipment was limited, consisting of a few clay vessels, sometimes the shell-shaped bowls that are already found in the tombs of the Merimidian culture.

Reed mat burial in Tarkhan.

Other items, such as combs or hair pins, were rare.

Buto was undoubtedly one of the most significant settlement areas of its period, as is shown not only by contemporary modern archaeological research but by later tradition. According to tradition it was here that the rulers of the First Dynasty founded their permanent seat, the palace called the “place of the harpooning Horus.” This was also apparently the site of the famous Buto palm groves, in the shadow of which the famous predynastic rulers of Lower Egypt were buried. According to some Egyptologists, it is here that hieroglyphics were discovered – they were originally written on palm leaves and not papyrus, and thus evidence of them has not been preserved. This hypothesis is fairly convincing if we consider the brisk trade contact with the Near East and the need to record and register the flow of goods. Buto’s position was sufficiently important to ensure that later, in the third millennium BCE, many Egyptian dignitaries had notices written on their tombs that they had undergone a religious pilgrimage to Buto. The owner of the tomb had to perform such a pilgrimage before his spirit went to the Netherworld.

Although recent archaeological research has enriched our knowledge of the prehistoric cultures of the Nile Delta and placed it on entirely new foundations, many issues and questions remain. The common origin of many of these questions is geographical position. Unlike the valley of Upper Egypt, with its broad belts on the edge of the desert, these sites lie in the Nile Delta in the immediate vicinity of the river’s flood area. It is possible that sites still lie buried under thick layers of Nile deposits. Hopefully the answers will be provided by future archaeological research.

The battle between the North and the South

The basic differences between the cultures of the fourth millennium BCE in Lower and Upper Egypt lie not only in the composition of the material inventory,



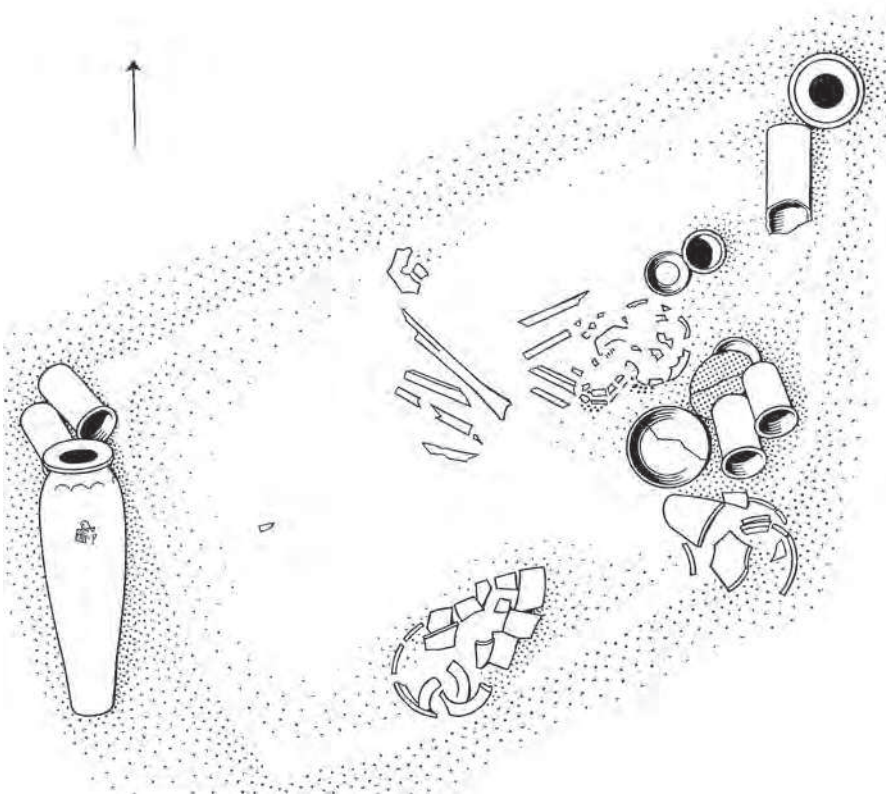
but in the customs and social forms that are reflected in them. In his still-unequalled book, *Egypt Before the Pharaohs* (first published in 1979), American archaeologist Michael A. Hoffman compares developments in Upper and Lower Egypt to the battle between the North and the South in nineteenth-century American history. He was thinking in particular of the warlike chiefs of the south, controlling more and more territory, trade routes and human resources, and the skilful traders of the north, engaged in active long-distance trade with the surrounding countries. In the south were warriors who invested their gains and plunder in luxury items that demonstrated their position, power and prestige, and who took the same approach to the construction and equipment of their tombs. In the north, to a much greater extent, were adroit traders who did not mind cooperating with other populations and who invested their gains in further trade, in trade commodities, raw materials and technologies (for example copper working). Rich tombs were the exception, and on the basis of burial grounds it could almost be said to be a very egalitarian society. Hoffman compares this development to the situation in the United States:

'In the South family solidarity, marriage and alliance systems and a highly ritualized and display-oriented system of entertaining and hospitality formed the backbone of society. New England, on the other hand, and the North in general, was a society more open to foreign trade, to rapid movement and social mobility. Even its traditional values, rooted in the religious protest movements of seventeenth-century England, placed hard work and community solidarity above kith and kin. The southern, labor-intensive agricultural economy based on slavery, social privilege, and territorial expansion, developed a semiprofessional military caste... The South focused its growth inward, developing symbols of its elitist and semifeudal attitudes that emphasized the strong security and stability of an essentially agrarian society ruled by a church-state type of arrangement which aggrandized the economic, intellectual and military skills of outstanding members of its own elite.'

(Hoffman, *Egypt before the Pharaohs*, 212–13)

This comparison aptly conveys the basic differences between the north and south in ancient Egypt. In the south there is a dynamically growing culture based on expansion, the creation of powerful elites, military conflict and territorial hegemony. The north, on the other hand, is more peaceful, somewhat egalitarian, but also an area blooming as a result of long-distance trade, with easy access to mineral raw materials and perhaps also to better technologies. Unlike in America, however, in Egypt the South won.

Today, our picture of the pre-unification processes is much more complete and vivid thanks to the Polish expedition working on the site Tell el-Farkha (Chicken Hill) in the Eastern Delta. This site consists of several about 5 m high koms (tells) which comprise settlement, ritual and funerary monuments starting in date around 3700/3600 BCE. The excavators, Marek Chłodnicki and Krzysztof M. Ciałowicz and their team, identified three stages of settlement. The first phase, lasting from 3700/3600 through 3300 BCE, marks an era when the site was inhabited by the native Lower Egyptian population. The second phase, starting around 3300 BCE, reveals



Tomb 113 (160) in Minshat Abu Omar, dating to a period shortly before the unification of the country. The rich burial equipment indicates that the care paid to the afterlife existence and the social diversification was demonstrated within the material culture. This tomb contained 7 pottery and 4 stone vessels, a nicely worked cosmetic palette, a stone knife and carnelian beads - 130 on the skull and 119 around the neck of the deceased.

a new phase when the local inhabitants started to be penetrated with people clearly associated with the Upper Egyptian culture. Passing through the unification process, the site continued to be settled down to 2600 BCE.

The settlement associated with the first phase shows structures arranged in a hierarchical order indicating that there was nothing like the presumed purely egalitarian Lower Egyptian culture at that time. The local population kept intensive trade ties both with the Near East and Upper Egypt including similar or identical decorated pottery, tools, mace heads and beaded necklaces made of semiprecious stones and gold. This site gives evidence of the oldest attestation of gold known from the Delta. Around 3300/3200 the Naqada settlers seem to dominate the site. As the excavators state, there are no traces of war or any military takeover, and this seems to indicate that the local population was assimilated to the newcomers. The second phase is marked by intensive building activities on the part of an anonymous Naqada

chieftain who controlled the trade with Palestine and Sinai, and whose residence was subsequently burned around 3200 BCE.

The importance of the site continued into the protodynastic and unification period. We know of two chapels with rich votive deposits including a statuette of a woman with a child sitting on her lap, possibly symbolising the divine mother of the king, and a statuette of a man clad in a cloak, possibly the first known example of a king ready for his *sed* jubilee that marked the anniversary of thirty years on the throne. There are signs in the settlement that the period preceding the unification was tense, potentially dangerous and full of internal conflicts, unlike the earlier Naqada take-over by the Naqada people. This indicates that the historical vector leading to the unification of the country was not easy. After the unification, the site seems to decline in importance owing to political and economic (trade) issues that became a matter of the new state and its centres (most likely Memphis).

This is the situation at the end of the fourth millennium BCE. There follows the unification of Egypt, an event that recasts the culture and social institutions of the prehistoric cultures of Upper and Lower Egypt into new forms that will go on to last a further three thousand years. Above all, it will lead to the famous era of the early dynastic rulers and the ensuing period of the pyramid-builders of the Old Kingdom.

The new destinies of the dead and sacrificed



South Abusir – together with North Saqqara, this is one of the most important sites for the history of Early Dynastic Egypt and the origins of the Egyptian state (MF).

The unification of Egypt occurred around 3000 BCE. The Upper Egyptian rulers successfully conquered the whole Nile Delta up to the Mediterranean coast, and became the absolute rulers of the Nile valley and the surrounding areas. The nascent proto-state was thus able to draw on the fundamentally more advanced culture of the northern part of the country, which had traditional contacts with the Near East. The Upper Egyptian system of government contributed considerably to the dynamic of development, in that it made skilful use of many instruments of power and various means for the outward presentation of political domination. The subjugation of the more advanced north became a necessary condition for the successful development of the slowly emerging state.

Surprisingly, it was not until the twentieth century that our knowledge of this period changed radically. In 1961 W. B. Emery, whom we shall meet again later, wrote in the foreword to his book, *Archaic Egypt*:

'Before 1895, our knowledge of Egypt's history did not extend back beyond the reign of the Pharaoh Senefru, first king of the Fourth Dynasty (2680 BCE), and to the historian of that day even he was a somewhat shadowy figure... Certainly no one had any conception of the highly civilized state which existed in the Nile valley hundreds of years before the Pyramid Age.

(Emery 1962, 21)

Rapid accession

The period of the First and Second Dynasty was a time of much upheaval, of rich and poor years, something that was connected with the dramatic fall in Nile flooding towards the end of this period. Not only did the gradually-forming state have the potential to build monumental works of architecture, but it had tools for demonstrating its powers in various ways – and above all means of holding on to this power. It developed and expanded its power with a rapidly developing sophisticated writing system, an ever-improving administrative structure and a quickly mastered mechanism for collecting revenues across the whole country.

Never before and never after was the development of the tomb as dynamic as during the First Dynasty. Only in this period did mortuary architecture undergo fundamental change with each new ruler. After the unification of Egypt, the journey to the other world became considerably more complicated, and also to a certain extent more inaccessible. The central theme in religion became the elaboration of the degree of “accessibility” of the afterlife on the basis of the person’s status in this world. Social environment played an indispensable role – on one hand, there was a narrow ruling elite, mostly consisting of members of the royal family, and on the other hand the largely agricultural population. This differentiation in society made itself felt immediately in the way that the tombs were built.

During the First Dynasty several significant events occurred. Several years after the joining of the white (Upper Egyptian) and red (Lower Egyptian) crowns, one of the largest and longest-functioning burial grounds in the world was created: Abusir and Saqqara. Over the course of several centuries additional significant cemeteries were



A North Saqqara satellite picture showing the tombs of the first officials of the White Walls (Memphis), the first capital of the unified Egypt. The lower part of the scene shows the Step Pyramid complex of the king Djoser.

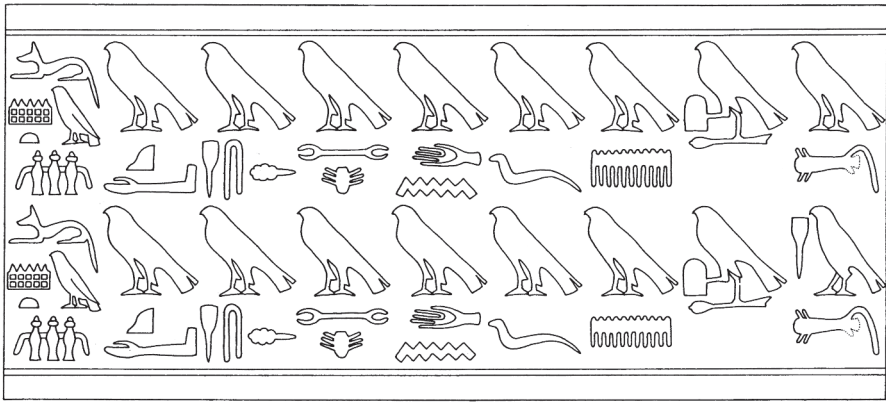
created: Meidum and Dahshur to the south and Abu Ghurab, Zawiyet el-Aryan, Giza and Abu Rawash to the north. The area that centres on Saqqara and Abusir will be fundamental to our narrative from now on, since it is here that most of the royal tombs of the Old Kingdom are located – three quarters of all the known pyramid complexes of ancient Egyptian kings. In their shade lie thousands of further tombs, of both high and low-ranking dignitaries. Only a small number of them is satisfactorily known to us, however. This area today lies some 30 km south of Cairo, on the west bank of the Nile, and on the very edge of the desert.

At the outset of the First Dynasty Saqqara was nothing but desert, with a highly conspicuous chain of limestone mountains running from north to south, easily visible from the Nile valley. This was the location chosen by the royal regents to build their after-death residences, which in a stroke exceeded everything that had previously been built for similarly important dignitaries. During the same dynasty, an unknown genius created a model of the first pyramid in the world, the forerunner of the Step Pyramid of the ruler Netjerikhet, who is better-known under his later name Djoser, first recorded on the Middle Kingdom. During the First Dynasty alone, several hundreds of people of lower social status would be killed to ensure the after-death existence of the Egyptian king, as well as of the powerful dignitaries of royal descent, all of whom were buried at Saqqara.

There are insufficient sources to reconstruct the history of the First Dynasty, however. The mixed feelings of an Egyptologist, archaeologist and historian are amplified by the awareness that during this period the territory was ruled by a group of the most significant rulers, who essentially laid the foundations of a state that went on to last successfully for another three thousand years. Thanks to imprints of seals from the royal burial ground in Abydos, specifically from the time of kings Den and Qa'a, we know not only the number of rulers but also the order in which they ascended to the Egyptian throne. There were eight kings in total, who ruled, at a very rough approximation, for some 200–240 years. The first ruler of the united Egypt was Narmer, who was succeeded by Hor Aha, Djer, Djet, Den, Anedjib, Semerkhet and Qa'a.

Narmer, the first ruler of the united Egypt

Narmer ascended the throne in around 3000 BCE. We are not certain of the correct pronunciation of his name, although it was written using the hieroglyphic symbol for a catfish (pronounced “*nar*”) and the symbol for a hoe (“*mer*”), which indicate the possible original sound of his name. According to tradition, Narmer came from the capital of the Upper Egyptian rulers, Thinis. Today the remains of this settlement agglomeration lie under the modern village of Girda. Driving down the modern asphalt road through the nearby settlements that follow one after another, you gain no sense of how glorious and politically significant place this once was. By all appearances, not even the local inhabitants know anything about it; their one concern is the health of their cattle and fertility of their fields. With a little luck, however, it is possible to find the burial ground of Beit Khallaf where one of the preserved tombs



Seal impression from the cemetery in Abydos, showing the sequence of names of the First Dynasty kings: Hor Narmer, Hor Aha, Djer, Djēt, Den, Anedjib, Semerkhet and Qa'a.

still reaches a height of around ten metres. This one and several other tombs were built by members of the royal family during the Third Dynasty. Today they are the only tangible evidence of the former glory of the area.

The situation is similar in the case of the new capital of the united Egypt, Memphis, which was originally called *Inebu Hedju*, the White Walls. According to tradition, the city was founded by the legendary ruler Meni, who was considered to be the same person as attested king Hor Aha. Again according to tradition, it was Meni who diverted the course of the river Nile in order to be able to build a city on the land with a strategic position on the border between Upper and Lower Egypt. As a result, he effectively controlled the entire country, with regard to the geopolitically important south and the strategic Delta, through which many luxurious items came to Egypt from the Near East (see the revidence from Buto, Maadi and Tell el-Farkha). The most recent palaeohydrological research in the Nile river basin suggests that it was in the area of *Inebu Hedju* that the different branches of the Nile began to fork, and thus the Egyptian Delta began in this area.

Nothing of *Inebu Hedju* has been preserved, and we can only guess whether this centre originally lay to the east of the burial ground in North Saqqara, close to Abusir, where a Czech expedition has been working for dozens of years. The very name is interesting in terms of its significance and possible political and religious connotations. It undoubtedly relates to an enclosed area, probably a small fortified town, around which there were further settlements of a predominantly agricultural character. The fortifications were made of unfired bricks of Nile mud, and the walls were painted white. However, the newly coined name is considerably broader in meaning than this architectural definition. *Inebu Hedj* may also signify that this small area was originally an Upper Egyptian fortified town which had part of its role to “supervise” the recently-gained territory of the Nile Delta. The area in which the Nile forked into several branches was naturally much more suitable from a geopolitical point of view – as compared to the remote location of Abydos in southern Egypt –

as a place from which representatives of the Egyptian rulers could supervise developments in the north. The monarchs continued to reside at their traditional seat in the south of the country. The “white” in the name of the settlement could, possibly also refer to the colour of the royal crown of Upper Egypt, and therefore the designation *Inebu Hedju* would thus be an expression of Upper Egyptian sovereignty over the area, a concise and explicit political statement confirming the result of the unification. It is also possible that the town’s name reflected the naturally white limestone plateau of North Saqqara, upon which the Upper Egyptian governors built their tombs.

The emergence of the Saqqara tombs of the nobles

In the newly born state, however, as in most such cases, the forces of inertia were considerable. As a result, the First Dynasty rulers continued to be buried in their burial ground in Abydos. The people who built their tombs in Saqqara were their representatives, probably male members of the royal family who administered the land and supervised it from their newly-established centre. It was at this time that the basic norms concerning the form and function of non-royal tombs began to crystallise and so remained in force for many centuries. We can see two parallel lines of development. The first prehistoric one has its roots in the fourth millennium BCE and is a continuation of simple pit burials. The second new one is based on considerably more complex architectural constructions accommodated in a large excavated pit that could be dug out several metres below ground level. Such tombs were reserved for the most powerful people of the time. Moreover, their superstructure became more ostentatious, if their basic elements were still built of unfired bricks.

A typical tomb, whether it was the mastaba of a high-ranking official or the simple pit-grave of a poor Egyptian, typically consisted of a superstructure and a substructure. The term mastaba comes from Arabic and originally meant a clay bench found outside a rural Arabian house, which is used for sitting, drinking tea and smoking water pipes. In Egyptian archaeology it designates a building with a rectangular ground plan and having its longer axis usually running north-south. The above ground section was reserved for the funerary cult, which was formally maintained by members of the family, but in practice much more frequently organised by priests from the ranks of the lower dignitaries. They were paid for their services in food and drink that came from what was offered in the tomb, as well as from the revenues of individual “funerary estates.” It was the latter which provided the necessary financial support for these mortuary cults.

The superstructure protected the underground section in which the person was buried. From the end of the Second Dynasty it also included a chapel where the funerary cult was performed. In the three centuries that followed the death of the first ruler of the unified Egypt, fundamental changes gradually took place in the appearance of the chapel interiors. Instead of the walls being plastered white, they gradually came to be decorated with scenes of everyday life, showing the buried



From these remains, it is difficult to imagine that North Saqqara once housed the most important tombs of the period.

person engaged in his favourite activities. He was supposed to, and was thought keen to, continue these activities in the afterlife (floating through a papyrus thicket in a boat, hunting and fishing, inspecting the work of his officials and servants, accepting sacrifices, banqueting and so on). It is here that the basic difference between royal and non-royal tombs becomes most clear. For the king, a tomb complex was primarily a means of rebirth, akin to a staging post on the road to the Egyptian heavenly gods. For other Egyptians, however, their tombs were their final destination, their house for the afterlife.

The substructure of the tomb consisted of one or more rooms reserved for the burial of the individual and for his burial equipment. At first it was built in an open pit, but later a descending corridor or staircase was hewn out. Finally, during the Third Dynasty, a shaft was constructed first, and only then the burial chamber added. It is in the underground part that architectural use of stone – white limestone – was first utilised. The wealth of burial equipment meant that all underground tombs were, from ancient times, the main target of tomb robbers.

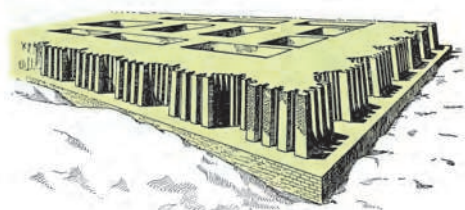
The shape of the tomb's superstructure in this period can be interpreted in two ways. The first explanation is based on the regular shape of the panelling on the outer side walls, specifically the system of rectangular projections and niches. This surface design was similar to the panelling on the walls of ordinary houses. Support for this "profane house for eternity" concept can be found in the Middle East today, where many houses have broken façades. Because part of the brickwork is constantly in the shade means that the walls are able to keep the house cool even in the hottest



Saqqara mastaba S 3503 was built during the reign of Djer. The tomb features niched and painted side walls and was surrounded by a perimeter wall. Along the outer perimeter of the tomb, tiny tombs of the servants were erected.



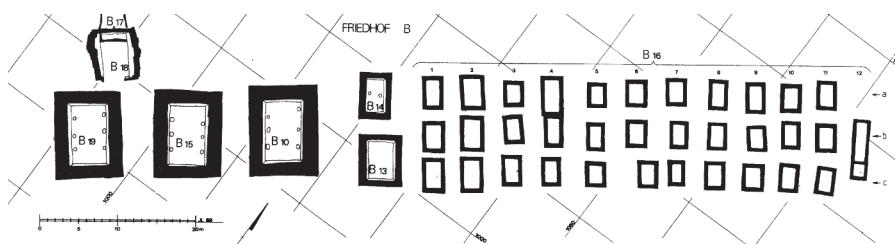
This Naqada mastaba measures in ground plan 54 x 27 m and dates to the very beginning of the First Dynasty. It is the southernmost example of its kind and it was built for queen Neithotep, wife of Narmer and mother of Hor Aha.



Examples of monumental architecture which started to flourish shortly after the unification of the country. (LM).

temperatures. Remarkably, this concept was used not only in the superstructure of the tomb, but also in the underground part. The stone and wooden sarcophagi that held the bodies of the deceased, later mummified, had outer walls that were decorated in a similar pattern. This was meant that the sarcophagus was considered the “house” of the dead person.

The second theory sees the tombs as being an imitation of an idealised primeval mound. The concept refers to the annual retreat of the Nile flood waters, which allowed the inhabitants of the Nile valley to resume their annual planting of crops. Supporting arguments can be found for this interpretation, but above all it is the shape of the superstructure of the tomb that represents the most important argument. An example is tomb S 3507 in North Saqqara, dated to the first half of the First Dynasty. This huge tomb, built of mud bricks and with its longer axis running north-south, had a ground plan measuring 44×22 m. Its superstructure comprised a total of twenty-nine inaccessible rooms, which were originally filled with burial equipment. The substructure comprised a large rectangular pit, with a ground plan measuring 5.25×3.15 m. At its bottom was the burial chamber of the high official. The walls were lined with bricks up to the edge of the pit, and at a height of 2.50 m above the floor of the burial chamber was a wooden ceiling made of large wooden trunks lying on a limestone lintel. The mouth of the pit was similarly closed off with wooden trunks. Over the chamber was an artificial mound of clay, sand and gravel, up



Ground plan of the tomb of Hor Aha in Abydos.

to one metre high, with a rectangular base measuring 10.50×9.20 m. The surface of the mound was covered in a single layer of bricks with no mortar. This construction, erected directly over the burial chamber and invisible once the tomb had been completed – it was entirely surrounded by a tomb casing with niches – represented the primeval mound, the place of rebirth in the netherworld.

On the tracks of the builders of Ineb Hedj

Although in the next section we will look mostly at the burial grounds of Saqqara, we should be aware that the several hundred dignitaries buried there did not represent most of the inhabitants of *Inebu Hedju*. Where, then, were these people buried?

In recent years, Egyptian archaeology has taken a significant step forward in its understanding of the history of the Saqqara area, in the sense that the main burial ground of the ancient inhabitants of *Inebu Hedju* is considered to be the burial ground in Helwan on the opposite bank of the Nile. This is where most of the population is buried, while Saqqara was reserved for high officials and the ruling elite. The burial ground at Helwan was created in the period immediately before the unification of Egypt, and thus precedes Narmer's rule.

The Helwan cemetery was explored in 1942–1954 Zaki Youssef Saad. It contained over 10,000 tombs and burials. Saad excavated the site over half a century ago, but it is only in recent years that we have gained a better understanding of the mortuary site. Most of the tombs discovered consisted of an ordinary grave pit with a dug out staircase leading to the bottom, usually from the north. To these may be added several dozen tombs built in a similar way to those built for the officials buried in Saqqara. Their tombs have a larger subterranean part, and sometimes the floors, walls and even ceilings are built of limestone blocks (limestone was quarried close to the site). Around five tombs had a pit with a boat burial close by. The superstructures of these tombs were made of mud brick, and had façades decorated with niches. The overwhelming majority of those buried were not mummified – the technique was not yet known at the time. The bodies were usually wrapped in cloth and buried on their sides in a contracted position. Some of them were placed in wooden coffins. The total areas of the tombs confirms that these were nearly all people of lower social status. Their size ranges from 250–400 sq. m, whereas the tombs in Saqqara are frequently over 600 sq. m, some of them even over 1000 sq. m.



Ways of Horus connected since prehistory Egypt with the palestinian territory and provided an important commercial route for importing valued items of foreign origin.

Approximately fifty tombs had a place reserved for “ceiling stelae”, which is a term used for the decorated limestone tablets showing, in low relief, the buried person sitting behind an offering table covered with bread loaves. These artefacts always included the owner’s significant titles and his or her name. The stelae were placed in the superstructure, and signified the main place where the cult rites were performed.

Their slightly mysterious designation as “ceiling stelae” was first employed by Saad, who discovered them in the burial chambers and assumed they were part of the underground architecture. Ceiling stelae for men are more common than those for women, with a ratio of 21:13. This still indicates a surprisingly large proportion for women, although unfortunately only two of them are given titles – “king’s daughter.” The others may be assumed to be the wives of dignitaries or members of the royal court or harem, but unfortunately their titles are missing. In the case of the men, more titles are provided: one individual was a royal prince and king’s son, while two others were administrative officials, four craftsmen, another four were priests and one a scribe.

Saad found burial equipment preserved in some tombs. However, the tombs were not excessively rich. Only in one case was an imported Syro-Palestinian vessel found. These Asiatic vessels stored wine and oil, and apparently were an exclusively royal privilege. The chief components of burial equipment included ceramics, to a certain extent stone vessels, amulets, flint knives, necklaces and armlets of semiprecious stones, faience and ivory objects.

The richest tombs are found in the north part of the burial ground, the position of which corresponds precisely to the cemetery of the high officials in North Saqqara. It

is as if these people were trying to indicate, through the location of their afterlife residences, that they were part of ancient *Inebu Hedju* and of the most important contemporary burial grounds. Given all of this, we are forced to consider both cemeteries when analysing the social structures of Archaic Egypt at this time.

Falcon the Fighter

The name of the ruler Hor Aha, the “Fighter” falcon, was represented by a hieroglyph of human arms, one of which held a shield and the other a battle mace or *bedj* – The latter is very apt symbol of power and strength. Aha holds a peculiar place in Egyptian history because he was the first ruler of a united Egypt, or at least was considered as such by the ancient Egyptians in later times. This is despite the fact that contemporary sources unambiguously label him the second ruler. He was buried in Abydos, at Umm el-Qa’ab, in tomb B 10-15-19, which points to the significant innovations that took place during his period. The ruler’s name is also connected to the “historic” founding and development of the Saqqara burial ground, which from the Second Dynasty became the principal cemetery of the Egyptian rulers of the third millennium BCE.

We can, however, count ourselves lucky that we actually know much about his tomb and the tombs of his successors. From 1894–1898 the site was in the hands of Emile Amélineau. He concentrated only on obtaining artistic objects from the tombs of the first Egyptian kings. If an object was damaged – especially in the case of stone vessels, but also of many other items – he unfortunately had it broken into small pieces in order to increase the value of the items that had been preserved completely, since their sale helped to finance his further research. The vessels often contained organic remains, which he ordered to be burnt, a sign of the primitive nature of Egyptian archaeology at the time. He further allowed the destruction of the remains of the wooden construction of the burial chamber of the ruler Djer. Owing to Amélineau’s “archaeology,” William Flinders Petrie set out to save the site “for historical study” and to locate “what was left on the spot.” It was only his painstaking work and meticulous exploration of the debris that Amélineau had left behind that led to a considerably more sophisticated analysis and study of the early native Egyptian rulers and events of the incipient Egyptian state, until then almost unknown. Petrie found broken vessels, fragments and freshly-plundered royal tombs and, as well, ivory tablets and labels with historical data of immense value. The last contained the names of rulers, dates, descriptions of events that took place during the rule of various kings, and lists of imported goods. Today, these items rank among the most valuable things discovered on the site, and form part of the “national treasure” in the Egyptian Museum in Cairo.

Aha’s Upper Egyptian tomb in Abydos (labelled B 10-15-19) is made up of three large, separate rectangular pits, orientated northeast-southwest. During Amélineau’s exploration they were shown to be encased by a wooden construction of boards and slats. The ruler was buried in the central pit, which differed from those on either side in that its ceiling was slightly vaulted. It is one of the oldest evidenced attempts by an

Egyptian architect to transfer the concept of the primeval mound into the interior of a tomb. After a ruler was buried, he joined the company of the immortal gods and was reborn on this mound, which emerged from the dark and primeval waters ruled by the ancient Egyptian god Nun, similar to the primeval mound above the burial chamber.

Close by the royal tomb, in a northeast direction, there were two larger grave pits, one of which is ascribed to Aha's wife Benerib. Behind them were three regular rows of tombs, of which each contained eleven "secondary burials" of members of Aha's court, young men aged 20–25. At the end of these was an elongated pit in the vicinity of which the skeletal remains of seven lions have been found. This arrangement can be interpreted as a procession by the ruler and his queen, accompanied and protected by the male palace guard and lions, to the other world in the southwest (see Den's tomb, below).

The arrival of Emery

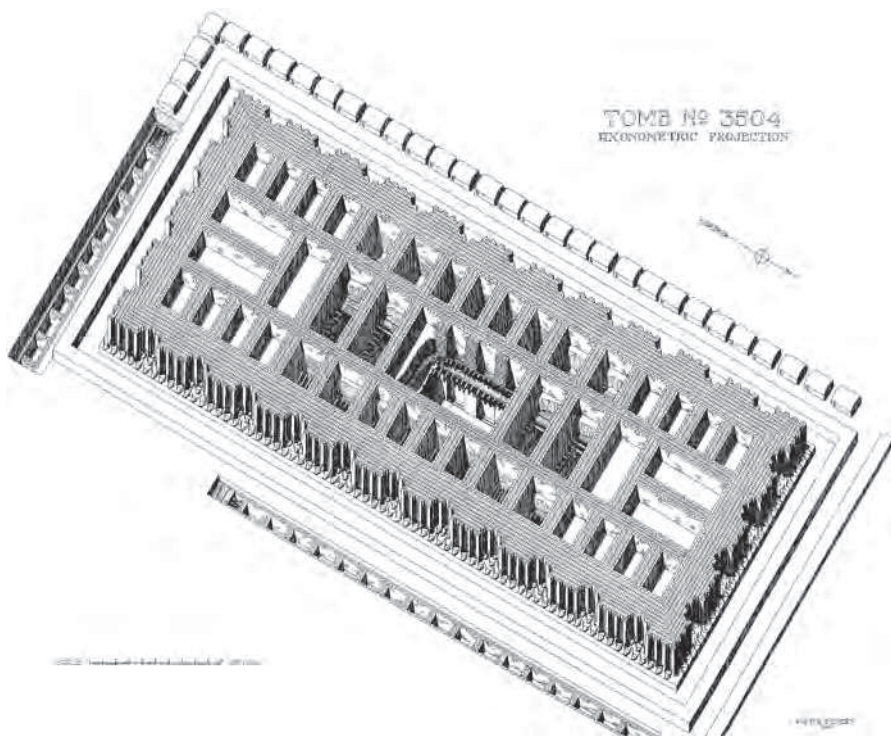
Hor Aha is seen as the initiator of the tradition of building the rich tombs called mastabas in Saqqara. During the First Dynasty these were built along the eastern edge of the rock massive of North Saqqara so that they were easily visible from the east and the Nile valley. These mastabas thus expressed the high status of the members of the royal family, as well as the highest-ranking men who administered the state in the capital of the country, and thus effectively represented the ruler.

Not too long ago the burial ground in North Saqqara was almost unknown. It was discovered by Walter B. Emery who came to Saqqara in 1935. Emery originally was trained as a marine engineering draughtsman, but when he was nineteen his interest in ancient Egypt led him to Egyptology. Owing to his technical training that the publications of his research are accompanied by drawings, of unusually high quality for their time, documenting the tombs excavated. In 1951 Emery became Professor of Egyptian Archaeology at University College, London, where Petrie had been the first professor in Egyptology in Great Britain.

Over the years, Emery became a legend in British archaeology:

In some ways he may be considered the last of a long and famous line of "monumental" archaeologists, in that his forte was the excavation of the major remains of ancient civilizations, not the detailed dissection and analysis of living debris by modern methods.'
(Smith 1971, 200)

Emery's discoveries in North Saqqara were of huge significance. Before his work, very little had been known about the Egypt of the first two dynasties. The huge tombs with numerous unexpected finds represented an entirely new chapter in the history of Egyptian archaeology. They were created in the first three centuries of the third millennium BCE, and the finds that came from them represent a watershed in our knowledge of the history, culture, religion and technical abilities of the society of the time.



Tomb S 3504 in North Saqqara.

In tomb 3504, for example, over 1 500 stone vessels and 2 500 ceramic ones were discovered, even though many parts of the tomb had been repeatedly robbed in ancient times. The remnants of the wooden construction of the burial chamber also bore traces of originally having been clad with gold leaf, and it is truly difficult today to imagine what the original sumptuous decoration of these ostentatious buildings might have looked like. Tomb 3471, from the period of Djer's rule, contained a unique group of numerous copper vessels and implements. In Tomb 3111 was the undisturbed burial of the local royal viceregent Sabu, while Tomb 3038, from the end of the First Dynasty (rule of Anedjib) has architecture that foreshadows the idea of the step pyramids, first implemented by Imhotep for the ruler Netjerikhet in the Third Dynasty.

The royal ideology of the period is vividly expressed by the above-mentioned Tomb 3504, which had brick benches down the length of its facade with skulls and bulls' horns composed into it. Over three hundred of them were documented in all, and on the basis of later parallels it appears that all these bulls were killed at once, probably in the course of a single day. This unique finding gives us an idea not only of the efficiency of the economy of the time, but that the Egyptians, and especially the high officials of the day, spared no effort or expense when it came to self-presentation and life after death. Moreover, from the period shortly before the



Tomb S 3504, with bulls' skulls along the perimeter of the mastaba. In total, about 300 bulls had to be slaughtered for this funeral ceremony.

unification of Egypt the bull was an emblematic animal for the Egyptian ruler, revered for its strength and rampancy. The king was frequently represented as a bull, demolishing the fortifications of enemy settlements, for example. Later, one of the royal epithets was *ka nakbt*, “strong bull”. This clearly became an impulse for the worship of bulls, for which evidence dates from the middle of the First Dynasty, under the rule of Den.

Among the most surprising finds, however, was Tomb 3035, belonging to the dignitary Hemaka from the same period. By chance, it was one of the first tombs that Emery began to investigate after his arrival in Saqqara. During the excavations it occurred to him that it might be a useful to explore the seemingly compact superstructure of the tomb in more detail; thus far it had been considered a brick building filled with bricks and debris. Very soon it became clear that within the area surrounded by the facade was a regular network of forty-five storerooms containing more or less intact burial equipment. Besides the usual stone and ceramic vessels, these included weapons, personal items and many other objects, including two of the oldest finds of papyrus scrolls. These were not inscribed, but they nevertheless indicated that writing was in common use at the time. An additional discovery was

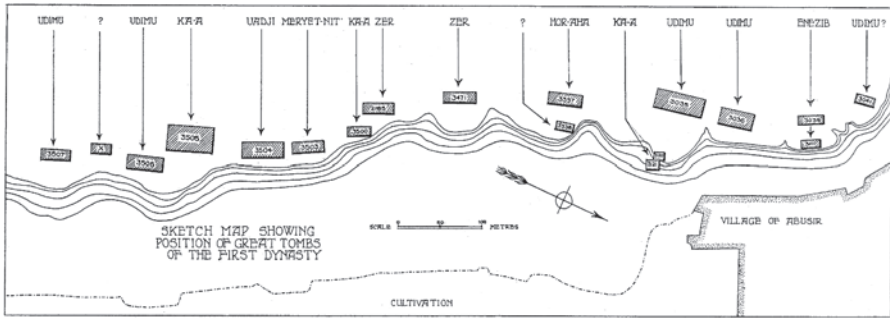


Tomb S 3035, belonging to an official Hemaka, where the first papyrus roll known from ancient Egypt was discovered (unfortunately, it was blank).

made that today we would consider a matter of course: the superstructure of these tombs of were not filled with rubble, but instead hid a large number of inaccessible and well-hidden storerooms containing a wealth of burial equipment.

One example of the way in which the construction of non-royal tombs developed only a few years after the unification of Egypt can be seen in oldest known tomb in North Saqqara, labelled S 3357. The superstructure had a ground plan of approximately 41.60×15.50 m., and the outer walls of the construction were over two metres wide. The space inside was divided by thin brick walls into different storerooms. It is the degree of preservation of this, and other brick tombs in North Saqqara, that still provokes surprise. We should remember that they were built of mud bricks of Nile mud and lasted for five thousand years. At the time of discovery, the maximum preserved height of the tomb was approximately two metres. Today it is considerably less, and if you walk through the burial ground of North Saqqara, with desert dogs as your only companions, you will be amazed at the destructive force of nature that in less than a century has managed to reduce the height of the brick walls to just a few decimetres.

The underground portion of the tomb was originally excavated as a large right-angled pit with a ground plan of approximately 19×3 m. This large space was divided by four brick partitions into five independent chambers, the ceiling of which was formed by wooden poles, boards and matting, which covered the rooms at the



North Saqqara cemetery.

level of the surrounding terrain. The edges of the chambers were lined with solid mud bricks walls. The central and largest of these rooms served as the burial chamber.

Inside the mud brick construction of the superstructure was a group of twenty-seven rooms, which served to store objects for the afterlife existence, with the five central rooms precisely copying the positions of the underground rooms. Their floor was artificially raised by about a metre using waste material and sand. From here up to the ceiling the rooms were plastered white. The whole tomb was surrounded by two enclosure walls, which created a double corridor around it. To the north of the tomb was a wooden boat. Like the storerooms full of various mundane items, the boat was situated within the tomb's perimeter because after death the deceased was meant to be equipped with everything to which he was used in this world. This included also a luxurious boat in which the tomb owner had, when alive, floated down the Nile. Given that the boat was wooden, it is possible that it is a real boat that was actually used by the tomb owner. It lay on an east-west axis and its preserved length reached twenty metres, with a maximum width of three metres.

Between the boat and the tomb Emery discovered a collection of symbolic brick buildings, platforms and three round silos for storing grain. Some Egyptologists believe it was a model of a port or harbour. However, others, probably more correctly, maintain that a model of sacrificial rooms, including a slaughterhouse, stood here.

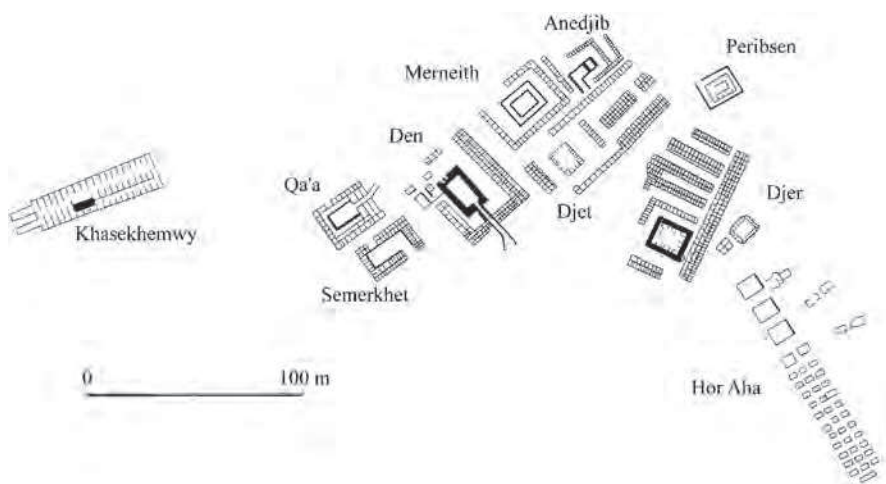
It was the size of the tombs, their imposing architecture and lavish burial equipment (often preserved in the place where they were originally stored) that led Emery to believe that the tombs belonged to the rulers of the First and Second dynasties. We cannot be surprised: a comparison with the relatively modest constructions in Abydos did suggest such a conclusion. Emery believed the tombs at Abydos were cenotaphs – symbolic tombs with no actual body buried – that the rulers had had built at Abydos for religious reasons, as a display of piety and of their ties to their Upper Egyptian roots. Today, we know that Emery was wrong. It is now certain that Abydos was both the home and the burial ground of the first kings of the unified Egypt. This is best shown by numerous pieces of written and iconographic evidence discovered in tombs there, which have a fundamental relationship to the ruler and the royal ideology. The overall significance of the necropolis is underscored by the extensive valley temples discovered not far from the tombs themselves. Emery's

hypotheses, together with his attempt to discover the tomb of the architect Imhotep, the builder of the oldest Egyptian pyramid for the ruler Netjerikhet, reflect, only dimly, the credit that is due to him for widening our knowledge of the history and culture of the rulers of the First and Second Dynasties.

Ritual murders and Djer – the record-holder

The tomb of Aha's successor to the throne, Djer, at Abydos is considered to be the largest royal tomb of the First Dynasty, as it possesses a ground plan of 70×40 m. In addition to the body of the ruler, over 338 secondary human burials were found close by, arranged in one, two or three rows. A further 269 secondary burials were found in the area of his valley temple, close to the fertile Nile valley. This is the largest number of human sacrifices known in ancient Egypt. The valley temple was built for a temporary period of mud bricks with one purpose: to hold the necessary funeral ceremonies.

Human sacrifices are not a commonly found phenomenon in Egyptian history, although they occurred in times of social crises or rapid social transformation. The First Dynasty was undoubtedly such a period. On one hand, a despotic form of government was asserting itself, using all the means of power available. On the other hand, the society was slowly transforming itself. Indeed, it had only recently passed beyond the tribal stage. We have already mentioned human sacrifices in connection with the tomb of Djer's predecessor, Hor Aha, in Abydos, where a total of 36 people were buried. Their successors continued this practice. In Merneith's case there were 41 people, Djet 174, Den 133, Anedjib 64, Semerkhet 68 and Qa'a 23. From these figures it can be seen that the number of people sacrificed under the First Dynasty gradually fell, and subsequently the practice rarely occurred. Only in Khasekhemwy's



Cemetery of the First and Second Dynasty kings in Abydos (Umm el-Qa'ab). The ground plan shows the number of secondary interments around the principal royal tombs.



Stela of the lady Kehenu, owner of one of the secondary tombs in Abydos.

tomb at the end of the Second Dynasty did Petrie find one servant's body. Hence, it cannot be ruled out that the custom continued at least until the end of the Second Dynasty. Human secondary burials were usually in ordinary pits arranged in regular rows with the remains of the bodies of usually young men, who had reached the age of 20–25. The analysis of their tombs, limited funerary equipment and the men's physical traits suggest they were mostly members of the lower social ranks. One detail that Petrie noticed while excavating the Djet complex sheds light upon this premeditated ritual slaughter. On the southern walls of Djet's servants' graves their names were written in red ink, to make it easier to put the dead bodies into the graves that had been allotted to them in advance.

This brutal custom disappears from the scene at the end of the First Dynasty. It remains a mystery how these people passed away in the prime of their lives. According to one opinion, they were poisoned. Nancy Lovell of the University of Alberta argued that they may have been strangled with catgut, as suggested by the small blood stains on the teeth of the preserved bodies of victims. Presently, however, there is no definitive answer to this problem although it is clear that the people were laid in the graves already dead. This is shown by the position of the bodies, which do show no signs of spasms or indication of tense muscle gestures that are common when people are buried alive (see the evidence from the Shang dynasty in China, the royal graves in Ur and the Sudanese graves in Kerma near the Third Cataract in the south). Moreover, the custom is not limited to the Abydos region. It can be also found in Saqqara, albeit to a limited extent, and close to the richest tombs of the governors. In this case Emery showed that they were craftsmen with individual specialisations (see below).

George Andrew Reisner is one of the few Egyptian archaeologists to have dealt with this phenomenon in the general cultural context. He also discovered evidence of this custom during his research in Kerma, one of the famous kingdoms of ancient Sudan. From his description it is clear that it was a very archaic and tragic custom, full of emotions and symbolism:

The location and various attitudes of the bodies show that they must have entered the grave alive on their own feet and taken their positions as they could find place...the movements exhibited are largely those of emotion at the prospect of death by burial under earth. The most common thing was for the person to bury the face in the hands. It was also not unusual for one hand to be over the face and the other pressed between the thighs... In K XX, three bodies have one arm passed around the breast clasping the back of the neck from the opposite side. In K XB, the very well preserved body AC has the head bent down into the crook of the elbows in a manner most enlightening as an indication of her state of mind at the moment of being covered... In K 444, the two bodies, G and H, lie with their foreheads pressed against each other as if for comfort... in K 1047, a woman lying at the foot of the grave and under a hide; she has turned slightly on her back with the right hand against the right leg and clutches the thorax with her left hand as if in agony...

(Reisner 1923, 108–110)

During the period of the Middle Kingdom, at the start of the second millennium BCE, Djer's tomb at Abydos was architecturally modified. A second staircase was built

into the burial chamber and the whole area became one of the prominent places in the topography of the burial ground. It was believed that Osiris, the lord of the Egyptian underworld, lay buried there. Annals from the period of Djer's rule show much construction activity, which indicates that the ruler was very active. Imported vessels from Syro-Palestine found in his tomb suggest that during this period there was an increased interest in the Levant, Palestine and Syria. Under his reign an expedition to the region of Sekhet took place, an area in Sinai whose precise location is unknown, but which contained turquoise and copper. Written records preserved on the Palermo Stone referring to him conclude with a record of the tenth year of his rule, although it is generally assumed that he may have ruled longer. As was the custom at this time, the individual years of a king's ruler were characterised by notable events that took place during their course. In Djer's case the sixth, seventh and eighth years of his rule, for example, were characterised by the commission of stone statues of the gods Iat, Min and Anubis.

Horus and the sun boat

Although we do not know much about Djet, there is valuable evidence from his rule regarding the social and economic development of the country. In the huge burial ground in Tarkhan there are two large brick mastabas belonging to local elite members. Their monumental architecture, with outer walls richly decorated with niches, indicates that these were significant men who administered an important part of the ancient Egyptian state, lying around 30 km south west of Memphis.

One striking object dated to this period is an ivory comb possessing unparalleled decoration. It gives us a very specific image of one of the first known cosmologies in human history. In the bottom part of the decoration contains the ruler's "Horus name" placed within a serekh, a rectangle set on its shorter side resembling a royal palace. The falcon god Horus sits on top of the serekh. Above him is a boat, in which an identical falcon resides, a god that from time immemorial had a close relationship to the Egyptian ruler. The boat is also winged, which indicates that it is not meant to go on water. The object thus shows the god Horus, the deceased king, sailing across the sky in a heavenly sun bark. Although this is a unique object, its significance is considerable. It has been even interpreted as providing the first undisputed evidence of the solar religion that was developed greatly during the Third Dynasty.

The tomb labelled S 3503 from Djet's time shows construction innovations first of all in its underground part, which is markedly smaller than older parallels. It is built as a rectangular pit, extending for three metres below the surface of the surrounding terrain and divided by brick walls into five rooms. The walls of the rooms were, as in earlier times, lined with bricks, and the ceilings consisted of a wooden construction combined with matting. Certain changes can also be observed in the superstructure of the tomb, which continues to house the storerooms used for burial equipment, but their total falls to a mere twenty-one.

The outer walls of the tomb were covered in white plaster, with the remains of the original coloured decoration, using red, green, black and yellow. The outer walls were

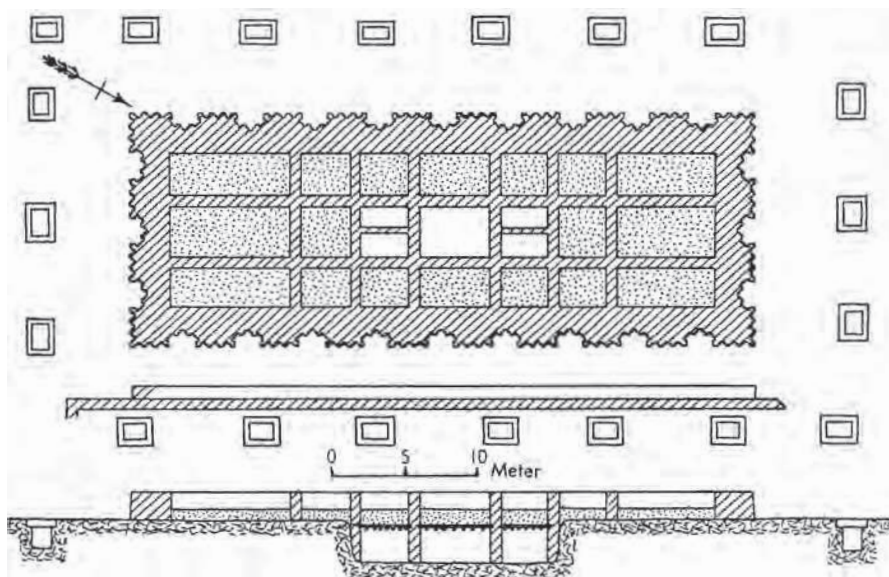


The comb featuring the name of Djer, with a carving showing him crossing the sky as Horus in a winged boat.

divided up by both colours and regular niches. On each of the long walls there were nine large niches, with only three on each of the shorter ones. It is interesting that researchers were able to distinguish the later bricking-in of the central east and west niches, which during construction and the period before the burial provided access to the underground part of the tomb, being bricked in only after the funeral ceremonies were over. It is also worth mentioning the regularly arranged oval pits that were found in front of each of the niches decorating the facade – in each case there were four small pits. According to Emery they are left over from the stakes in the original wooden scaffolding that was used during the construction of the tomb. This explanation may not be far from the truth when one considers that tombs of the time could easily reach heights of five metres, sometimes even more.

Shortly after it was finished, probably at the end of the First and start of the Second Dynasty, a time marked by internal conflicts connected with low levels of flooding and failed harvests, the tomb burnt down. The fire, which broke out shortly after the burial, created a relatively homogenous layer of debris, almost two metres thick. Its contents indicate how rich the original burial equipment must have been. In the middle of the western part of the burial chamber was a large wooden coffin 2.70×1.80 m, with a height that must have exceeded a meter. To the east of it were stone vessels with the remains of animal bones, left over from an opulent funeral banquet. To the north of the coffin archaeologists identified the remains of three wooden poles for carriers and several wooden cabinets. Along the side of the chamber a large number of broken ceramic and stone vessels lay on the floor.

The tomb is also significant from the point of view of the funerary cult. When the floor at the southern end of the eastern wall was being cleaned, the remains of wooden tree trunks and boards from the ceiling were found in front of the large main niche. In the same place, relief elements of mud bricks that formed the surface decoration of the niche were found. This tells us that this particular spot was the centre of a funerary cult in honour of the buried person. The overall picture is completed by the numerous ceramic fragments found in front of the niches of the east wall of the mastaba, which can be explained in a similar way. In addition to the central cult site in front of the southern niche, to which exceptional attention was devoted, funerary cult practices were also performed at other places along the eastern facade of the tomb. To the north of the mastaba portions of the brick casing of a buried boat, similar to that found near tomb S 3357, were found. Outside the tomb's enclosure wall were a total of twenty-two secondary burials, mostly of men. These small tombs with shafts were made up of two parts. The first was a small, rectangular pit, at the bottom of which was the mouth of the shaft. At a depth of approximately one metre, on the floor of the shaft, was the actual dead body, protected by a wooden ceiling. The bodies were mostly on their sides in a contracted position, wrapped in mats or placed in wooden coffins. The walls of the shafts were lined with bricks, and on the basis of the differing order of the floor layers, it may be assumed that the tombs were not all made at the same time. According to Emery the dead bodies bore no signs of violence; he believes the victims were poisoned. The superstructures of the tombs were made of mud brick and took the shape of small mastabas.

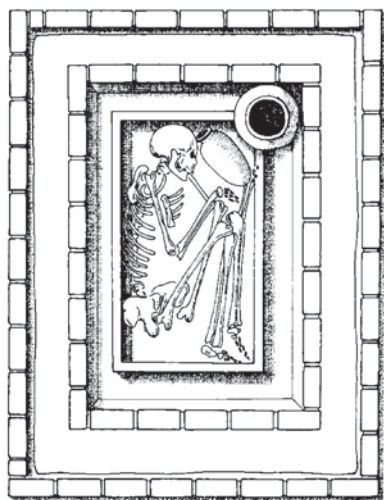


Tomb S 3503 in Saqqara.

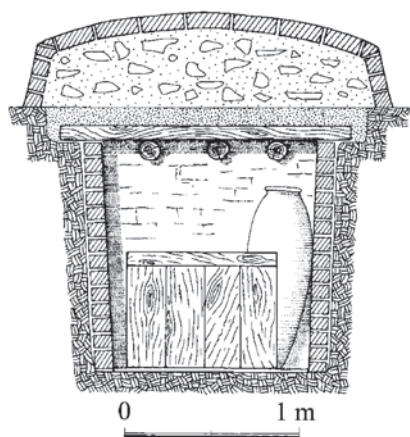
An analysis of the burial equipment found in each of the pit tombs has brought very interesting results. They show clearly that the people buried were specialised craftsmen, whose task was to be close to their master in case they were needed in the netherworld. In the case of Pit A, the burial equipment included a wooden cabinet with copper instruments. In Pit B a total of eleven ceramic vessels were found; this may have been a potter. In Pit E a large number of broken vessels were found at the dead person's feet, containing the remains of coloured pigments – green, black, red and yellow. Was a painter buried here? In addition to a man buried in a wooden coffin, Pit J contained stone vessels and copper instruments, making it likely that the man made stone vessels. In Pit Q a man responsible for preparing oils and perfumes was buried. This list should be enough to give us an idea not only of the professional differentiation between the people buried, but also of what professions were considered essential in the netherworld: a craftsman with copper tools, a potter, a painter, a cosmetics expert and a craftsman who fashioned stone vessels.

A reformer on the Egyptian throne: Den

The ruler Den was of the most distinctive figures of ancient Egyptian history. His rule, in the middle of the First Dynasty, saw several changes. There was a considerable shift in the concept of the construction of non-royal tombs, but above all the groundwork was laid for fundamental reform of the state and the tax collection. We have a relatively large amount of information about his rule. Soon after he acceded to the throne he set out on an expedition against “the archers,” as the Nubians were



Secondary Tomb B, belonging to one of the craftsmen buried in and around Tomb S 3503.

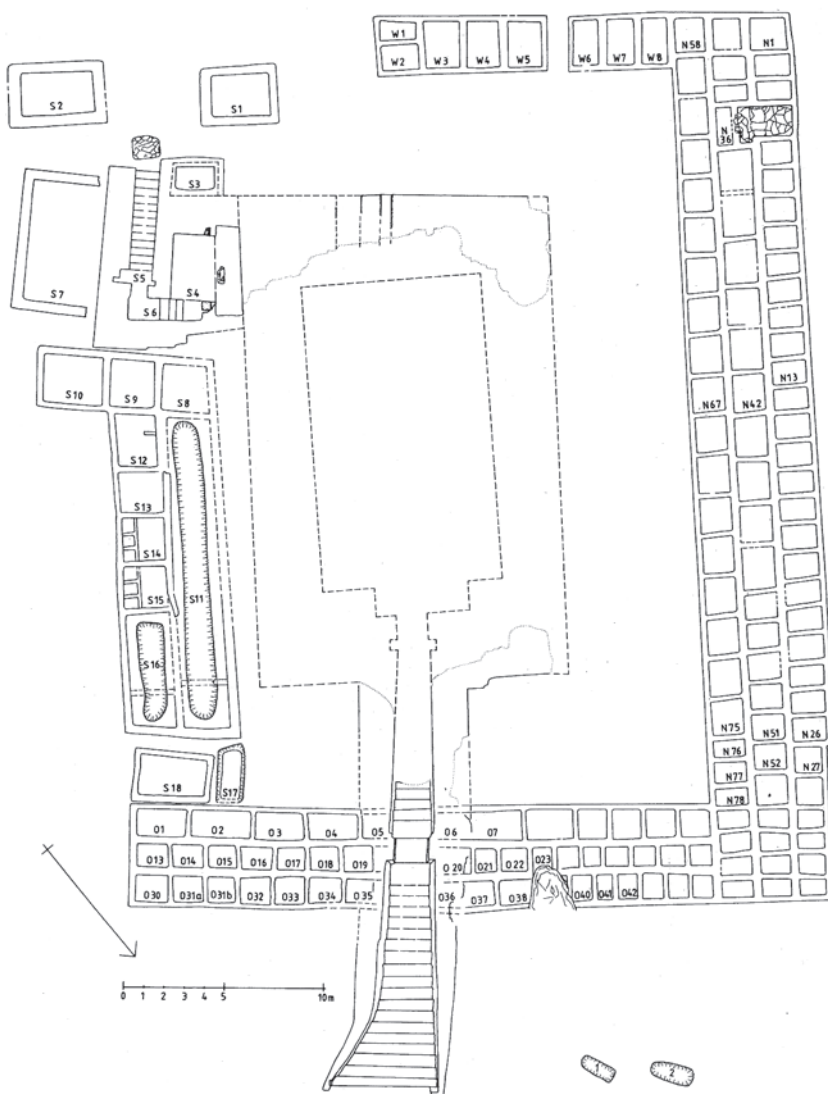


called at the time. We also possess the oldest mention of the sacred bull Apis, as recorded in Manetho. Den also engaged in significant reforms, including the founding of estates in the northwestern Delta and a census of the population of the eastern Delta.

Den's royal tomb in the burial ground of Abydos is probably the most complicated building of the First Dynasty. The burial chamber was huge, with a ground plan measuring 9×15 m and located six metres under the surface of the surrounding terrain. The floor was formed by carefully lined-up stone blocks of limestone, and this is one of the earliest attestation of an extensive use of stone being used in ancient Egyptian architecture. The walls of the pit were lined with mud bricks and further clad with matting. Inside the chamber was a wooden construction measuring $12 \times 6 \times 3$ metres, surrounding the burial place of the king. Around this sanctum, dozens of imported vessels were originally positioned. A corridor descended into the burial chamber from the east and, after the actual burial, the entrance to the burial chamber was closed by a large

limestone block (portcullis). Compared to previous developments, this is a considerable architectural innovation, which significantly changed the approach to the construction of the royal tomb. Until now it had only been possible to complete the tomb's superstructure after the ruler was buried, but from now on the burial chamber was accessible via a roofed staircase, and the rest of the tomb could be finished entirely independently of the time of burial. It is interesting that Den's tomb made use of a technological approach that was first used in a non-royal tomb from the time of Djer (Saqqara tomb 3503).

Another unique feature of the underground tomb is the extension on the southwestern side, to which an independent staircase led from the desert surface. It originally contained a seated royal statue that symbolised the resurrected ruler. At the close of the ritual of resurrection that took place inside the tomb, it was from here that the ruler set out for the



Den's royal tomb in Abydos.

west. In the concrete topographical conditions of the burial ground in Abydos this meant that he went into the large valley, or wadi, to the southwest. This valley, shut in on both sides by a high rock plateau, provided to the ancient Egyptians the idea of the heavenly horizon, the *akhet*, where the sun god sets (or dies), only to be reborn the next day on the eastern horizon, *akhet*. This concept seems to have arisen, at the latest, during Djer's time. Starting with his tomb, all the royal tombs in Abydos have a free area in front of their southwestern corner, so that they were not disturbed by secondary graves and the ruler was ensured an unencumbered departure to the western horizon.

By Den's rule, at the latest, it had become clear that the growing administration of the country was in need of systematic reform. The mechanisms that had so far been sufficient for the oversight and organisation of the gradually-developing state had ceased to be effective as soon as increased demands were made on the whole system. Den decided to take some fundamental measures. After his reorganisation, the state apparatus, the royal court, and thus in a certain sense the whole country, lay on three pillars. The first was the administrative department, which was responsible for organising and recording supplies of the grain and game, the second was the office of the scribes, and the third pillar was the department responsible for the households of the princes and royal women. Den also founded a permanent palace as his headquarters, part of which was the royal *per nisut* office, with the most significant department of the royal Treasury. The separate households of the members of the royal family eventually disappear, becoming part of the overall system of providing for the royal court.

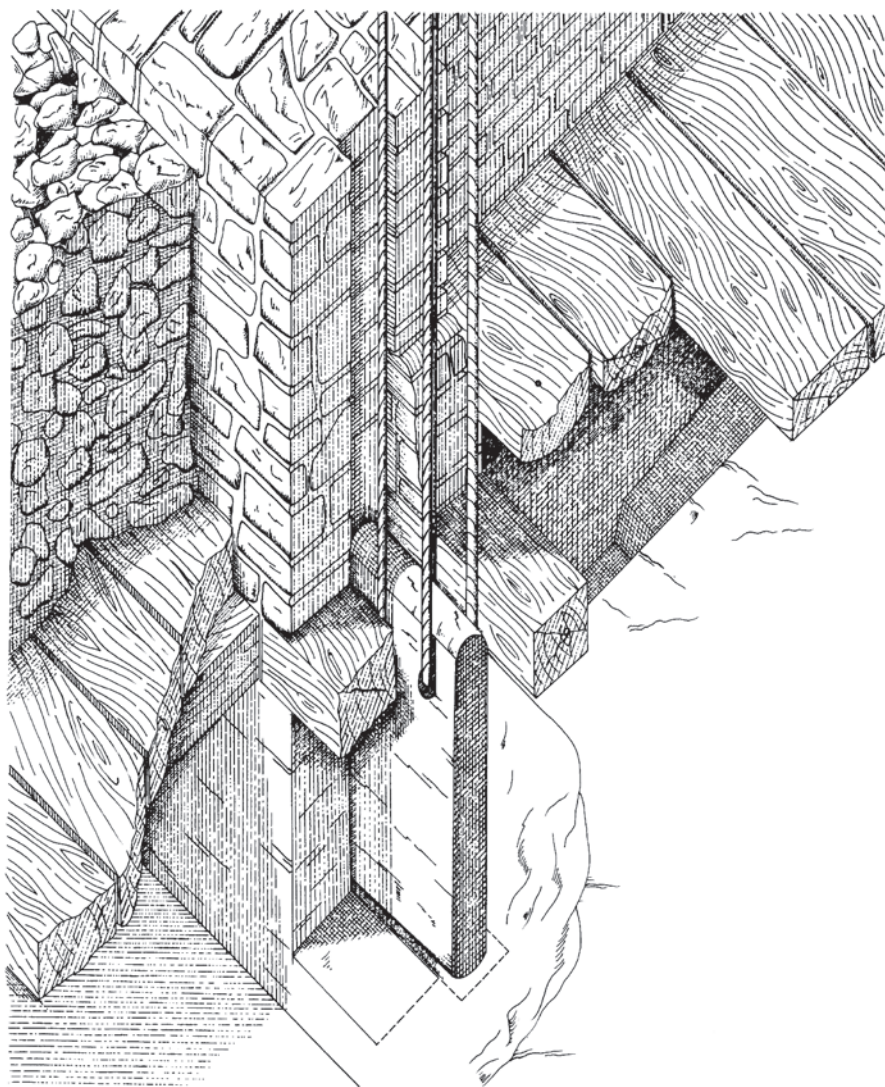
The economic base of the court – which encompassed the royal family and officials – the high-ranking people of non-royal origin – took on new forms. It was now based on specialised economic units, with specific functions that in ancient Egyptian were called *hut*. The available sources suggest there were at least seventeen of these units. There was, for example, the department of both vessel with its associated pig slaughterhouse, the shoe- and leather-making departments, the scribes', weavers' and gardeners' departments, and the makers of matting, fine cloth, gold, linen, bread and so on. From this list it is clear that the tasks of each department were clearly defined. Their activity was organised by the Treasury, which controlled all the goods that entered into the system or were taken out of it. The Treasury divided them up between the king and his court and the state officials, and then sent the remaining items to the provinces according to need. The names of the production units listed indicate one of the most significant features of the ancient Egyptian administration: the detailed division of activities according to specialisation. Their mutual coordination was managed by an official with the title "inspector of the palace," *keherep akh*, who was subject to the highest-ranking prince. The royal court also consisted of craftsmen, personal servants, dog keepers, guardians of the seal (who controlled the movement of goods and provided them with the official royal seal), butchers, wardens and dwarfs. It is most likely from these categories of people that the unfortunate slaughtered men were chosen to be buried with their master in secondary graves.

An important part of the king's suite were also the "friends," known as *semeru*, entrusted with performing personal service to their ruler. Originally they were recruited from the members of the royal family. It was only later, at the end of the Fourth Dynasty, that these offices started to be filled by people of non-royal origin. Their functions had titles such as "overseer of the banqueting hall", "overseer of the throne" and "trustee in the wine room". Another important office was that known as the *keheri udjeb*. It was usually important to be on good terms with the holder, since he was responsible for dividing up the daily rations (above all of food) to the members of the royal court.

As a result of these changes, there was a sharp increase in the number of officials, and thus also in the number of non-royal tombs. We know of over thirty non-royal tombs belonging to high-ranking people dating to Den's reign. For reasons of space, a new non-royal burial ground was created in Abu Rawash, in the area of modern Giza on the site of the burial of the later "sun" king of the Fourth Dynasty, Radjedef.



Magazine "C" in the mastaba of Hemaka contained dozens of sealed vessels.



Portcullis, or blocking stone, from one of the tombs in Saqqara.

The very existence of many sizeable non-royal tombs is an important external indication that fundamental changes were going on in the state administration.

Tomb S 3035, belonging to the dignitary Hemaka, is perhaps one of the most important tombs from the reign of Den. We have already mentioned that the underground tomb was partially excavated by Cecil Firth in 1931, but it was Emery who finished the excavation of this unique construction. Its superstructure measured 57.30×26 m and contained a total of forty-five storerooms with burial equipment. Most of the store rooms were inaccessible, however, and only sixteen of them

contained burial equipment. Of the burial equipment found, worth mentioning are the small discs made of stone, copper and ivory, playing stones, weapons (arrows), labels with inscriptions containing the name of king Den and one of his predecessors, Djer, fabrics, wooden cabinets, stone and ceramic vessels and seal impressions.

The outer walls of the tomb were decorated with niches. A staircase from the east led into the burial chamber. It was blocked in three places by large limestone blocks. The chamber was on a north-south axis of the tomb, almost twelve metres under the ground, and measured 9.50×4.90 m. Inside the burial chamber Firth made another unusual discovery: the remains of two limestone pillars that were designed to support the ceiling construction.

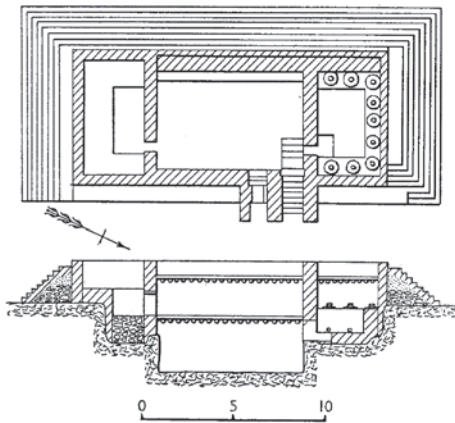
The entrance to the actual burial chamber was originally blocked by another limestone block quarter of a metre thick. Three round openings have been preserved in its upper part – evidence that the stone was lowered into position with the help of ropes from the surface of the mastaba. The walls of the room were carefully plastered, and the remains of a human burial were even found here.

Some general features of tombs of this period are that the number of storerooms in the superstructure is considerably reduced, the underground part is usually accessible via a staircase or descending corridor and in the superstructure there is a gradual decline in niching the outer walls, with non-divided facades becoming the norm. They usually have a chamber built in a pit, mostly a burial chamber with two or four separate storerooms on each side. The superstructure may be up to 12×8 metres, and has a simple divided or non-divided facade.

The birth of the idea of the step pyramid

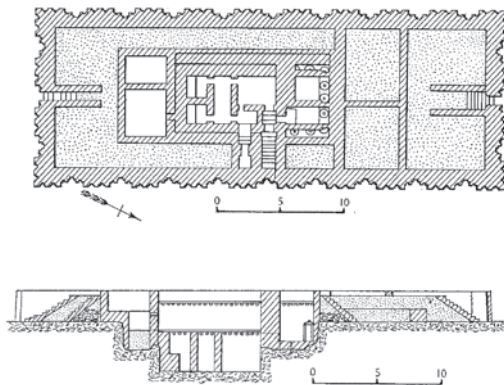
The last significant ruler of the First Dynasty, from the point of view of the development of non-royal tombs, was Anedjib. According to fragments of ceramics with inscriptions mentioning celebrations of his *sed* jubilee (the thirtieth anniversary of rule) it may be assumed that he reigned for a relatively long time – at least thirty years. The period of his rule is notable for another reason: from the burial ground in North Saqqara comes tomb S 3038, which clearly belonged to one of the most powerful dignitaries of the time, and is the most architecturally-significant building of the whole First Dynasty. It is distinctive in that its superstructure consists of a stepped mud brick construction which foreshadows the step pyramid of king Netjerikhet – indeed, by several centuries. It is just a pity (as in many similar cases) that the identity and name of the father of this idea will remain forever hidden. All we know is that its owner was an official called Nebitka.

The path to this original architectural form was not simple, however: the tomb passed through a total of three construction stages, which Emery labelled A, B and C. In stage A the tomb was founded on a relatively small ground plan, 22.70×10.55 m, covering a surface area of 240 square metres. The underground part of the tomb comprised a central pit with a burial chamber in the centre. To the north and south were two smaller adjacent chambers. The entrance to the north one was located just about two metres above the floor of the burial chamber. Around its northern, eastern



Tomb S 3038 in Saqqara – the first and second building stage.

and western walls a low platform was built, in which there were nine round vessels with rectangular openings closed near the floor with stones and sealed with Nebitka's name. They were models of grain silos copying the large vaulted constructions with their round ground plans. In the upper part were round openings through which the silos were filled, while the smaller holes at the bottom were used for getting the grain out. The southern room originally contained burial equipment. The entrance into the actual burial chamber was via a staircase from the east.



The upper part of the tomb consisted of a brick casing, this time with slightly slanting walls. On the outside, a waste layer of gravel and sand stuck to the north,

south and west walls, from the filling of the eight-stepped brick terrace. In front of the eastern wall was a platform used for the funerary cult and gatherings of the bereaved.

In stage B there were several significant changes in the tomb's architecture. Around the superstructure, in the places where there had been a graded terrace, new terraces were built up to a metre high. The original platform to the east was also raised. In this way the ground plan of the tomb was increased to 35×12.55 m. Finally, in the closing stage, C, the tomb took on its final appearance, and the superstructure was given a facade richly decorated with niches on all four sides. The empty space inside was filled with clean sand. Staircases were built from the north and south, leading into the storerooms. Alterations also took place in the original burial chamber, where five rooms were created, each one with a wooden ceiling. They were divided from each other by brick partitions. The middle one became the new burial chamber, while the rest were used for storing burial equipment.

The mastaba was plastered white, and a chance visitor today would no longer know that this monumental construction hid the first attempt that we know of in Egyptian history to realise the idea of a step tomb, anticipating the creation of a step pyramid

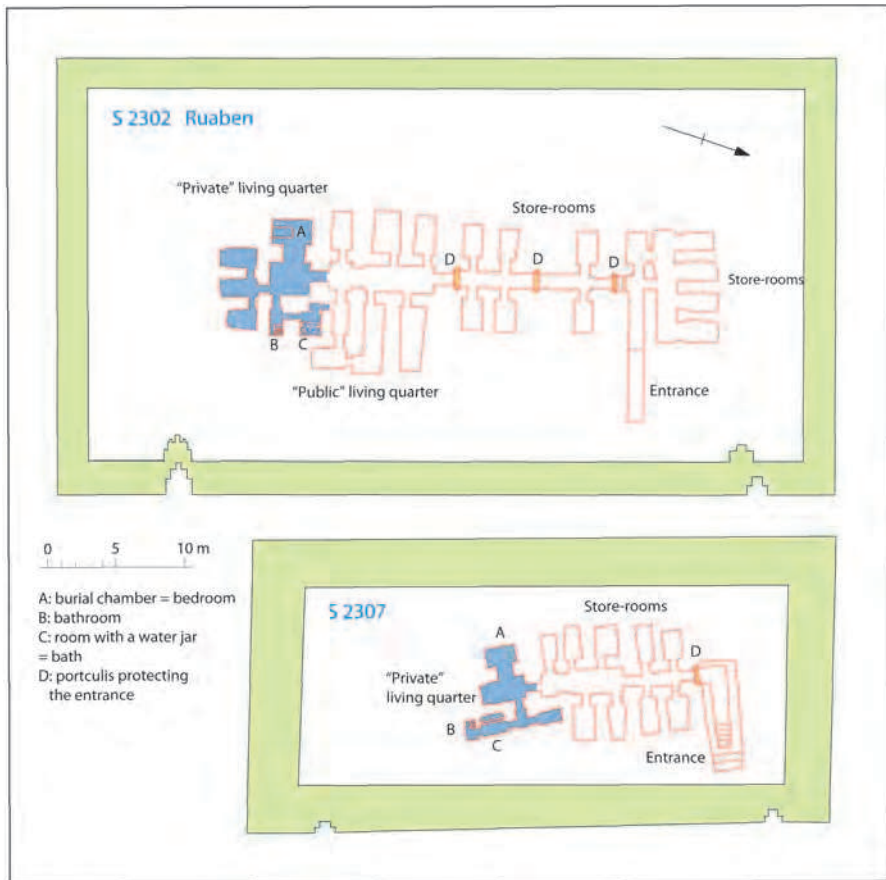
two hundred years later. At the beginning of work, there apparently stood an original idea that was gradually “neutralised” or ‘regularised’ during the next two stages, until a regular, traditional appearance was reached, one that was no different from established practice. We will never know whether the cause was a dispute between the architect and the tomb owner, who took fright at the new idea. There may have been other causes, probably much more prosaic ones such as egoism. I believe however, that the first possibility is an acceptable, albeit unsubstantiated hypothesis. The ancient Egyptians were human, like us, and as always, new ideas had to fight for a place in the sun, a fight that was not always successful.

New era, new tombs

The period of the Second Dynasty is among the most obscure periods of ancient Egyptian history in the third millennium BCE. There are as many possible reconstructions of the names of rulers and their number as there are historical sources available. According to very rough estimates, the dynasty may have lasted for about 120 years. From various indications this appears to have been a highly significant time in Egyptian history. The burnt-out tombs of high-ranking dignitaries in North Saqqara suggest that the recently created state was being severely tested. Internal conflicts may have been instigated by temporary changes in climate. According to the data recorded on the Palermo Stone, it is almost certain that during this period there was a fairly long-term fall in the level of the annual Nile floods, which was directly reflected in agricultural production.

This is also the first time in history that royal tombs in the Saqqara burial ground began to be built so that they would not be in close contact with non-royal tombs. Whereas in North Saqqara the burial ground of high-ranking dignitaries continued to develop at its own pace, the royal tombs were built in the central Saqqara area, in the area to the south of the later Step Pyramid complex. Two of them are located to the east of Unas’ pyramid and belong to the rulers Hotepsekhemwy (or maybe Ranef) and Nynetjer. The most recent archaeological research indicates that to the south of Unas’ causeway, there was maybe another royal tomb belonging to an anonymous ruler from this period. The remaining rulers of the Second Dynasty preferred the traditional burial ground in Abydos. There is, however, one more significant shift compared to the First Dynasty: the end of human sacrifices. They no longer appear in either Abydos or Saqqara, as if the king had realised that after death, live people could serve him better by being involved in his funerary cult.

The Second Dynasty also saw the first notable reassessment in long-term architectural development. The fashion for large mud brick mastabas with dozens of storerooms in the superstructure and a burial chamber built in an open pit recedes into the background, and a period dawns in which the emphasis on the afterlife existence is shown mostly in the attention paid to the building of the superstructure of the tomb. In addition, one entirely new trend appears: towards the end of the dynasty, a cult site begins to be created within the superstructure of the tomb. These nascent chapels are found in the southeastern part of the mastaba, accessible from the



Scheme of a Second Dynasty tomb featuring subterranean rooms, comparable with a layout for a profane residential house.

east. On the basis of their T-shaped ground plans they are called cruciform chapels. A little later, these chapels become the motor force of the development of non-royal tombs. The fact that they start to be decorated with paintings, reliefs and inscriptions provides Egyptology with an abundant source of information on the social status, identity, life and after death beliefs of their owners and designers.

The Second Dynasty forms possibly the most significant watershed in the development of the non-royal tomb, at least as far as the underground part is concerned. Hitherto, the entire history of the tomb on Egyptian territory was connected with burials in pits, however big. During this period, on the other hand, the building of intricate substructures was developed. This means that the underground part is accessible by staircase, ramp or (from the end of the Third Dynasty) shaft, and that the chamber is hollowed out underground and not built at the bottom of an open pit.

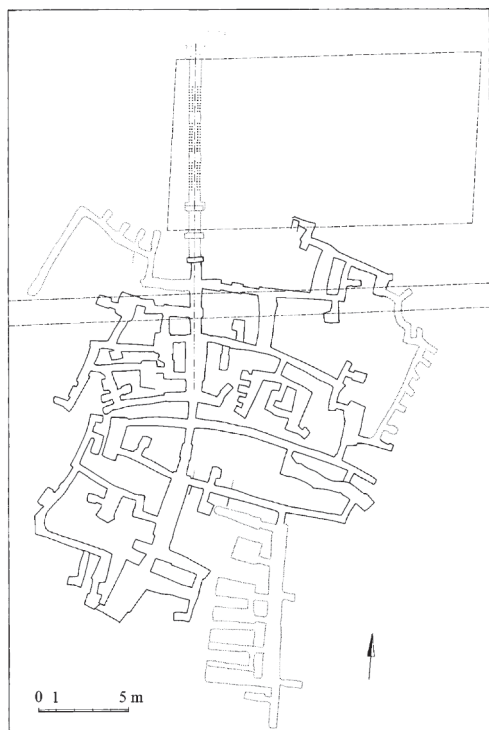
The first ruler of the Second Dynasty was Hotepsekhemwy, who at the start of his rule ensured an appropriate burial for his predecessor, Qa'a (as shown by

epigraphic finds from Qa'a's tomb in Abydos). Hotepsekhemwy was the first Second Dynasty ruler to be buried in Saqqara. The fact that his tomb has yielded both seal impressions with his name and ones with those of his successor, Raneb, has provoked speculation as to whose tomb it really was. According to one theory, Hotepsekhemwy had the tomb built, but it was then usurped by his successor. It is difficult to imagine this happening, however, not the least because royal tombs were usurped only sporadically. Another, more likely interpretation is that Raneb had his predecessor buried and then built his own tomb elsewhere, probably to the west or south of Netjerikhet's pyramid.

A project aiming to provide new documentation of the royal tomb of Nynetjer, the second royal tomb not far from Unas' ascending path, has been led by Günther Dreyer. The tomb was discovered in 1937 by Selim Hassan, but was never sufficiently documented. From present research it appears that its underground part (the superstructure seems to have been totally destroyed) is 3.5–6 m under the current terrain. The built-on area of this portion comprises a rectangle measuring 45 × 80 m. The tomb was originally accessed by a descending corridor hewn into the rock, running north-south and ending in the burial chamber. The corridor is 33 m long, approximately 2 m wide and 2.50 m high. On its longer sides, to the east and west of it, numerous corridors and several storerooms were hewn into the rock. Surprisingly, the corridors, which are totally unsuitable for storing burial equipment, predominate.

This is another way in which the tomb differs from the tomb ascribed to Hotepsekhemwy (or Raneb). The latter lies further to the west and has a much more regular ground plan.

Nynetjer's tomb has several other remarkable characteristics. On the central and southern part of the walls of the corridor leading to the burial chamber, disc-shaped protrusions have been left at regular intervals. They may have indicated the position and number of planned corridors. They are approximately 10–20 cm in diameter, and are about 1.20–1.50 m above the floor. Another peculiarity is the passage in the



**Ground plan
of the underground
section of the tomb
of Nynetjer in Saqqara.**

southwestern part of the burial chamber, which leads into a system of corridors running to the north-west. On the basis of an analogy with royal tombs from Abydos it may be assumed that these allowed the king to leave the tomb in a northwesterly direction, to the kingdom of the dead.

To the east of the burial chamber were five storerooms. Although these rooms were used secondarily for human burials, it has been ascertained that they were originally used to store stone vessels with the name of the owner of the tomb. The inscriptions also contained the name of the place from whence they came: the Palace of the Harpooning Horus in Buto (a city in the Nile Delta). It is surprising that the vessels were imported from the Delta, where there are no sources of stone. On the basis of the current knowledge, Dreyer believes the tomb was deliberately conceived in such a way as to be reminiscent of the royal palace. It was made up of parts designated for official purposes, storerooms and the king's private rooms – dining room, bedroom, bathroom and other areas. Most of these areas can be with some certainty identified in the underground tomb.

Nynetjer reigned for about twenty-four years. The end of his rule appears to have been marked by unrest, and possibly even military conflicts in the southern part of Egypt. The fighting and uncertainty may have been the reason why so many stone vessels originally designated for his burial equipment never left the storerooms at Memphis, in the end becoming part of the burial equipment of the ruler Netjerikhet from the Third Dynasty. The period of Nynetjer's rule is remarkable for another reason as well. From it comes the first evidence of a three-dimensional royal relief showing the ruler sitting on the throne, dressed in the ceremonial garment of the *sed* jubilee.

After his death, according to the indirect evidence available, Egypt found itself in a crisis during which several ephemeral kings ruled. At the end of this period a ruler named Peribsen surfaces. With his arrival, the iconography of writing the Horus name changes, and it is no longer the god Horus who sits on the serekh, but Seth. This change may have had several causes, but among the main ones is probably that he was buried in Abydos and items bearing his name are not found outside the territory of Upper Egypt. As the ruler of the southern part of the country he may have considered himself to be under the protection of Seth. According to another hypothesis, Peribsen conquered a city in the northwestern Delta called Setjet (later Sethroe), which was one of the main centres of worship of this god.

“Houses of eternity” made of stone, and the underground banquet

Just as Den set the tone for the development of non-royal tombs by the approach to the construction of his tomb, Hotepsekhemwy and Nynetjer contributed to its further development. This is clearly shown by the burial ground discovered to the west of the great mastabas in North Saqqara. This is the site known as the “Archaic cemetery” and it is dated from the end of the First to all the Second Dynasty. The main excavation work was accomplished by James Quibell in 1905–1910. The burial ground is not in any way conspicuous, and at the time of excavation was already badly



View of the Archaic cemetery in North Saqqara.

damaged. At first sight it appeared to be a burial ground that had grown up organically, with mud brick mastabas of various sizes and construction types. However, valuable information was provided by the underground part of several tombs, comprising a group of rooms that can be clearly interpreted as parts of an underground house. They include a dining room, living room, bedroom (a burial chamber with the actual body), storerooms and a bathroom. The attempt to create a credible simulation of life sometimes went so far so that a toilet had to be hewn out of stone in the bathroom. It is a faithful designation of the tomb as the after-death residence of the soul of the deceased. The superstructure of the tomb consisted only of a casing and a core, made of waste stone and building debris. The cult area was usually a niche or a cruciform chapel close to the southeastern corner of the tomb.

If under the First Dynasty, new forms of non-royal funeral architecture can be connected with almost each new king, under the Second Dynasty the situation is more complicated. We know of dozens of smaller tombs, but most of them have been badly preserved. Moreover, the excavation of the Archaic cemetery took place in the early twentieth century, when today's standards of precise and detailed archaeological documentation were far from the norm. The published reports are also far from complete. Frequently the basic dimensions of the tombs are not even given, let alone the details of individual rooms, finds and so on. Most of the details have to be gleaned by studying the published photographs and plans, which does not lend our conclusions much precision.



Detail of the underground facilities provided for a Second Dynasty tomb: in this view we can see even a lavatory for eternity.

A unique example of fortunate circumstances is represented by a tomb discovered by Emery in January 1939, which gives us a good idea of what a Second Dynasty tomb looked like. The tomb, labelled S 3477, had a ground plan of only 16.50×9.30 m. The eastern wall of the mastaba was divided into a southern and

northern part, with a larger cult niche at the southern end and a smaller one at the northern end. The interior of the superstructure of the mastaba was filled with building rubble and no longer contained any storage areas. Close to the northeastern corner was a hidden entrance to a staircase leading to the underground part of the tomb. This was now hewn out of the rock and not built in a large open construction pit, as we might have expected on the basis of older parallels from the First Dynasty. The staircase ended in a corridor, which after some metres turned to the south and was roofed by large limestone slabs. On each side of the corridor was one storage room, completely filled with stone and ceramic vessels with seals. In front of the actual entrance to the burial chamber were a large number of further ceramic vessels. The entrance to the burial chamber was carefully secured. First the corridor was closed off at its southern end by a large limestone portcullis, after which there followed a brick wall.

The intact body of the female tomb owner was found in the western part of the burial chamber. She had originally lain in a cedar wood coffin measuring 1.70×0.90 m and 0.65 m high. She lay on her right side, in a contracted position, with her head to the north and face to the west. The longer sides of the coffin were divided up by three panels and the lid was curved. Close by stood thirteen alabaster and diorite vessels, while a further fifteen were made of fired clay. On the floor lay a large number of flint knives and scrapers – clearly originally kept in a wooden chest that had fallen apart. Also found here were copper vessels, including an ewer and



Untouched funerary feast in Tomb S 3477.

found was connected with the ancient ritual, still shrouded in mystery, of the breaking of pottery vessels. This was part of an ancient Egyptian funerary rite, but archaeologists have rarely been able to identify or prove it. It essentially consisted of the ritual breaking of red ceramic vessels, with the aim of having these pots indicate the sphere of the otherworld by being broken (“killed”). The chamber contained twenty-seven pottery vessels, and twenty-one alabaster and diorite bowls, plates and platters. In the south wall was an entrance into another room, which contained over fifty stone vessels, made of alabaster, limestone and diorite.

The burial banquet itself consisted of various items and meals: triangular bread made of wheat, barley porridge, an unidentified liquid with an oily substance, boiled fish with the head cut off, boiled pigeon, boiled quail, two boiled kidneys, beef ribs and limbs, stewed fruit, probably figs, fresh *nabaq* fruit (jujube), other fruit, small round cakes, cheese and grapes.

The forerunner of decorated tombs

It was not only the underground tomb that underwent considerable changes at this time. The second half of the Second Dynasty was in many aspects very important for the birth of the non-royal tomb as we know it from the heyday of the Old Kingdom. Evidence of the most dynamic development must once again be sought in the Saqqara area. This is where we find, above all, innovation in the superstructure of the tomb. Close to the southeastern corner of the mastaba a clearly separated cult place is created, which no longer lies outside the tomb, but is now inside, with an entrance from the east. Its ground plan has a cruciform shape. Most of the cult activity focused on a niche in the western wall of the chapel, which was considered a central place, the symbolic entry into and exit from the chapel, fully available to the spirit of the deceased person buried in the tomb. This is effectively the birth of the future false doors that appear in the Third Dynasty. The context in which these chapels appear is very interesting. They are first found in the above-mentioned Archaic cemetery, initially in the case of tombs that are clearly less significant. The more important tombs continue to be built on the well-worn lines of the existing trend, with cult areas outside the tomb. Is this another sign that the tombs’ commissioners were somewhat distrustful of new developments? Whatever the reason, it provides an interesting lesson; namely that the most dynamic development is not necessarily connected with or reflected by the richest and technically most proficient tombs. The seeds of future development may be carried by individuals with lower social status.

During the Second Dynasty a further trend is clear: tombs start to be built using stone – limestone – as an important building material. Limestone blocks are no longer used only to shut off the entrances to the underground part, or for building pillars in the burial chamber. This is clearly shown by tombs at the Ezbet el-Walda site, right on the east bank of the Nile, opposite Saqqara. This burial ground was explored in 1942–1954 Zaki Saad who discovered over ten thousand graves here, mostly dating from the First and Second Dynasties. In particular, the large number of graves from the First Dynasty indicates that the tombs of lower-ranking officials of the capital of the united Egyptian state may be sought here.



One of the earliest slab stela from Helwan belonged to a woman: it includes a typical offering table arrangement and a rather extensive list of votive offerings for the afterlife.

The graves here can be divided into two types: simple grave pits, at the bottom of which a burial chamber was dug into the side wall, and tombs where the underground part was accessed via a staircase leading to the burial chamber. Grave pits are usually found 3–5 m under the ground. The chambers are typically hewn out of the rock, and have an irregular ground plan. In the wall of the burial chamber there is usually a small niche for the burial equipment. In some cases this niche becomes the actual room where the body is placed, and the entrance chamber then becomes the area in which most of the burial equipment is stored. Sometimes it even happens that two independent burial chambers are found in the underground part. The walls of these chambers, like the walls of the pit graves, are lined with bricks, or fragments of building stone.

In nine cases, the tombs use stone to a significant degree. The stone used was mostly limestone, of which there were outcrops nearby, on the eastern edge of the Nile valley. Limestone was usually used to line the floor and side walls, to help make the staircase and, of course, for the portcullis, which prevented access to the tomb. An example is the tomb 40 H.3, which dates from Den's era. A staircase led into the burial chamber from the north, lined with stones. Two stone blockades on the way to the burial chamber were found in their original places. The burial chamber measured approximately 5 × 3.5 × 2.5 m and was also lined with limestone blocks, of which the largest ones measured up to 3 × 2 × 0.5 m. In the northern part of the chamber were two small storerooms for burial equipment.

Stone tombs from the Second Dynasty clearly show that stone at this time was not reserved only for the king, but became accessible to some officials as well. Once

again, there is an interesting trend: while the Saqqara tombs of the highest-ranking officials do not make much use of stone, in Helwan it is used, again in a small number of tombs, but on a much wider scale. The main reason is likely to have been the relatively easy availability of limestone at that location. It is also likely that, instead of “progressive” architects looking for new forms for the ancient Egyptian tomb, we have a situation in which a virtue was made of necessity. A cheap and available material that allowed building activity to progress rapidly, or, in different words, the laziness of the builders, may have been the real cause of this “progress”. This conclusion is supported by several facts. The limestone blocks are relatively thin and coarsely worked, which means that no exceptional attention was paid to their final working which would have increased the price of the tomb. But it remains an open question whether the craftsmen working on the tomb were capable of working stone well. It must be stressed that the stone blocks were not used to construct the ceilings of the burial chambers. In such a case the blocks would have to be carefully worked and fitted together, which once again was clearly beyond the intentions and/or capabilities of the builders. Instead, the ceilings were constructed traditionally from palm tree trunks.

At the same time that tombs started to be built in stone, the first innovations in their decoration also appeared. From Helwan come over forty limestone stelae decorated with an offering scene. We know of another seventeen from Saqqara, one from Abusir and five are of an unknown origin. As we noted earlier, they were originally called “ceiling stelae,” by Saad Today it is clear that they were part of the decoration of the tomb’s facade and marked the place of the main funerary cult. They are decorated in low relief, and usually depict the dead person, whether male or female, sitting on a chair. In front of him/her stands a sacrificial stool with cut-up loaves of bread. The accompanying hieroglyphic inscriptions list the other sacrifices essential for the afterlife banquet, such as wine, beer, fabrics, oils, small and large cattle, ducks and geese.

The Second Dynasty thus saw the apex of a trend that had lasted almost three centuries. The architecture of tombs – a reduction in the underground part, the disappearance of store rooms built within the casing of the mastabas, and their internal division, with the central place of the cult within the superstructure – as well as the development of decoration paved the way for the great leap of the following dynasty.

Six steps to divinity



Satellite image of Saqqara with the Step Pyramid complex of Netjerikhet.

With the Third Dynasty, which began to rule around 2650 BCE, we enter the period known as the Old Kingdom, which lasted for five centuries. Throughout this period a relatively stable and conservative approach to the construction of non-royal tombs was maintained. Nevertheless, in non-royal tombs we can also observe the main elements of development, common and divergent features and, last but not least, the way in which the tomb reflected the development of society at the time. The very beginning of the Old Kingdom saw the creation of the first texts displaying the basics of the grammar of the written language. At the same time, the ruler Netjerikhet, known much later as Djoser, constructed his eternal residence at Saqqara completely out of stone. The beginnings of this new trend go back to the rule of his predecessor Khasekhemwy. On the other hand, changes in the development of non-royal tombs took place more gradually. What usually happened was that several changes took place at once, followed by a relatively stable period in which there were no essential changes, but rather a maintenance of the status quo.

In the shadow of the pyramids

At the beginning of the Third Dynasty, it was almost 350 years since the first governor of Memphis had built his large tomb in northern Saqqara, a sufficiently long period for the refinement of style and taste. During the First Dynasty the preferred type of tomb had a burial chamber built on the bottom of a large construction pit, and several storage rooms located in both the substructure and superstructure. As early as the Second Dynasty the opposite trend can be seen: the underground part of the tomb is gradually reduced to a single burial chamber with a wooden coffin, and later often a stone sarcophagus, for the dead person (accessible either by a descending corridor or a shaft). The main emphasis was on the superstructure of the tomb, which was built either of unfired bricks or (occasionally) limestone, and included the place used for the cult of the dead person. This was originally located in front of the eastern wall of the tomb, but gradually shifted, mostly for practical reasons, to the inside of the main part of the superstructure, close to the southeastern corner. This created a room – later often several rooms – whose primary function concerned the cult of the deceased.

At the end of the Second Dynasty, however, there was still a considerable difference between royal and non-royal burial grounds. From the Third Dynasty they both started to become more alike in certain respects. One very significant change was that members of the royal family and the highest dignitaries of the country built their tombs in the shade of the royal monuments so that they could be close to their ruler even after their physical death. We should therefore look briefly at the basic elements of royal tombs, which will help us to better understand the development of non-royal ones.

The birth of the pyramids

For the ancient Egyptians the royal pyramids, or pyramid complexes, were above all a unique system, a micro-cosmos expressing in an abbreviated, condensed way, their



Pyramid of Khafra, one of the monumental outcomes of the splendid Old Kingdom epoch.

ideas about the world, its order and creation. The construction and existence of these complexes guaranteed the order (*maat*) that was brought to the world by the gods. Because the king became a god when he died, the pyramids were a guarantee of harmony between the mortal world of men and that of the gods. The building of a tomb for the king, the intermediary between the profane and sacred world, was thus also a guarantee of prosperity for the other members of society. Viewed from the Nile Valley looking west, the pyramids were clearly the most important optical point on the horizon. These megalithic buildings appeared to be saying: “Here is the start of the eternal life reserved for the gods.” With the pyramid complexes we are thus able to investigate the concentrated essence of ancient Egyptian civilisation during the period of the pyramid-builders.

One of the most characteristic features of the tombs of the ancient Egyptian rulers is that they always differed significantly from non-royal tombs. From the Third Dynasty, the royal complex had several key distinguishing features:

1. The king's tomb always had a central position in the cemetery and was surrounded by the tombs of members of the royal family as well as high-status officials of non-royal origin. To be buried near the king was a privilege. There was no longer a duty to die at the same time as the ruler, as was the case with servants under the First Dynasty.
2. The king's tomb gradually took on the shape of a pyramid, which distinguished it from non-royal tombs.
3. The king's tomb differed both in construction method and size. The choice of stone used to build it was the king's privilege, since all sources of stone were officially owned by him. Officials could not use white limestone, for example,

unless they had his permission. Moreover, it took them a long time to attain this right – the first wholly limestone mastabas were not built until the outset of the Fourth Dynasty. Other types of stone – black basalt and alabaster, for example – were used exclusively for the construction of royal complexes and temples.

4. As the royal tomb developed, different means were used to express its exclusivity. In general, the new differentiating elements that emphasised the role of the king by means of the architecture and decoration of the royal complexes were not included in the design of non-royal tombs until several generations later. The process was as follows:

4a) During the First and Second Dynasties, all the Abydos tombs of the kings differed from the non-royal tombs not only in size, but above all in their sophisticated system of rooms built at the bottom of open pits. All they had in common with other tombs in the cemetery were the building materials used (mud brick, wood, matting, and to a certain extent, limestone), a covering that was elevated in the form of a mound, and also stelae, which indicated the owner of the tomb. Unlike the stelae of officials, royal stelae, which featured the Horus name of the ruler, were always erected in pairs, and differed considerably in size. Royal tombs also differed significantly in the amount and quality of grave goods.

4b) During the Third Dynasty, royal tombs moved definitively to the Saqqara area and were built of white limestone, while the tombs of high-ranking officials were still built only of mud brick and smaller blocks of limestone. Only their chapels were cased with limestone blocks, although not always. The overall design of the royal tomb, above all its superstructure, was totally different from that of non-royal tombs, since royal tombs were starting to be built in the shape of a step pyramid. While royal tombs were designed with the purpose of enabling the ruler's entry into heaven, the afterlife of dignitaries took place within the tomb, or to the west of the burial ground.

4c) Another interesting fact is that great emphasis was placed on building underground areas designed for the storage of extensive grave goods, in non-royal tombs there was a notable move towards economisation in both the size and number of subterranean rooms – indeed, there was often just one room. At the beginning of the Fourth Dynasty a sudden change can be observed: the underground rooms of the pyramids were simplified into a burial chamber and several other rooms that served as storage space, plus entrance rooms. At the same time, the classical pyramid shape appeared.

4d) The Fourth Dynasty saw the development of the decoration of the walls of the different parts of the ruler's complex. The oldest example of this is the Bent Pyramid of king Sneferu in Dahshur. During this period non-royal tombs were at first decorated to a limited extent, in the case of the highest-ranking officials and members of the royal family. Only in the Fifth Dynasty did decoration extend to the tombs of practically all social classes, its quality and extent depending purely on the economic means of the owners and their position in society.



Stone vessels represent a very specific category of luxury goods of the period. In Netjerikhet's complex alone more than 40,000 exemplars were deposited.

- 4e) At the end of the Fifth Dynasty a further distinguishing feature appeared in the construction of royal complexes. *Pyramid Texts*, first carved on the walls of the entrance room and the burial chamber, and later also in other parts of the underground areas of the pyramid, suddenly appeared. This written aspect of the decoration and underground "equipment" of the tomb was not taken on by high-ranking dignitaries until the Middle Kingdom, when it appeared in altered form as the *Coffin Texts*. At the same time as the *Pyramid Texts* appeared, however, most important officials started to decorate their burial chambers.

A brief look at the basic characteristics of the parallel development of royal and non-royal tombs indicates that they were connected top down. Innovation in the royal sphere would, after a certain amount of time, find its way into the non-royal sphere. To preserve a distance from the other social classes – which was absolutely essential in terms of maintaining the royal ideology – the ruler needed to develop constantly new symbolical forms that would amply reflect his exceptional position on earth.

Divinity hidden in a name

When examining this period it is vital to remember that the afterlife, as well as the earthly life, of every Egyptian was immediately dependent on the ruler, who was at first considered to be a living god and later (from the Fourth Dynasty onwards) the son of the sun god Ra. As such he was the only person who could guarantee his



Statue of king Khafra featuring the protective image of Horus behind his head.

subjects an undisturbed afterlife. This conception of the afterlife was maintained until the very end of the Old Kingdom, when something occurred that James Henry Breasted called “the democratisation of the royal afterlife”.

Herman Kees aptly characterised the nature of the non-royal afterlife as very similar in form to earthly life. When looking at the burial grounds near the former royal city of Memphis it is hard not to gain the impression that we really view a city of the dead containing the necessary houses and streets. The houses consist of entrances, courtyards, corridors and cult rooms, built not only to ensure the afterlife of the deceased, but also to allow his descendants to stay there during visits. For non-royals, the netherworld was “located” in the tomb itself, or in the sarcophagus in the burial chamber, and also in the Western Desert, which was thought to be the kingdom of the dead under the protection of the jackal god of death and mummification, Anubis. No one was as symbolically bound up with the country as the pharaoh; no one was closer to the gods than he was. This connection with the history of the country and its dual character, reflecting the political circumstances that led to the gradual unification of the southern and northern parts of Egypt, is indicated in the names that made up the royal titulary. It consisted of five names, each of which reflected a different aspect of the king’s rule, and on the religious level provided the ruler with divine legitimacy, authority and protection.

The oldest of them may be considered to be the Horus name. Horus, the falcon god, was seen as the protector of the ruler, who was his earthly incarnation. This fact



“The Two Ladies” names of the Fifth Dynasty king Sahura.

is best illustrated by the famous statue of the ruler Khafra, on display in the Egyptian Museum in Cairo, which shows him sitting on the throne, with Horus in the shape of a falcon behind his head, embracing the king from behind with his wings in a protective gesture. In this unique way, the anonymous Egyptian artist depicted the unity of the god Horus and the earth-dwelling ruler. The Horus name was placed in a *serekh*, a rectangle standing on its short side, with the lower part featuring a decoration that imitated the palace façade and the upper part the king’s name. On the upper edge of the figure stood the falcon, Horus. This was a way of expressing his dominance and protective role in relation to the ruler and his earthly throne.

A second name related to the “two ladies,” the traditional protective gods of Upper and Lower Egypt: the vulture goddess Nekhbet and the cobra goddess Wadjet. Nekhbet was originally a local protective female deity worshipped in El-Kab (ancient Egyptian Nekheb), on the eastern bank of the Nile. Across the river, on the west bank, was the ancient capital of Upper Egypt, Hierakonpolis. It is this geographical and religious configuration that surely hides an explanation of the exceptional position of this goddess in the further course of Egyptian history, and her significance throughout the state. From time immemorial, El-Kab was the site of a large fortress protecting the mouth of the Helaal valley, which ran down to the Nile valley from the east. This was one of the places where nomadic Bedouin tribes could enter the Nile valley from Egypt’s Eastern Desert, attacking the peaceful dwelling farmers. There is thus no doubt as to the strategic importance of this stronghold. In the event of an attack, it represented the capital’s main defence. In the other direction Egyptian expeditions set off through the valley aiming for the gold mines that lay in the mountains to the east of the Nile Valley. In the period that followed the unification of Egypt, Egyptian rulers undoubtedly promoted this protective goddess as a nationwide god, especially since she represented the winning side, politically-speaking.



From time immemorial, El-Kab was associated with the protective goddess Nekhbet, who later on became one of the protective goddess of Upper Egypt.

The goddess Wadjet, a poisonous cobra, was worshipped at Buto in Lower Egypt. Here too, there is no doubt as to why she enjoyed such prominence. As a very dangerous snake, living in the thick undergrowth of the Delta, hunting mainly in the dark, she represented a fatal everyday danger. Thus, too, the cobra was considered a protective goddess, worn by the ruler on his forehead.

The third name was that of “golden Horus,” which appears at the outset of the Fourth Dynasty during the rule of Sneferu. The significance of the name may lie in the physical and chemical properties of gold, considered to be eternal and very hard to obtain, hence very rare. In fact, it has been shown that the name specifically means “Hours out of/consisting of gold.”

At the beginning of the Fourth Dynasty we also encounter the name *nisut bity*, which translates as “he who belongs to the reed and the bee.” These were two additional characteristics of the Egyptian land: the reed was related to the marshy area of the Delta in the north of the country, and the bee to Upper Egypt. In addition, one of the highest-placed court officials, the keeper of the royal seal, was called the *khetemu bity*, or “the sealer of the one who belongs to the bee.” The title was of Upper Egyptian origin, and its roots undoubtedly lie in the victory of the Upper Egyptian rulers during the period of the unification.

The fifth and latest part of the royal title was the name “son of (the god) Ra.” This appeared first during the rule of Radjedef in the Fourth Dynasty, and expresses his connection with, and subordination to, the sun god Ra. It is worth noting that his

pyramid complex was the tallest one of all, and so the closest to the sun. His pyramid was also the nearest to the sacred precinct in Heliopolis, the site of the sacred *benben* stone, a symbol of the primordial mound. Later the symbol of the rising sun and (re)birth became the obelisk, a tall pillar on a square base, narrowing towards the top and ending in a truncated pyramid. Every morning, its tip was the first thing to touch the rays of the rising “reborn” sun.

Tools of rebirth

If we analyse the pyramid as a place of burial, then we have to respect the developing continuity of the construction of the Egyptian rulers’ tombs, the roots of which can be found at the beginning of the First Dynasty. At that time, the superstructure of the royal tombs took the form of a low embankment, which was meant to symbolise the primordial mound. In Egypt a special significance was attached to this mound as a symbol of new life. The idea clearly developed on the basis of the annual Nile floods, which always flooded a large part of the valley for several months. When the flood waters began to recede, the first hillock of earth appeared, a symbol of renewed life. Tombs were supposed to be reminiscent of the same idea of rebirth.

The sun and its eternal cycle were already playing a significant role in the architectural design of royal tombs. To the southwest of the burial ground at Umm el-Qa’ab there is a valley which at first sight looks from the east like the hieroglyphic sign *akbet*, representing two mountains bordering a valley . According to ancient Egyptian ideas, the *akbet* was in this case the place of the going down, or “dying,” of



Step pyramid complex of king Netjerikhet.

the sun in the west. Like the sun, rulers went to the west after they died, to the western horizon or *akhet*, not far from their burial ground. This is why, from the middle of the First Dynasty, royal tombs have a door in their southwestern wall, pointing directly towards this valley.

During the Second Dynasty some rulers were buried in the necropolis at Saqqara, and from the Third Dynasty all the pharaohs were interred close to the then capital city, on the present-day sites of Meidum, Dahshur, Saqqara, Abusir, Zawiyet el-Aryan, Giza and Abu Rawash. The main part of the tomb complex was the pyramid, the actual place of burial. With minor departures, the pyramids always had the same shape, and had adjoining buildings that imitated the palace of the ruler. This is clearly illustrated by one of the oldest pyramid complexes — Netjerikhet's Step Pyramid with its related buildings. This was a tradition based on the idea that the tomb was a house for the afterlife and had to contain the typical parts of a residence. Some archaic non-royal tombs in Saqqara cemetery thus have, in their substructure and/or in their superstructure groups of rooms that correspond to their earthly counterparts. These are to be found especially in the so-called Archaic cemetery.

Besides this, pyramid complexes were places for the gods, who used to meet the Egyptian ruler there when religious holidays were celebrated. In this way the pyramid complex became a connecting element between the world of people and the world of the gods, with the only intermediary being the Egyptian ruler.

During the Third Dynasty the funerary temple of the king was located typically to the north of the pyramid, which was also the site of the exit from the underground part, and the route by which the ruler set off to heaven in order to become one of the "imperishable stars". During the period that followed Netjerikhet, during the Fourth to the Sixth Dynasties, there was a standardisation of the form and design of the royal pyramid complexes. At the outset of the Fourth Dynasty the pure pyramidal form, which doubtless developed from the step pyramids of the Third Dynasty, started to be used to its full extent. During the Fourth Dynasty the funerary temple moved – in connection with the developing cult of the sun – to the east of the pyramid, the whole complex being oriented in line with the sun's course from east to west. The royal funerary complex acquired from now on several unchanging functional parts: a valley temple, causeway, funerary temple, and a pyramid containing the actual burial place of the king.

The philosophy of forms

The reason for the shape of the step pyramid, and later the true pyramid, and its significance for the ancient Egyptians, is still not entirely clear. There are several explanatory hypotheses. One suggests it was a symbolic ladder, on which the deceased ruler climbed to reach the sky and joined with the gods. This is supported by the *Pyramid Texts*, a heterogeneous assortment of religious spells carved on the walls inside of the kings' pyramids from the end of the Fifth Dynasty. These texts provide a vivid illustration of the ideas that related to the ruler and his afterlife. Spell 304, preserved in the Saqqara pyramid of Unas, for example, opens as follows:



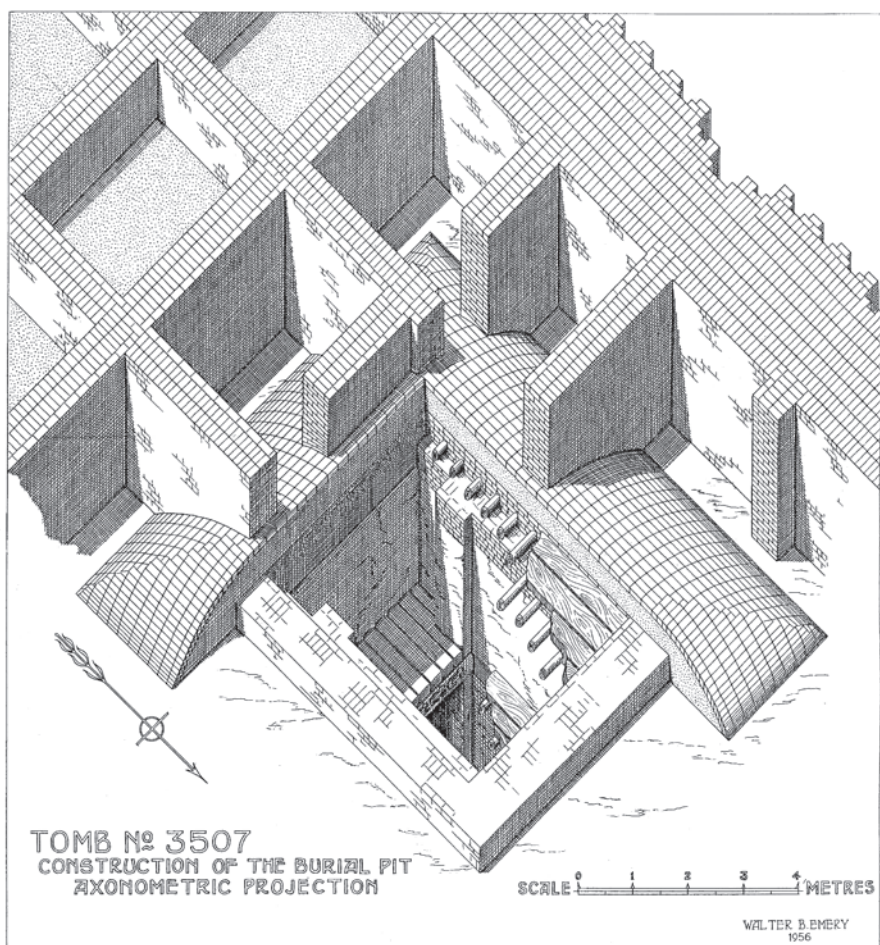
“Valley temple” of king Khasekhemwy in Abydos.

Greetings, Anubis's daughter at the sky's Looking (Waters),
You whom Thoth endowed, at the ladder's uprights!
Open Unis's path, that Unis may pass.
(Allen 2005, 57)

Nevertheless, the identification of the pyramid with the “heavenly ladder” up which the spirit of the ruler climbs to the sky is far from being as sure as is sometimes assumed.

With the help of archaeological data, scholars have been able to reconstruct the superstructure of the royal graves in Umm el-Qa'ab, all of which are reminiscent of the primordial mound. This reconstruction has been particularly successful in the case of the tomb of king Djet. In its subterranean section sand was moulded over the burial chamber in a shape symbolising the primordial mound rising above the flood waters. Above it, above the level of the surrounding terrain, a second mound was created, about 1.5 m high, which together with two stone stelae carved with the Horus name of the ruler, indicated the place where the king was buried. According to Mark Lehner, it is possible that this second mound was then enclosed by a wall made of light organic material. In this way something like a shrine was created, containing inside a mound and stelae.

Similar remains were also found at other places in Umm el-Qa'ab, this time on the very boundary between the desert and the fertile Nile valley. These were large complexes, with characteristic enclosure walls of huge dimensions, built of simple mud bricks. The enclosure walls were further divided by niches. David O'Connor believes the complexes represented the initial phase of the development of the later



Tomb S 3507 with the primeval mound construction above the burial chamber.

pyramid complexes, arguing that in the middle of these structures an artificially-raised mound was with a brick casing was located. The structure is best preserved within the “Large enclosure” that belonged to Khasekhemwy. According to O’Connor this was an early form of the pyramid, which later, starting with Netjerikhet’s Step Pyramid, took on a much more concrete shape and larger dimensions. This would mean that the idea behind the birth of the pyramid concept saw this form of tomb as the primordial mound. Yet another hypothesis, rightly objects that it is unlikely that in addition to the royal tomb in Umm el-Qa’ab, the ruler would have had another one closer to the valley. Hence, the complexes are more akin to valley temples.

An interesting contribution to this discussion is provided by the tombs of high-ranking dignitaries of the First and Second Dynasty from Saqqara. We have already mentioned that these constructions were designed as dwelling-places for the afterlife.

Besides, one tomb from the reign of Anedjib, at the close of the First Dynasty, is vaguely reminiscent of the Step Pyramid, because on three sides its façade took the form of eight receding steps — in other words acting as a staircase. In tomb 3507 a small rounded mound was created above the funeral chamber. Hidden under the superstructure of the tomb, it was not visible after the mastaba was completed. In this way its symbolism was designed exclusively for the netherworld. Here, there is a clear parallel with the mounds found in Umm el-Qa'ab. At the present state of our knowledge, it is quite impossible to delineate a crystal-clear building tradition that led to the creation of the pure pyramidal shape. In practice there was most likely a synthesis of various traditions, concepts and approaches.

This is best documented by the known construction phases of Netjerikhet's Step Pyramid which was built in six main stages. The first three were based strictly on the Lower Egyptian concept of the tomb as the king's afterlife palace with all the components necessary for such a building. It was not, therefore, just a burial place, but had a connected courtyard for the celebration of royal jubilees, a funerary temple, the official House of the North and South, expressing the duality and also the unification of the country, and the symbolic place of burial, the "South Tomb." This concept was based on the appearance of the legendary palaces of the predynastic rulers of Lower Egypt who ruled in Buto. In the M1–M3 phases the superstructure, over the grave of the king, took the form of a huge mastaba.

Later on this initial mastaba was transformed into a monumental four-stepped, and finally six-stepped pyramid. In keeping with the change of form — from a low mastaba to a stepped construction — there was a corresponding alteration in significance. The pyramid became a symbol of the primordial mound, but it also was a ladder for reaching the heavens. Over the course of the Fourth Dynasty, the architect perfected these concepts into the shape of a regular pyramid.

An entirely original and no less interesting theory explaining how the Egyptians adopted the shape of the pyramid is that put forward by Farouq El-Baaz. According to his idea, the pyramid shape was based on forms in nature. This simple idea respects the fact that to some extent Egyptian civilisation originated in the Western Desert where parallel rock formations occur. If one visits the White Desert, between the oases of Bahariya and Farafra, a formal agreement between the shape of the pyramid, sphinxes and even mastabas, and the rock formations created through aeolian activity in the desert is noticeable. Does the solution to our question lie here, in a present-day no man's land that was once bursting with life? We do not know, but it is one of several possible explanations.

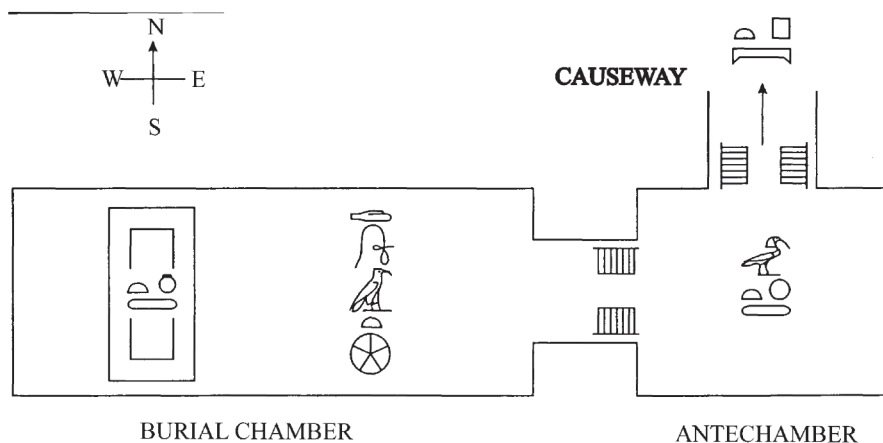
In 2002 Wolfhart Westerdorf, wrote on the possible meanings of the pyramids, or more precisely their forms. He began with a study by Helmut Pitsch, who in 1985 pointed out that at Egyptian longitudes the sun climbed up from the horizon on a trajectory that was very similar to the side angle of a pyramid. He also pointed out that the further south one goes, the more upright the angle of the sun's trajectory becomes. In theory, therefore, the pyramids at Giza should have an angle of ascension of 60 ° (latitude 30 °), at Thebes (latitude 26 °, 600 km further south) 64 ° and in Meroe, even further south and in what is now Sudan, 72 °. How is it in reality? The



Egypt's Western Desert is full of natural pyramid shapes.

great pyramids at Giza have an acute angle of ascension of 52° and the only pyramids reaching the expected angle of around 60° being those of Radjedef in Abu Rawash (60°), Pepy II and queens Neith and Iput at Saqqara (61°). In Thebes most of the documented small pyramids, forming the chapels of tombs from the New Kingdom, ascended at an angle of around 75° . Only in Meroe is it possible to find absolute agreement between the expected and actual degree of ascension of the walls of the pyramids, around 72° . The hypothesis that the shape of the pyramid is based on observing the rising of the sun finds a certain degree of confirmation in the etymology of the Old Egyptian word for pyramids: *mer*. This was originally composed of the word *ar*, which means ascent or coming out, and the spatial prefix *m*. A possible reconstruction of its original meaning indicates that a literal translation would be “place of ascension”.

Taking as its starting point the varying degrees of accuracy of the pyramids' north-south orientations, Kate Spence's research aimed to answer the question of whether these varying degrees of precision help to determine the period of construction of each pyramid. She suggested that the ancient Egyptians oriented their pyramids with the aid of two circumpolar stars which never fall below the horizon): Mizar (Zeta Ursa Majoris) and Kochab (Beta Ursa Minoris). At the moment when one of these stars was above the other in such a way that a line between them was perpendicular to



J. P. Allen's scheme of the rebirth ritual inside the pyramid.

the surface of the earth, the ancient Egyptian architect made a mark on the ground with the aid of a lead line, through which there passed a line that pointed due north. Movements in the earth's axis mean that over the course of the centuries there was a slight shift in the North Pole, and this fact is reflected in the precision of the various pyramids' orientation.

It is interesting to find, for example, that according to calculations based on the method described in very simplified terms above, the largest Egyptian pyramid's construction of Khufu was started in 2554 BCE and not between 2485 and 2475 BCE as was previously assumed. Spence's method has several advantages. It explains the difference in the precision of the pyramids' orientation, even if it might logically be assumed that with the passing of time, the architects would become more and more precise in orienting the pyramids. In reality it is the other way round: the most precisely-oriented are the pyramids of Giza, while the later pyramids shows greater and greater departures, with the latest, from the Sixth Dynasty, revealing the greatest difference. A presumed evident advantage is her assumptions concerning dating the pyramids. Methods used so far can provide only ranges in dates, and a relative historical chronology is far more precise. As always, however, such astronomical assumptions have their weak points. In this case they include the use of a long lead line at night and the question of whether the two stars in question were used by the ancient Egyptians for astronomical observation. Last but not least, both the relative and absolute chronologies of third millennium BCE Egypt support considerably later dates.

According to an analysis of the *Pyramid Texts* of king Unas carried out by James P. Allen, it is also possible to reconstruct a connection between the different underground parts of this pyramid and their significance for the rebirth of the ruler. The western part of the burial chamber contains spells concerning the protection of the ruler from dangerous animals and enemies. These spells are also found in the eastern part of the anteroom, in front of the burial chamber – the buried ruler is thus

protected by magical texts on each side. The ruler's sarcophagus can be seen as the goddess Nut, who gives birth to the sun every morning. The sun then traverses the sky all day and is swallowed again by Nut in the evening. The burial chamber itself is interpreted as the netherworld, *dat*, which is where the king's body resides. The king's soul, however, leaves this region after burial, passing first through the anteroom, which is labelled the *akhet* – in this case the morning sky into which the sun rises, the symbol of life and rebirth. Frequently the corridor that connects the anteroom and the burial chamber contains spells describing the passage through the thicket that is found on the edge of the horizon. This is supposed to be the location of the mythical place where the god Horus was born. The thicket was also meant to aid the symbolic rebirth of the ruler after physical death. Finally the soul set off up the ascending corridor leading north from the anteroom, out of the burial chamber, in order to join the sun god Ra. This “principle of rebirth,” shown in Unas' pyramid, can be identified with the path of the sun – the dying/setting of the sun on the western horizon and its rebirth/ascension in the east. The direction of this movement is from the west to the east, and it thus symbolises the regeneration of the sun during the night, before it reappears again on the east, i.e. is reborn.

The Heliopolis cosmogony is one of the fundamental religious compositions explaining the origin and role of the ruler as the representative of the gods on earth. As far as the idea of the primordial mound is concerned, its identification with the pyramid is in accordance with this cosmogony which also explains the creation of the world and the birth of the gods. We already have very good evidence for this idea from the *Pyramid Texts* (Spell 359):

Atum Beetle! You became high, as the hill;
 you rose as the benben in the Benben Enclosure in Heliopolis.
 You sneezed Shu and spat Tefnut.
 You put your arms around them as ka-arms so that your ka might be in them.
 Atum, put your arms around Pepi Neferkare as ka-arms,
 so that the ka of Pepi Neferkare might be in it,
 firm for the course of eternity.
 (Allen 2005, 269)

According to the Heliopolis cosmogony the creator god is Atum, who created the gods of two elements: the god of the air, Shu, and the goddess of moisture, Tefnut. From this pair there then arose the god of the earth, Geb, and the goddess of the sky, Nut, the symbol of the heavenly arch over which the sun travels in the course of his daily cycle. Geb and Nut had two pairs of children – the brothers Osiris and Seth and the sisters Eset (Isis) and Nebthet. Seth, who tries to gain power on earth, treacherously kills his brother and cuts up his body into pieces which he spreads all over the earth. Eset, the sister and wife of Osiris, manages to collect together his chopped-up limbs and puts them together in a hidden place in the swamps of the Nile Delta. Osiris comes to life for a short time, and manages to impregnate Eset. After his death (Osiris becomes the lord of the netherworld) Eset gives birth to the god Horus in a papyrus thicket.



Fragments of Netjerikhet's chapel from Heliopolis: the proliferation of the state administration, technology and social differentiation boosted the development of the Egyptian hieroglyphic script. From this period dates one of the earliest full sentences in hieroglyphs.

When Horus grows up he challenges his uncle Seth to a duel, and after a number of battles gains his due inheritance, rule over Egypt (= the world). The struggle between Horus and Seth is one of the most frequently repeated themes in Egyptian mythology, and reflects the strong antithesis between the life-giving Nile basin on one hand (represented by Horus) and the dead desert (represented by Seth) on the other. At the same time it is a parable of the struggles for the unification of Egypt, in which Upper and Lower Egypt stood against each other. Horus, born in the thickets of Lower Egypt, ultimately wins and thus becomes the first ruler on the Egyptian throne.

According to the late Rudolf Anthes, a leading authority on the religion of the Old Kingdom, this cosmogony, created at some stage mainly for political reasons, needs to be interpreted backwards. We therefore have to consider the end of the story, when rule over the world is assumed by Horus, to be the logical beginning. At the end of the myth we then find an explanation as to why the world is the way it is – it was created as the result of the existence and wish of the primordial god Atum. As such, it reflects the order that has existed since time immemorial, divine and inviolable. The institution of the king, Horus, was thus necessarily seen – on the basis of the Heliopolitan concept of the creation of the world and its rule – as an office that was divine, eternal and guaranteed by the gods. The ruler, who from predynastic times had the title of Horus, was his mortal representative and maintainer. After death, however, the Egyptian king became the ruler of the kingdom of the dead, Osiris, and his successor on the Egyptian throne automatically became the new Horus, in other words the king governing Egypt. In this way the unchanging order of rebirth and



Tomb of Hetepi in Abusir: it represents so-called “transitional” tomb with the subterranean apartments accessible by combination of a stairway and a shaft.

orderly rule over Egypt would be repeated for ever. Another important element in the cult of the ruler was the idea that he was also the son of the sun god Ra, one of the most important gods in the Egyptian pantheon.

All this makes it clear that society perceived the construction of a king's pyramid as much more than the construction of a monumental tomb for a chosen individual. By participating in its construction, Egyptians were endorsing the prevailing terrestrial order, confirming themselves as part of the created world and ensuring their own existence after death. This is why high officials were so keen to have the privilege of building their tomb as close to their ruler as possible. Not all of them managed to. Worse, we are still looking for most of the tombs of those who did manage to.

A jewel among burial grounds

The most important place with regard to the history of the period of the pyramid-builders, the third millennium BCE, is without doubt the area of today's Saqqara and Abusir. It is here that tombs were first constructed, encompassing cult areas in the form of a "cruciform chapel" (a room that was part of the interior of the above-ground part of the tomb, with a ground plan reminiscent of a cross). Previously the cult areas had usually been situated outside the tomb, but now they moved inside, where they were protected and at the same time separated from the world of the living. The cruciform chapels became the basis on which the tradition of the tombs of the Fourth Dynasty and the subsequent periods of the Old Kingdom was based. What did these tombs look like, who owned them, and what makes this undoubted period of transition unique?

From the Third Dynasty onwards the walls of these chapels are decorated with reliefs and hieroglyphic inscriptions. Given that settlement structures from this period are now practically non-existent, these reliefs and inscriptions are a significant source of information regarding the society of the time, the position of the tombs' owners, their official careers, their family members, the religious ideas of the time and many other aspects.

The focal area of the chapel was the west wall with the "false door," mostly made of stone, less often of mud brick or wood. This decorative architectural element was based on real doors, and was considered to be a symbolic door connecting the world of the living in the Nile valley with the world of the dead in the west. This concept was a parallel to the rising (birth) and setting (death) of the sun. The false doors bore inscriptions with offering formulas and the titles and name of the dead person. To the west of the chapel was often a serdab – an inaccessible room with a statue or statues of the owner of the tomb. These statues were one of the ways of ensuring his trouble-free existence in the other world, in that they represented an embodiment of physical body (although considerably idealised) in permanent material, in case the tomb owner's actual body suffered any damage.

All the Abusir-Saqqara tombs were built using a similar technique: the outer casing was made of brick, and the inner core consisted of a loose filling. The perimeter walls were often decorated with niches that were supposed to symbolise the façade of a dwelling house – a fashion that from the end of the First Dynasty was on the retreat, however.

During the Third Dynasty a further significant process can be observed. This was a movement away from tombs where the underground part was entered via a staircase or ramp (or a combination of both) towards tombs furnished with shafts. Shafts represented great progress, both in terms of technology and security. The tombs usually were equipped with two underground systems, combining shaft with a staircase, and they are therefore sometimes called tombs of “transitional” type. This in itself shows that development during this period was far from linear and simple. The above-mentioned tombs also nearly all have cruciform chapels. After this brief period lasting maximally for several decades, the tomb’s underground accessible by means of a shaft prevailed and suppressed all other technical solutions.

These tombs lie to the north of Quibell’s Archaic cemetery, on the territory of what is referred to as Northern Saqqara. In recent times a similar type of tomb has also been discovered in southern Abusir. Most of them belonged to relatively high standing state officials. This fact is underlined by their location – they are all at heights of around 50 m above sea level, in other words in the best places in the burial ground. During this period only members of the royal family could hold the highest functions, however, and these officials were certainly not those people. With some amount of exaggeration it is therefore possible to say that the source base for our research so far has consisted of “second-grade” tombs. Where the tombs of the royal family are hidden is something we do not yet know. Only future archaeological research is likely to bring a definitive answer.

The ruler of “the divine body” and “He who comes in peace”

Reconstructing the history of the Third Dynasty in any great detail presents a major problem. With a little exaggeration it might be said that the main thing we know of from this period is Netjerikhet’s burial complex. And yet this is the era from which we have evidence of the first written sentence with the use of a verb, and the era when the first known stone temples were built in Heliopolis and Gebelein. The dynasty ruled for approximately seventy-five years, during which period five rulers succeeded each other on the throne. The most significant of them was the dynasty’s founder, Netjerikhet.

Netjerikhet’s Horus name, which in translation means “divine body,” was known until the time of the Middle Kingdom. It was only then that the name Djoser, by which he is probably best known, started to be used. He was the son of the last ruler of the Second Dynasty, Khasekhemwy, and his wife Nimaathap. From his period comes imposing mastaba at Bet Khallaf labelled K1. This tomb is one of the largest ever built, and shows that Upper Egypt, especially the Abydos area, continued to remain an important region, where high-ranking state officials had their residences and burial sites. In Bet Khallaf, seal impressions with Netjerikhet’s name have been found in the tombs labelled K2, K3, K4 and K5. This suggests that this was likely the burial place of part of the royal family, relatives of Queen Nimaathap.

Another site with evidence of Netjerikhet is Elephantine. It is also his period that saw the start of the regular Egyptian expeditions to Wadi Maghara in the Sinai, where vitally

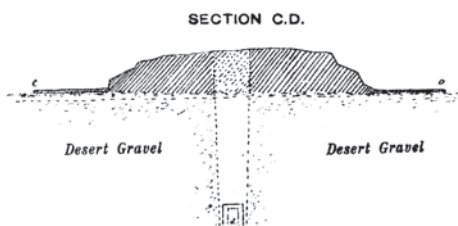
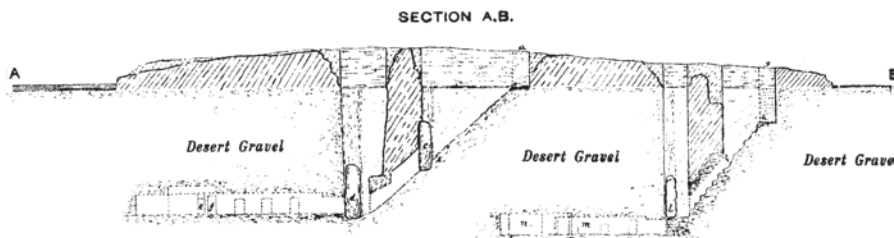
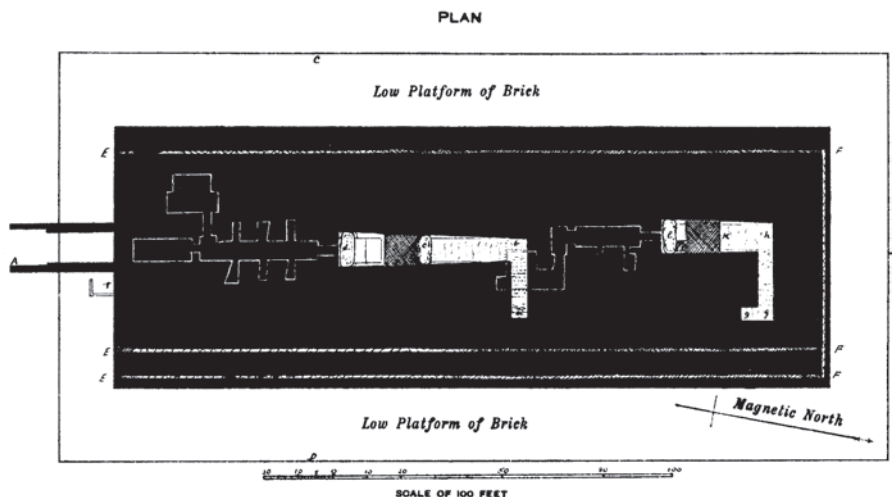


Tomb K1 in Bet Khallaf.

important copper was obtained. The Turin royal papyrus, which comes from a much later period, suggests that he ruled only 19 years. Netjerikhet's rule, or, more precisely, his name at the beginning of the Third Dynasty, is shown in red, which means that in the eyes of the ancient Egyptians, too, this was seen as a very significant start of a new epoch.

It remains a paradox, however, that most of the events of Netjerikhet's reign are connected with the name of Imhotep, the royal architect and one of the most significant figures in ancient Egypt. Imhotep, whose name means "He who comes in peace," was an important dignitary (possibly even of royal origin), architect, doctor, Heliopolitan priest of the sun god Ra, and later a renowned ancient Egyptian sage and demigod. Tradition has ascribed unique abilities to him, and the ancient Egyptians considered him the inventor of the art of building in stone and the author of the idea of Netjerikhet's complex – the first to be entirely constructed of small limestone blocks, replacing mud bricks and organic materials.

Remarkably, Imhotep's period provides us with only a minimum of explicit evidence that he existed. One of them is the base of a statue discovered during archaeological work close to the southeastern corner of Netjerikhet's complex. It is a fragment of an originally standing statue of Netjerikhet, displayed in a small cult area in the entrance to his complex. It was discovered in 1926, and since then has been the subject of much speculation and academic debate. The front of the plinth has Netjerikhet's name, and to the left a hieroglyphic inscription that translates as follows:



Tomb K1 in Bet Khallaf, ground plan and cross-section.

Sealer of the king of Lower Egypt, administrator of the royal landholdings, overseer of the Great House, prince, highest priest of Heliopolis, Imhotep, overseer of the sculptors, magazines and stone vessels craftsmen.

Further evidence of Imhotep's existence comes from the underground galleries of Netjerikhet's complex and from the pyramid complex of Sekhemkhet. Here Imhotep's title of high lector priest is found several times on stone vessels which Imhotep clearly donated to his ruler.



Netjerikhet's statue base containing the titles and the name of Imhotep.

His life and career can be reconstructed only on the basis of circumstantial evidence. It is probable that he was already active at the end of the Second Dynasty during the reign of Khasekhemwy, who was the first to start commissioning his architects to build, albeit to a lesser degree, in stone. One such building was a shrine in Hierakonpolis built partly of red granite, and Khasekhemwy's stone tomb in Abydos was another example. However, it was during the reign of Netjerikhet and his successor, Sekhemkhet, that Imhotep's art reached its peak.

Among the best evidence of Imhotep's genius is the complex of the Step Pyramid of king Netjerikhet in Saqqara, built exclusively of stone. The complex was meant to symbolise the eternal palace where the king, himself a god, met the other gods of the Egyptian pantheon after his physical death. The divine nature of the king was also indicated by one of his names, "Netjerikhet", or "the divine body." The complex was called "The Refreshment of the Gods," and numerous religious feasts were celebrated here: the highest-ranking officials and priests of the country gathered here in order to pay their respects to the deceased ruler. At the same time, the pyramid complex is a great mystery. It consists of a group of many independent architectural elements, both spatially and functionally separate. The complex is evidence of the consolidation of political and economic conditions in Egypt: it includes places for celebrating religious feasts, buildings that evoke the unification of Upper and Lower Egypt, a temple for the afterlife cult of the ruler, and an altar on which sacrifices were made to the sun god. The complex is so extensive that even today it has still not all been excavated, and a large part remains uninvestigated.

From the outside the whole complex was protected by a monumental trench that was 40 m wide. Inside, over an area measuring 750 x 600 m, was situated the actual burial precinct, with a ground plan of 545 × 278 m, enclosed by a stone wall 10.5 m high. Imhotep's genius lay above all in the fact that he decided to replace the building materials that had been usual up to that point. Instead of mud bricks, reeds and wood he used small blocks of limestone. Because the architect and his building team lacked essential experience with this new material, however, they stuck to the usual dimensions of bricks, using stone blocks that were very similar in their dimensions to the bricks that were in common use at the time. They thus produced a faithful copy of

the earthly palace of the king (which was built of the above-mentioned materials, with the exception of stone) but in “eternal” stone. Here the king became an immortal god after his death, and during religious holidays he met with other members of the ancient Egyptian pantheon of gods.

With a few exceptions, the large area to the north of the pyramids, between the temple to the south and the enclosure wall of the complex to the north, remains unexcavated. According to some indications, it is possible that Imhotep’s tomb is located here, maybe close to the northeastern corner of the complex. This would not be so unusual, since members of Netjerikhet’s family were buried within the complex too. However, Imhotep’s tomb has still not been found. Or maybe it has, and the archaeologists working in the necropolis have no idea that they have, or had, it in front of their very eyes. The search for this legendary tomb has been a major preoccupation of the twentieth century archaeologists.

From what we know, it seems that a high-ranking dignitary of Imhotep’s position, a man with significant functions at the royal court in the then capital city of *Ineb Hedju*, could only be buried somewhere where other dignitaries of the same rank were buried, in other words in the Saqqara metropolitan burial ground. In this cemetery W. B. Emery, the British archaeologist who contributed significantly to our knowledge of the first half of the third millennium BCE, discovered and excavated a tomb labelled S 3518. It had a ground plan of over 50 × 20 m and a very carefully laid-out system of cult areas in the form of cruciform chapels, storage rooms and corridors adjoining the mastaba form the south. What is particularly remarkable about it is that it contains imprints of cylindrical stone seals with the name of king Netjerikhet, plus a large number of offering items and ceramic vessels. On the basis of these indices Emery believed that he had actually discovered Imhotep’s grave. From today’s point of view, however, this does not seem very probable – it is more likely to be the burial place of one of many high-ranking state officials of the time.

Either we have not yet been able to find Imhotep’s tomb, or we are not able to recognise the true identity of the owner of a tomb that has already been found because of the state in which it has been preserved. Whatever the reason, it is a good thing for Imhotep. He came in peace, and may he rest in peace. Nevertheless, it is worth reconstructing the hypothetical appearance of his tomb. Our first example will be the tomb of Hesira, an important official, and the second will be the surprising discovery of Hetepi’s tomb at the end of 1999 in the Czech concession area in Abusir.

The wooden Hesira

In 1913 British archaeologist James E. Quibell published a study of the tomb of the official Hesira (labelled QS 2405), a grave which continues to be the subject of dozens of studies and analyses. It is one of the best-preserved tombs from the Third Dynasty in Northern Saqqara. Its owner was the dignitary Hesira, probably another important contemporary of king Netjerikhet. Most of the objects found in it were highly unusual and have made a significant contribution to our knowledge of Egypt of the time.

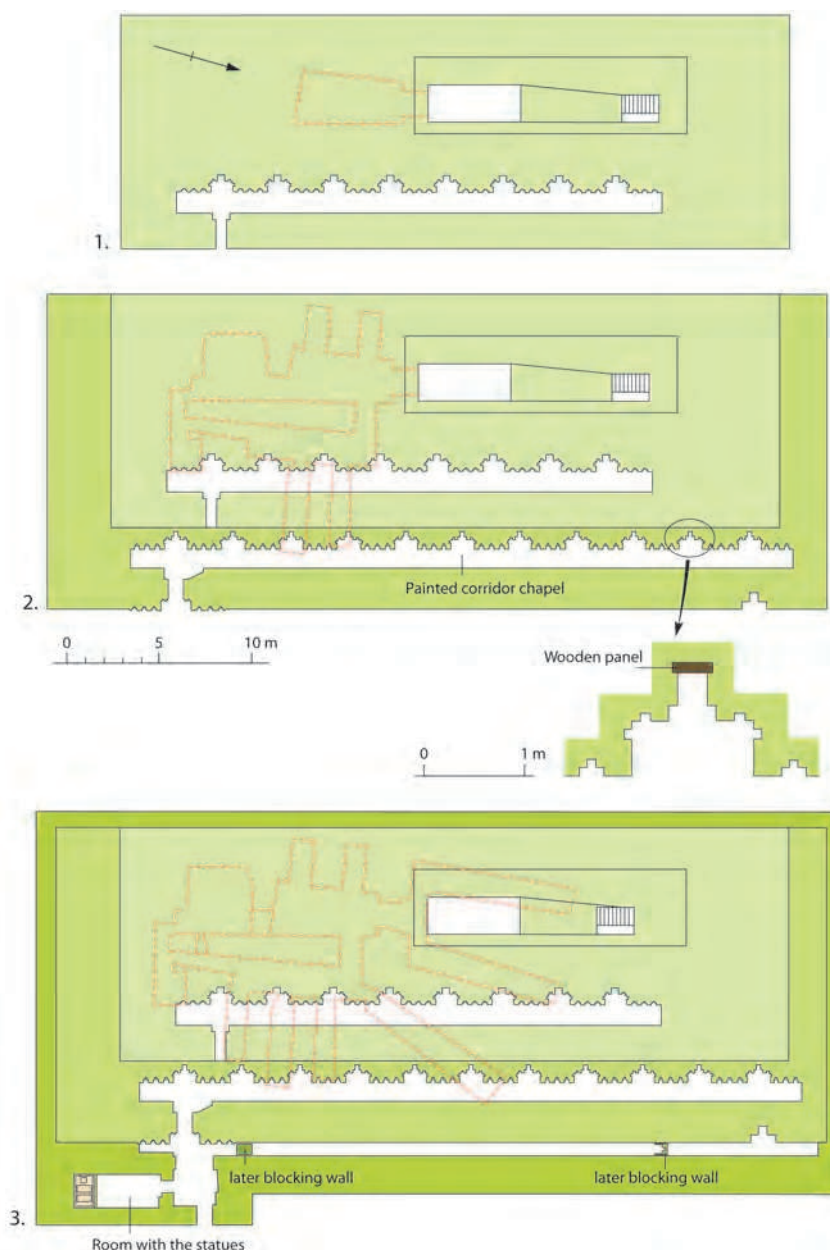
Some parts of the tomb were known from the second half of the nineteenth century, when the French archaeologist Auguste Mariette worked in the area – without making any sort of documentation, however. Mariette, discoverer of the Serapeum, the famous Saqqara burial ground of holy bulls, found five unique wooden panels depicting the owner of the tomb in various attitudes. We do not have scholars to thank for its academic rediscovery and subsequent documentation, however, but, as it happens, an Egyptian worker. Mohammed Duqmaq was a hired labourer who worked on the excavations in the Saqqara area from 1861, and remembered very well where Mariette had found the unique wooden panels. Fifty years later, now in the services of Quibell, he remembered the location of the long-ago discovery. It was thus not until 1911–12 that the tomb was properly investigated. Partly as the result of the tomb's unsettled history, maybe, we still lack a detailed analysis of its decoration and architecture. Still, Quibell's research was highly successful. In addition to documenting the decoration of the unique corridor chapel and the underground structures, he managed to increase to six the number of wooden panels known to us. Five are still missing, however, since there were originally eleven, in niches in the western wall of the tomb.

The tomb measures 39×17.4 m, and its preserved height reached up to five metres in some places. In front of the entrance to the tomb was a cult room originally containing three wooden statues, of which only the torsos have been preserved. Two of them belonged to Hesira, and the third was of his wife. The corridor chapel was approximately one metre wide, and extended along the eastern façade of the tomb. In its western wall there were niches with ornamentation reminiscent of matting, decorated in four colours: black, yellow, red and green.

The underground part was similarly interesting. It was built on three levels, and in a certain sense represented the swan song of previous development. A staircase from the north led to the first floor, hidden ten metres under the surface of the desert and forming a corridor several metres long. From here a roughly-hewn staircase continued to the second floor, which has never been researched. There is also a third floor, however, at a depth of more than twenty metres, and this has also not yet been investigated. Thus, one of the most famous tombs of the Third Dynasty has, paradoxically, never been properly investigated.

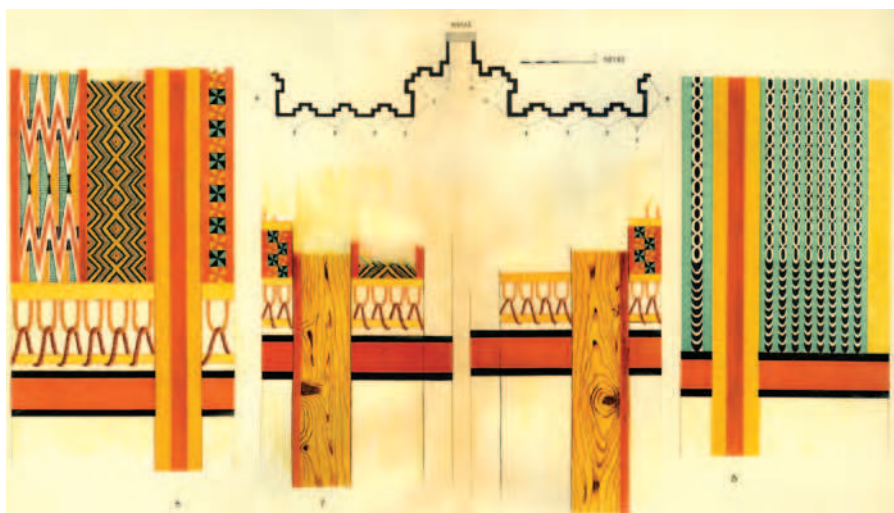
Most of the tomb's fame comes, however, from the above-mentioned wooden panels, which originally decorated the western wall of the corridor chapel. The six panels, preserved to various degrees, depict Hesira surrounded by hieroglyphic inscriptions. Each panel depicts Hesira in a different attitude and with different insignia relating to his position. He is most frequently depicted standing, stepping forwards. This indicates his high status, connected with significant offices in the country and duties that required him to behave in an active and sovereign way. In his hand he usually holds a stick and a *keherep* sceptre, the symbol of decision-making rights. The carefully-worked athletic figure and sharply-carved features are a kind of artistic shorthand for an official of the time, and leave no one in any doubt that this was a man at the height of his vigour.

The depiction also develops to the full the ancient Egyptian method of portraying an object by combining its most characteristic views. Hesira's head is thus shown in



Ground plan of the tomb of Hesira (LM).

profile, while his shoulders are shown frontally. The lower part of his trunk and his limbs, meanwhile, are depicted in side view again. Also notable is the order and the symmetries that govern the area decorated. By this period the ancient Egyptians were already making full use of an elaborate system for deciding the proportions of the



The original colour decoration of niches in the tomb of Hesira imitates the construction made of wood and mattings.

human body, which involved the use of a pre-drawn regular network of squares. During the Old Kingdom the human body was divided into nine parts, with the head equalling to one ninth of the height of the figure (measured from where the neck meets the shoulders to the edge of the hair as depicted on the forehead).

The best-preserved panel shows Hesira sitting, for a change, in front of an offering table with a high leg, on which loaves of bread are arranged. Hesira holds a stick and sceptre in his left hand, while with his right he reaches out for the bread. He has writing tools over his right shoulder – a quill case and a palette with two hollows for black and red ink. Above his head some of his official titles are given, while in the remaining area offering items are depicted and labelled – wine, cold water, myrrh and a basin and jug used for ritual cleaning. Also visible are a bowl on a stand, beef, three jugs of beer and an antelope.

The eastern wall of the corridor chapel was plastered white, and decorated along its whole length with paintings depicting the different components of Hesira's grave goods. Things that can be seen include vessels for sacred oils, wooden chests with fabrics and clothing. Sometimes we can observe individual items under the lids of the half-open chests. A vital part of the grave goods were head rests, an ancient Egyptian equivalent of the pillow, used for sleeping, and the indispensable copper instruments that were used for personal hygiene and also for many other tasks. Copper was the most frequently used metal during the era of the pyramid-builders, when iron was not yet known.

We also see various pieces of furniture, tables, couches and stone and ceramic vessels. There is an interesting depiction of two boxes with weights and cups for measuring volume. This indicates one of Hesira's duties – to ensure the careful management of various commodities for which he was responsible in the king's



Two of the wooden panels of Hesira, featuring his figures and titles.

residence, or in the central offices of the state. The northern end of the chapel originally contained a unique depiction of Hesira holding a sacrificial *hesi* vessel in his hand and a disc. It is a rebus writing of his own name, *Hesi-Ra*, which translates as “Revered/praised by Ra.” This is one of the oldest explicit pieces of evidence of the cult of the sun god in the non-royal sphere.

The preserved panels, however, complicate the interpretation of the chapel as a central cult place. Under normal circumstances the tomb would have contained only one cult place. Instead, we have a total of eleven niches, each of which might be

considered a stand-alone and autonomous cult centre. Maybe, however, Hesira's tomb is one of the last places where it is possible to look back into the past. Let us remember the era of the First Dynasty, when it was fairly usual for the funerary cult to take place in front of several niches embedded in the eastern wall of the mastaba at the same time. In such a case the corridor chapel can be seen as an integral part of the house, the residence where the dead person lived. This is why Hesira is shown performing his duties in various situations, in different contexts. His corridor is at the same time already the netherworld, in which Hesira is currently living and is continuing to fulfil his duties in the service of his ruler forever. This is supported by the idea of the "storage areas" depicted on the eastern wall of the chapel. The storage areas are no longer situated inside the inaccessible above-ground part of the tomb, but the individual items stored in them are "merely" depicted on the wall of the chapel, which on a symbolic level is more than enough to ensure their availability to their owner in the other world. Finally, this interpretation is given additional weight by the actual decoration of the niches in the western wall of the chapel – the motifs, painted in colour, copy the patterns of mats hung from the ceiling in a house, weighed down at floor level by wooden beams.

The secrets of Hetepi's tomb

One of the most exceptional recent discoveries from the period of the builder of the oldest pyramid, king Netjerikhet, is the tomb of an official named Hetepi (his name translates as "He who is satisfied"), from the period around 2600 BCE. It was discovered by the Czech expedition in the winter of 1999–2000. Not only does it provide us with an indication of the approximate appearance of Imhotep's tomb, possibly lost forever, but it shows us how Hetepi imagined and ensured his afterlife. Its architecture and internal arrangement may be considered a typical example of the tomb of a high-ranking official from the time of Netjerikhet.

The dimensions alone of Hetepi's tomb make it one of the biggest mastabas of its kind of the period (the longer side was almost 50 m long, and the superstructure covered an area of over a thousand square metres). In the southeastern corner was a small chapel built of blocks of superb white limestone. Its façade, orientated towards the east, was covered with a unique relief decoration. Hetepi's tomb is thus one of the oldest decorated tombs in relief in Egypt, and confirms the hypothesis that the oldest decoration was initially focused on the entrance area, only later expanding to the inner walls of the chapel. To the right of the chapel entrance Hetepi is shown sitting at an offering table with bread loaves. Around the table there are depictions of further offerings that were regularly brought to the dead person in the chapel. At Hetepi's feet sits the "steward" Nekhti, while above Hetepi's head his titles are written in two rows.

Hetepi's chief titles included "strong of voice of the king, great one of the ten(s) of the mansion of life and keeper of the secrets of the *sekh(eru)* hall". In Old Egyptian "keeper of the secrets" read, literally "he who is above the secret." There followed the titles "inspector of the custodians of the ornaments of the Wadjet phyle,



Hetepi's façade decoration panel with the offering scene.

inspector of the Estate 'Seat of the Goddess Hatmehit' of the Great phyle, keeper of the secrets of the *sekb(ernu)*-hall of the god's heir, overseer of the 'Thrones of the Estate of the Goddess Bastet' of the Great phyle, property custodian of the king". The last title indicates that Hetepi was a member of the highest rank of officials, comparable to the retinue of a mediaeval ruler. These dignitaries acted not only as the king's personal servants, looking after his hygiene, food and clothes, but also formed the backbone of the emerging ancient Egyptian state.



Kaimen, so far the earliest-known vizier of Egyptian history, lived probably during the Third Dynasty. His existence is attested exclusively by inscriptions on stone vessels from Netjerikhet's complex. His tomb is still unknown.

To the left of the entrance to the chapel, the figure of Hetepi was portrayed in black alone. There was clearly no time to finish this part of the decoration, and so only a working sketch by an ancient Egyptian artist has been preserved, with numbers serving as an aide-memoire for the proportions of the different parts of the human body. Hetepi is shown here standing, resting on his official's stick, a sign of his power and authority. In front of him are two of his sons, accompanied by the above-mentioned steward, Nekhti. The chapel itself was not decorated, and three of its walls were clad with small blocks of limestone, while the fourth, western wall, appears to have been destroyed by thieves in ancient times. In the limestone floor, however, stone hinges remain from the double leave door which closed the western wall of the chapel. Behind the door there must have originally been a niche, in which a standing Hetepi was probably depicted. The chapel is unique above all in that it provides clear evidence of the ancient Egyptians' ideas regarding human existence in the netherworld. The two leave door and the niche were meant to represent a magical gate, a junction between the world of the living and that of the dead, which was opened by the funerary priest whenever offering rituals took place. Yet most important fact is that the western wall design (niche protected by a functional door) represents a unique precursor of the later false door concept which became one of the corner stones of the funerary cult of the ancient Egyptians.

In its underground part, Hetepi's tomb hid two separate systems, each with its own entrance. In its southern part there was a staircase, several times changing direction, which descended to the south, finally ending in a shaft at a depth of several metres. The actual underground part of the tomb consisted of a simple and small burial chamber. This, however, was robbed in ancient times, and all that remained of the original burial were several fragments of wooden coffin and sporadic grave goods. The entrance and underground area in the northern part of the tomb was designed in a similar way.

Hetepi's tomb still looms, at almost its original size, over the Lake of Abusir, which was once the main entrance path to the burial ground that extended to the north of the Step Pyramid. Every funeral procession for Old Kingdom dignitaries would have thus had to pass by, and participants would have found themselves looking at this tomb at least for a moment. Since time immemorial, Hetepi and Hesira have gazed at each other across the Abusir valley, the entrance to the Saqqara burial ground during their time. They look silently at the path that leads to Netjerikhet's pyramid, from whence the echoes of voices of other characters of their time bear down on them. Its underground part reminds us of our limited knowledge of this period. Tens of thousands of stone vessels comes from it, some of which bear the names and titles of famous and high-ranking men of the Third Dynasty who contributed to the ruler's grave goods. They include Hetepi, who was one of those who gave the ruler several stone vessels. His tomb is exceptional in another regard, in that it is a unique example of a historical figure being identified with someone for whose existence there is evidence from the underground part of the Step Pyramid. Here, too, we find the name of the oldest known vizier in Egyptian history, Kaimen. His tomb has also disappeared without trace. Where are these men buried in the Saqqara necropolis, and what happened to them? Finding an answer to this question is one of the future tasks that await archaeologists of the Old Kingdom.

The great and the greatest



Cemetery established by the king Sneferu in Dahshur.

The most famous ancient Egyptian architects of the greatest buildings of the third millennium BCE lived and operated in the first half of the Fourth Dynasty. Their works can be found at the sites of Meidum, Dahshur and Giza. Everything took place very fast; ancient Egypt's largest pyramids were built during the rule of two successive generations, father and son. The rulers of the Fourth Dynasty also managed to organise great expeditions to Sinai, Nubia, modern-day Lebanon and deep into both the Eastern and Western deserts. Their goal was to obtain raw materials and products that were not found on Egyptian territory, such as copper, gold, turquoise, furs, incense, myrrh and cedar wood. The rule of Sneferu and Khufu, father and son, lasted for about half a century and their tombs are still a symbol of the age of the pyramid-builders. At the same time it is certain that surprises and vital new discoveries from this period will continue to occur in the future, because their rule had a permanent influence on developments in the field of society, religion and, of course, of the construction of non-royal tombs.

The founding father

The Fourth Dynasty was founded by Sneferu, the first Egyptian ruler to start building pyramids in the classical shape, one that the kings of the Old and Middle Kingdom followed. Sneferu was the son of queen Meresankh (I) and king Huni. His successor on the throne, Khufu, was one of his younger sons, his mother being the Hetepheres I. She was the owner of the secret chamber discovered at the start of the twentieth century in Giza, containing many consummate works of art of the period.

Egypt under Sneferu was already a fully consolidated power with a strong and efficient system of state administration and a distinctive foreign policy. From the period a little later come the annals known as the Palermo Stone, which list several specific events. In the thirteenth year of Sneferu's reign, for example, cedar ships were built (the Egyptians imported cedar wood from the port of Byblos in present-day Lebanon). One of these was 100 cubits long, while another measured 16 cubits (1 cubit equals 52 centimetres). There is also recorded a victorious military expedition to Nubia, from where over 7,000 captive men and women and 200,000 sheep and goats were brought back. Finally, one of Sneferu's palaces was built in the same year. It is interesting that in that year the Nile flood was extremely low, reaching a height of only two cubits and two digits. A year later, however, the flood ensured a sufficient harvest, reaching a height of five cubits, one palm and one digit. From that year there is also a mention of intensive internal colonisation of the country, during which the king founded 35 agricultural domains and 122 cattle-breeding estates.

Originally Sneferu built a pyramid for himself in Meidum, approximately 90 km south of Cairo, in the region of the ancient route connecting the Nile valley with the Fayum oasis. The pyramid at Meidum was formerly ascribed to his father, Huni. However, this possibility is ruled out by the name of the pyramid complex, *Djed Sneferu*, and the fact that inscriptions from later periods always specify Sneferu as the owner. By building this complex, Sneferu launched a new stage in the history of



The port of Byblos on today's coast of Lebanon was the focal point in foreign-trade with cedar wood as a major commodity.

Egyptian architecture. It was an entirely new concept but at the same time one rooted in earlier development. It consisted of several interrelated parts: a valley temple, a causeway (which in this case took the form of an ascending ramp with no roof), a small funerary temple (simplified into a cult space with two limestone stelae) and the pyramid itself including the king's tomb, with a burial chamber accessed by means of a descending corridor from the north.

This pyramid was never actually used for a royal burial, however, something that is partly shown by its present local name, *Haram el-kaddab*, the False Pyramid. To the north of it is a large burial ground where several members of Huni's and Sneferu's families were buried. Yet a further burial ground, known as the Western Cemetery, is reminiscent of the ordinary burial grounds for high-ranking court dignitaries that were created during the reign of Khufu in Giza.

Two unique tombs were erected in the immediate vicinity of the pyramid. To the north of the pyramid stood an east-west orientated superstructure comprising a corridor leading into the underground part. The corridor ended in the burial chamber, in which there was a wooden coffin containing the remains of a woman. Later tradition ascribes this tomb to queen Meresankh, Sneferu's mother. Yet this is only a hypothetical conclusion.

The second tomb is situated near the northeastern corner of the pyramid and is labelled M 17. This monumental building, the largest in the burial ground after the pyramid and Nefermaat's tomb (M 16) located nearby, is remarkable in having an unusual burial chamber with a T-shaped ground plan. By its western wall there is



The Meidum pyramid as looked about a century ago (courtesy P. Jánosi).

a monumental sarcophagus made of red granite, which must have belonged to an important personage. Moreover, this is actually the oldest red granite sarcophagus we know of from ancient Egypt – it is several years older than the similar sarcophagus of king Khufu in Giza. According to original reports, the bodily remains found in the sarcophagus were ascribed to a male member of the royal family.

Approximately halfway through his reign Sneferu decided to move his residence to Dahshur, where he gradually built further two pyramids, the Southern (Bent) and

Northern (Red) pyramid, the latter becoming his burial place. His reasons for the move are none too clear to us, and all theories lie within the realm of speculation. Was it a political act, with the king deciding that he wanted to be closer to the political action in Memphis, at that time the capital of the ancient Egyptian state and the headquarters of most of the country's administrative apparatus? Did the king decide to alter a building project and build a much more perfect work? Both these arguments are likely to be true in part. It is also likely that in the background there were other reasons, which for the time being escape us.

Sneferu first started to build the Southern Pyramid. Its name was "Southern Pyramid – Sneferu Shining." This was the first one to be planned from the very start in the shape of a true pyramid. Moreover, at that time it was the highest royal tomb ever built. The sides of its base were 188 m long, and the pyramid was over a hundred metres high. Its walls did not imitate the degree of ascent of the older step pyramids, in other words 72–78 degrees, but were built at an angle of 55 degrees from the start. However, the large scale of the project meant that when the pyramid had reached a height of almost 50 metres, technical problems began to appear. Some of the limestone blocks within the pyramid had cracked in several places as a result of the poor-quality marl clay bedrock under the pyramid. The ground was unable to bear the gigantic weight, and began to subside. The degree of ascent of the walls had to be significantly reduced in order to reduce the weight of the masonry that was pressing down on the poor-quality fundament. At the same time, the base was widened. Not even this measure helped, however, and the royal architect decided to start work on a third pyramid project.



Burial chamber of M 17 featuring a unique red granite sarcophagus.



View over Dahshur's Eastern Cemetery, with the tombs of Sneferu's family members. The ramp leading to the top of the mastaba was used for mortuary ceremonies during the burial and for the transportation of the mummy of the deceased.

The result was the Northern Pyramid, the place of the king's actual burial. Important inscriptions have been found on the pyramid's stone blocks, graffiti written by the builders and relating to the construction. They show that a fifth of the total volume of the pyramid was built within two years from the beginning of the project. After the unsuccessful experience with the foundations of the Bent Pyramid, the construction of the Sneferu's northern one started much more carefully. The side may have measured a record 200 m at the base, and its total height was 104 m, but the angle at which the walls rise is only 45 degrees, which significantly lowers the burden created by the mass of masonry on the ground underneath. The entrance to the pyramid in the northern wall is located at a height of 28 m above the ground. For the first time in royal Egyptian architecture, the burial chamber had its longer side on an east-west axis, so that the sarcophagus with the king's body stood by the western wall. The funerary chapel at the eastern base of the pyramid was not finished during the king's life, and after his death it had to be hurriedly finished off using unfired bricks during the canonical seventy days allotted for the funeral and mummification rites, so that it would be fully-functional by the time the king's body was ready to be placed in the pyramid. This is probably why the entrance path remained unfinished. The valley temple has not yet been investigated, however, although researchers have had a sense of its likely location for several years.

In addition to these three giant pyramids, Sneferu also had a number of smaller pyramids built. They were meant to indicate the main economic and political centres, and to symbolise for all eternity the king's presence and sovereignty. His son may indeed have had a difficult task: to step out of his father's shadow.

The owner of the largest pyramid

Sneferu's successor on the Egyptian throne was Khufu. He attempted to show himself equal to the statesmanship of his father, his economic successes, monumental buildings and the rapidly growing and administrative apparatus of the country. Although he had the advantage of an efficient administrative apparatus, a good level of technical knowledge and high Nile floods that were repeated for several years in a row, the situation was not easy. It was expected (and royal dogma demanded) that he would try to ensure that his tomb not only equalled his father's, but outdid it. For religious and practical reasons, Khufu chose the upland limestone plateau of Giza on which to build. Not only was it within view of the then temple of the sun god Ra in Heliopolis, but the firm limestone foundation was also a guarantee that the body of the pyramid would not encounter the structural problems that were the case in Dahshur.

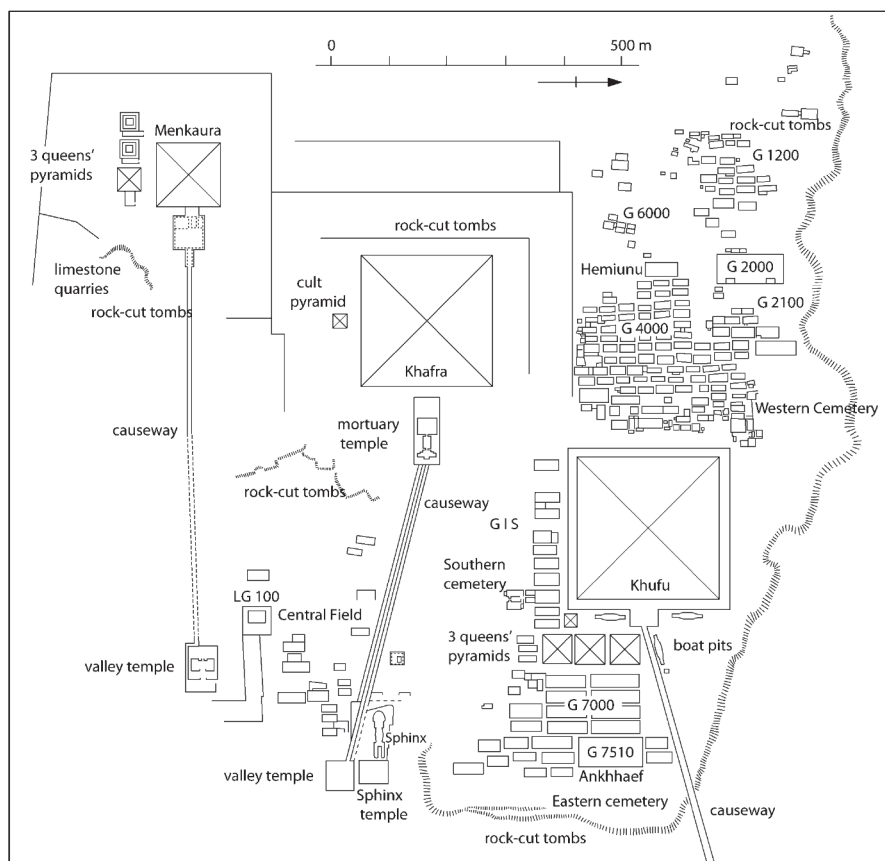
Khufu founded a new royal burial ground in Giza, today the location of the gigantic pyramids of three famous rulers of the Fourth Dynasty: Khufu, Khafra and Menkaura. Khufu's pyramid became one of the seven wonders of the world, and from the end of the nineteenth century AD, the main centre of pyramid research. It was, among other things, this pyramid that sparked the interest of the William Matthew Flinders Petrie in ancient Egypt. He was keen to overturn the theories of the "pyramidiots" who claimed that the dimensions of the pyramids hid the secret of the universe, evidenced by various mathematical constants. When he arrived in Egypt in 1881 he started his career by making very detailed plans with measurements, not only of Khufu's pyramid, but of the other Giza pyramid complexes. His 1883 publication, *The Pyramids and Temples of Giseh*, is still used today as a vital source of information.



Giza pyramids.

In recent years, several sensational finds and discoveries have been made relating to Khufu's pyramid, including up to now, unknown and inaccessible cavities in the Great Pyramid. Moreover, a new cemetery of the priests and the workers who constructed the pyramids was discovered by Zahi Hawass. Last but not least we must mention discovery of a city of workmen where the builders of the pyramids in Giza lived. International media interest has also been provoked by the announcement and subsequent publication by French architect Gilles Dormion who argues that in the mass of limestone a massive long corridor of the pyramid, previously unknown to archaeologists, leads to a large room that he is the as yet undiscovered and genuine burial chamber of the king.

Khufu ruled for at least 27 years. His chief wife was Meritites and the crown prince was Kawab – who died prematurely, however. Khufu's pyramid is the largest Egyptian funerary monument ever built. The architect was his relative, Hemiunu. The square base has sides of 230 m long, and the building was originally 146.5 m high. Today the pyramid has seven fewer layers of limestone blocks, and its internal division continues to provoke heated debates regarding the gradual genesis of the tomb's creation and



Giza cemeteries (LM).



**Hemiunu, famous architect
of the Great Pyramid.**

significance. The king's burial chamber, situated high above the pyramid's base, contained the first known royal sarcophagus. It was made of red granite imported from the quarries at Aswan, 800 km away south.

Khufu's funerary complex contained all the traditional features. There was a funerary temple to the east of the pyramid, although all that remains of it today is the basalt paving. A cult pyramid of the king was also constructed in addition to a causeway and a valley temple, the remains of which were discovered several years ago underneath the current village settlement of Nazlet Siman. Large cemeteries were gradually created and expanded to the east, west and south of the pyramid. The Eastern one was for members of Khufu's family, whereas the Western and Southern burial grounds were for members of the king's court and servants.

To the southeast of the pyramid are three smaller pyramids belonging to high-born women – very probably from the royal family. Khufu was the first ruler to decide to use adjacent small pyramids for the burials of high status women – queens and princesses. The northernmost one may have been for Meritites, Khufu's wife and the mother of the crown prince, Kawab, who was buried in a mastaba immediately to the east of her. The central pyramid remains anonymous for now. It is hypothetically ascribed to Henutsen, the mother of prince Khufukhaf, who later ascended to the throne under the name of Khafra. The tomb which he originally had built as a prince is located to the east of the pyramids. There is no contemporary historical person to which we could ascribe the southernmost pyramid.

Paradoxically, there is just one statue of Khufu from the period that can be reliably identified. It is only a few centimetres high, carved from ivory, and was found by chance by Petrie in Abydos. But there is another unique feature connected to Khufu's

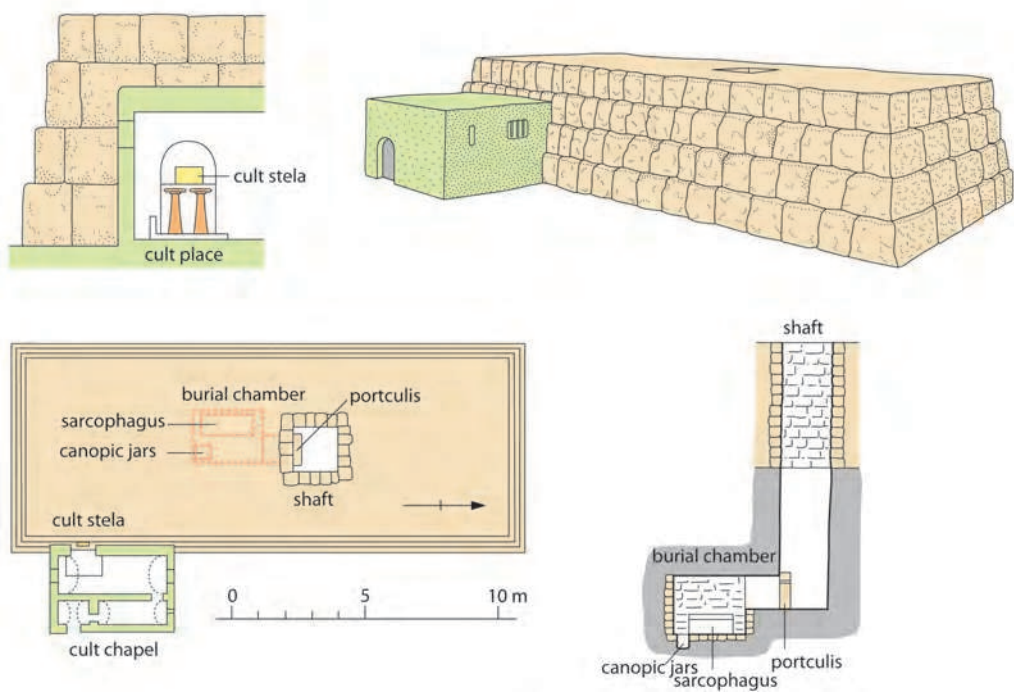
reign. The oldest dam in the world that appears to have been built at Wadi Garrawi on the eastern bank of the Nile, on the territory of modern-day Helwan. Unfortunately, the project was never finished. Before the building was ready, it was damaged by a sudden flood. It is not entirely clear why it was built, but we may assume that its aim was to protect the settlements on the eastern bank of the Nile. Rock inscriptions some two hundred kilometres southwest of the Dakhla Oasis in Egypt's Western Desert show that expeditions tasked with obtaining the natural pigments used to make dyes reached as far as there during Khufu's reign as well. One can thus see just how powerful Khufu intended his reputation to be.

“The multiplier effect of Colin Renfrew”

The beginnings of the rule of the Fourth Dynasty are not marked only by the construction feats of these two rulers, however. Major changes also took place in areas that are not as visible or monumental. The state had reached a stage where fundamental transformations were to occur without which further development would be inconceivable. The building of gigantic royal tombs forced a further enlargement of the country's administrative apparatus and a corresponding increase in the number of officials, an improved revenue collection system and the further development of technology. It is also possible, however, that the improvements to the administrative system and the more detailed and sophisticated economic regulation of the country system made it possible to erect these huge pyramid complexes.

In any case, there were many vital changes. In the mid-1970s Colin Renfrew published his work on the Cyclades. In the introduction he formulated what he called the “multiplier effect” – the phenomenon whereby several smaller and independent changes taking place may have a combined effect that provokes fundamental and very rapid changes in society. This phenomenon is very noticeable at the outset of the Fourth Dynasty. The sophisticated titles of many high-ranking dignitaries clearly show the changes and improvements made to the administrative apparatus. The rapid increase in the number of officials was immediately reflected in the development of already-existing burial grounds and the creation of new ones. There was an improvement in the technological prowess of the architects of the time. The decoration of tombs also became sophisticated in a way previously unseen, both in terms of form and content.

The high number of dignitaries put considerable demands on the king and his duties to his loyal servants. One of his most important activities was to provide for the afterlives of those loyal to him, to guarantee for them a select place for their burial, as close as possible to his own pyramid, and to ensure that they had the means to build their own tombs and equip them with expensive burial equipment. Naturally, it became economically unviable to equip tombs as abundantly as they had been hitherto. The number of tombs was rising rapidly, as was the demand for building materials, since most of these tombs were built of limestone blocks quarried on the eastern bank of the Nile, close to the capital. There was a royal monopoly on this quarrying. In principle, the king was the owner of all mineral wealth, and could use it



Typical Giza mastaba of the Fourth Dynasty (LM).

according to his will. The same was true of the provision for funerary cults and tomb decoration – the craftsmen of the time were employed by the king, and were maintained by him. Equally, it was the king who decided how to allot the means required for the funerary cult of this or that official.

To these developments, the above-mentioned construction of royal tombs must be added. During the Third Dynasty the kings' afterlife residences were built of small blocks of stone. Under Sneferu, however, the secret of building using large blocks was discovered. The blocks used to build his monuments weighed two to three tonnes on average. A few years later, the architect of Khufu's pyramid managed to move even larger blocks, not only of limestone, but also of the extremely hard and much heavier Aswan granite. Nine blocks used for the ceiling of the king's burial chamber weighed over four hundred tonnes. Some of the limestone blocks from local quarries, used to build the smallest pyramid in Giza belonging to king Menkaura, weighed up to 220 tonnes. It is no surprise that the famous historian Herodotus wrote that under Khufu the people suffered and the temples in the country were closed:

Till the death of Rhampsinitus, the priests said, Egypt was excellently governed, and flourished greatly; but after him Cbeops succeeded to the throne and plunged into all manner of wickedness. He closed the temples, and forbade the Egyptians to offer sacrifice, compelling them instead to labour, one and all, in his service. Some were required to drag blocks of stone down to the Nile from the quarries in the Arabian range of hills, others received the blocks after they have been conveyed in boats across the river, and drew them to the range of hills called the Libyan. A hundred thousand men laboured constantly, and were relieved every three months by a fresh lot.

(Herodotus, *The Histories*, 1992, Book II, Chapter 168, 207–208)

This apparently ungrounded claim is now supported by archaeology. We even know that Khufu fundamentally limited the decoration of funerary chapels in non-royal tombs, not allowing it again until he was sure that he would be able to finish his royal building project successfully. This was no small matter: a proper tomb with a chapel decorated in a fitting manner and a burial chamber with burial goods was considered essential for the afterlife.

The ability of the Egyptians to move heavy burdens must be considered an indicator of major and deep changes in society. Fundamental innovations had already taken place under Sneferu's rule. The glaring discrepancy between the capacity of the ancient Egyptian economy and its religious demands had to be solved. A suitable and rapid solution that satisfied all the parties – in reality it concerned a maximum of several hundred people.

A very interesting phenomenon arises whereby religious needs and demands lead to fundamental changes in the “material culture.” In the underground part of non-royal tombs, for example, luxury stone vessels begin to give way to “Meidum ware”, fine, polished pottery with a high degree of firing, imitating older copper and stone models. They are known as Meidum ware because they were first discovered at the site of Meidum and represented an entirely new type of ceramic, as yet unknown in Egyptian history and differing from earlier ceramics in their quality of production and appearance. In addition to these ceramics, burial equipment now contained large numbers of miniature vessels made of limestone or calcite, which had to do instead of the large vessels that were previously popular.

Similarly fundamental changes took place in the actual funerary cult. In general, there can be said to have been an increase in its symbolism, which brought about many innovations. The texts of offering formulas for a peaceful life after death began to appear on the tomb walls, as did inscriptions with the titles and name of the owner, vital for preserving his identity after the physical death. The walls were crammed with reliefs showing characteristic life scenes, an attempt to create the conditions needed for the afterlife. The fact that they were made in stone meant for the Egyptians that they were eternal. On the other hand, economic savings were made in the regular mortuary cult. Here, a main role was played by miniature pottery bowls and cups, which held symbolic amounts of the sacrificial food and drink that was brought to the chapel altar. The bowls were used for symbolical offerings of food and agricultural products, while the cups were for drinks. All the bowls and cups were made on a potter's wheel, hitherto unknown technology. Here we have clear evidence of the discovery of new technology being driven by the need to make a ritual task more effective.

Silent geese, the discoverer of tomb decoration and the first vizier

A unique burial ground, still shrouded in mystery, stretches for several hundred metres to the north of Sneferu's pyramid in Meidum. It has several claims to fame. First, it is the site of the largest mastaba of the Old Kingdom, at least in terms of pure built-on area. Its shape is similar to the burial ground of the high-ranking dignitaries of the First and Second Dynasties in northern Saqqara. But is by chance or deliberate? It is



Meidum geese from the Meidum tomb of Nefermaat.

the site of the mastaba tomb M 16 of the oldest known Egyptian vizier attested archaeologically, Nefermaat, the son of king Huni, and his wife Atet. The burial ground also provides one of the earliest attestations of mummification in ancient Egypt, in the sense of the removal of selected internal organs from the body and their separate treatment.

Mastaba M 16 was built in three stages. As well as containing Nefermaat's cult and burial installations, it had a separate burial chamber for Atet. The wife of Nefermaat was, according to the depictions that have been preserved in her part of the tomb, undoubtedly very eminent. This is also shown by the remarkable decoration of her chapel in the northern part of the tomb, including one of the most famous paintings of the ancient world, the Meidum geese. They are depicted so faithfully that different zoological species can be distinguished. They are now on display in the Egyptian Museum in Cairo. The faithfulness of the detail, the glowing colours and the composition seek you out. There are further original scenes on the architrave at the entrance to the chapel, with Nefermaat shown hunting birds, while their children are sacrificing to a seated Atet. She, as in most other cases, is depicted as being the same height as her husband, which is another very unusual feature of this chapel's decoration.

The title of vizier was usually reserved for the king's eldest son, the expected future ruler on the Egyptian throne. This was the case until the end of the Fourth Dynasty. The office he was required to hold was something like that of prime minister, but with many more competences. As the representative of the ruler he was the highest-placed official, with the whole country being effectively subject to him. His sovereign position was reflected by his titles, "prince, bearer of the royal seal of Lower Egypt, hereditary prince" and "the king's eldest son." As such, he was responsible above all for collecting taxes and the administration of the country. His tasks also included supervising royal building projects all over the country ("overseer of all royal works") and organising them, heading court tribunals and preparing and dispatching expeditions beyond the country's borders. Because administrative functions in ancient Egypt were intertwined with religious ones, he was also the priest of the goddesses Bastet and Sakhmet, "the stolist of the god Min", "the greatest of the five in the House of Thoth" and "overseer of all the divine offices."

He was thus a truly exceptional person, as shown by, among other things, a detail of the decoration in Atet's chapel. This shows him standing, together with his wife and six sons. The accompanying inscription says: "He is the one who creates his depiction in writing that can never be erased." Historically, this evidence is highly significant. It indicates that Nefermaat considered himself the discoverer of a unique system of



The south chapel, with a courtyard belonging to Nefermaat.

decoration in his tomb. This task involved the hieroglyphic writing, or sometimes whole depictions, being hollowed out and divided into tiny chambers, which were filled with coloured pastes. This technique did not catch on, unfortunately, and soon went out of fashion.

With regard to architecture, this is the largest known tomb in the Old Kingdom. The tomb originally had a ground plan of 98×48 m, and appears to have been over ten metres higher than the surrounding terrain. The top of the mastaba consisted of a layer of desert material over a metre thick mixed with large pebbles that absorbed the rainwater and allowed it to gradually evaporate. During this stage the enclosure wall, tomb casing and stone walls of the chapel were created, while the inner space of the mastaba was gradually filled with a muddy solution that today is as hard as concrete. Without doubt, this filling for the core of the mastaba represented both a significant hindrance and a challenge for potential robbers.

The chapel itself is a remarkable feat of technology, worthy of the titles of its owner. Its western wall, with false door, was created by an eight-tonne monolith. Each side wall was made of a single block of limestone weighing up to twenty tonnes. Heaviest of all, however, was the chapel's ceiling block, which weighed over thirty tonnes. Meanwhile, the chapel had a very small ground plan: it was 2.60 m long and 1.30 m wide. We do not know exactly when, but at the end the tomb took up an area of 120×68 m. The entrances to the chapel were bricked off, and in front of them only symbolic niches with false door were left.

Remarkably, the underground part, with Nefermaat's burial chamber, has never been properly excavated. A large part of it, especially the entrance area, still remains to be discovered. Modern era archaeologists have penetrated it in the same way as the



Unique relief with the figure of Nefermaat's wife Atet.

ancient thieves, through the same secondary trench, since attempts to find the original entrance into the underground part have never been successful. The dimensions of the burial chamber, lined with limestone blocks, are surprisingly small, above all in comparison with the previous dynasty; the ground plan is 3.15×2.05 m. Above the floor in the south wall was a small, bricked-in niche. This hid the mummified organs of the tomb's owner, stored in four neat little linen packages. The chamber originally also contained a wooden coffin with the body of the dead prince. However, everything was stolen and destroyed by thieves before the shaft leading into the chamber could be filled in — in other words immediately after the funeral ceremonies. Nonetheless,, we can observe a significant shift in the concept of the tomb. From now on, and covering several centuries, the chief interest of both the craftsmen and the tomb owner centered on the decorated superstructure. Only at the end of the Old Kingdom, probably under the influence of political and social events, does the main interest return to the underground burial chamber.

The parents of the architect of Egypt's greatest pyramid

The Meidum burial ground was rediscovered for modern Egyptology in 1871. In December that year Albert Danilo, who worked for Auguste Mariette, the then head of the Egyptian Antiquities Service, discovered the joint tomb of Rahotep and Nofret. This took place under very dramatic circumstances. During work on the southern chapel of the mastaba, excavators had to gradually remove some large limestone blocks of walling that had provided a perfect seal for the space since ancient times. After the last two blocks had been removed, one of the masons was sent inside with a burning torch. After several minutes the man reappeared in the entrance with a look of terror on his face. Once he had calmed down, he was able to describe what he had seen. As soon as he reached the end of the corridor, he claimed, he was terrified by the gaze of two human figures – the tomb seemed to be still occupied by the spirits of its original occupants. Then he turned and fled. In the end, Danilo set off by himself into the bowels of the tomb. What he found was no less surprising. At the end of the corridor stood the totally undamaged statues of the tomb's occupants, Rahotep and his wife Nofret. The husband had an athletic figure, was dressed in a short kilt and had a playboy-style black moustache. Nofret had a heavy wig, under which her own hair could be seen. Her hairstyle was topped by a headdress with a plant pattern. Nofret's figure was considerably more rounded than her husband's. She wore a dress with shoulder straps, over which she had a light white stole, which followed the graceful curves of her body. What had alarmed the superstitious workman so much, however, were the statues' eyes, inlaid with rock crystal. In the light of the torch it must really have seemed as if two angry human creatures were staring at the intruder who had disturbed their peaceful repose.

This incident marked the start of a major era of both discovery and destruction of the locality, which lasted for almost twenty years and was only brought to an end Petrie's expedition in winter 1890–91. The conditions in which Petrie worked are vividly described by Charles E. Wilbour, who visited him on 9 January 1891:



Pair statue of Rahotep and his wife Nofret (MZ).

'He has a cot bed in the tomb of Nefermaat, whither he retires at dusk to write and read, for he has a few miscellaneous books, "a pinch of books", he said, and two tents, one a kitchen with a petroleum stove. He lives mainly on London food, sent out to him by Civil Service Stores in boxes, each holding three weeks' rations, does his own cooking, lives with Arabs only and pays the men who dig for him by the cubic metre, they trusting to his fairness both for the measurement and the rate...'
(Harpur 2001, 15–16)

The tomb of the vizier Rahotep is exceptional in its construction and the original technique used in its decoration. Tomb M 6, as well, is also breath-taking owing to the sophistication of its relief decoration. From the very beginning it was expected that it would be used for two members of the royal family, the parents of Hemionu, later the architect of the Great Pyramid in Giza.

During the first stage, Rahotep's chapel was built, consisting of an entrance corridor leading to the west, and a cult niche with false door. The chapel in the northern part of the tomb, which belonged to his wife Nofret, also took the form of a niche. Both were carefully clad in limestone blocks with reliefs. After two stages of enlargement, the tomb measured 80 × 49 m. During this phase, Rahotep's chapel was completely closed off, being transformed into a serdab with the above-mentioned

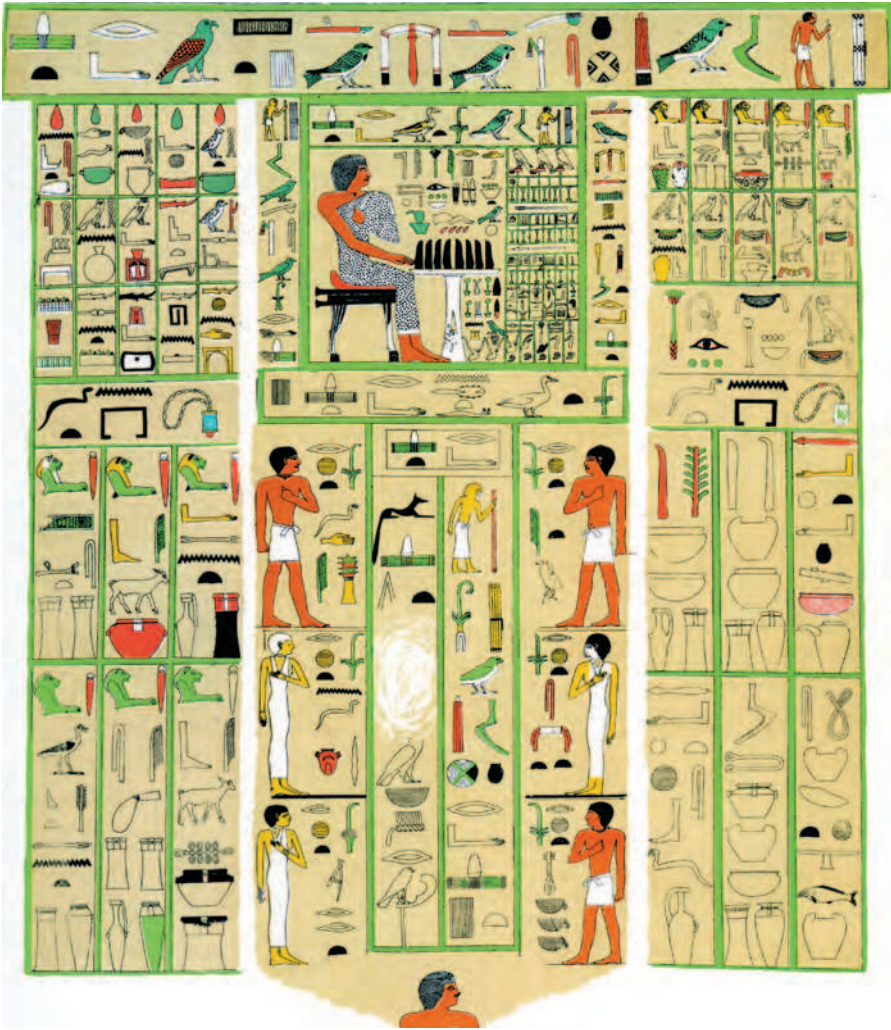
statues. A cult niche, probably with false door, was created in front of the original entrance, and in front of it there was an open courtyard, in which there stood two limestone stelae almost three metres high, marking the place of the funerary cult. The substructure of the tomb with the burial chambers of Rahotep and Nofret was similar to those of the previous tomb. It is worth mentioning that in both cases the women's burial chambers were smaller than those of their male counterparts.

These two tombs are significant in that their chapel walls were, for the first time, decorated using to an integrated and thematically very rich design. The decoration is concentrated in the chapels within the tombs, and uses several techniques: a sunk relief like that in Nefermaat's tomb, painting on plaster and low relief. It is also remarkable that the decoration makes use of all the six colours that the Egyptians knew and used. In addition to black and white, these were yellow, red, green and blue. The last two were made from imported, copper based materials, and thus fell within the royal monopoly; during this period only members of the royal family could use them. Lower officials had to make do without blue and green. However, this difference gradually disappears during the Fourth Dynasty.

In the chapel of tomb M 16, two decorative horizontal bands (called registers) contain rows of walking cattle, Rahotep hunting birds in a papyrus thicket in a swamp, a hunt in the desert in which children are participating, animals being slaughtered, cooking out of doors, fishing using nets, birds being caught, Rahotep in a carrying chair and a procession of the personifications of funerary estates. The hunt in the papyrus thicket, for instance, is the oldest scene of this type, and it was not until the start of the Fifth Dynasty, in the pyramid complex of Userkaf in Saqqara, that a closely similar scene was carved. The craftsmen working in the tomb were undoubtedly headed by a brilliant architect. This was also the first time that tomb decoration features a procession of cattle as a symbol of wealth and high status. The limestone lintel over the entrance to the chapel has a hieroglyphic inscription that is the oldest known evidence of one of the most significant titles of the time, "the king's eldest son", which designated the holder as the successor to the Egyptian throne. On the left side of the façade the husband and wife appear together for the first time and the wife is embracing her husband. The family context is completed by the depiction of children, arranged according to age.

Much about Rahotep is revealed by his titles. The most significant ones were: overseer of the troops, the greatest of the ten of Upper Egypt, the eldest of the Audience Hall, the greatest of the seers in Heliopolis, royal administrator, the unique one of the great ones of the feast, overseer of the fishers and bird-hunters, inspector of the bowmen/archers, overseer of expeditions, overseer of the carrier men and "king's son of his body."

Undoubtedly the highest-placed dignitary in the burial ground was the owner of the mysterious tomb labelled M 17. His name is unfortunately unknown, but the main features of the tomb indicate that his position was exceptional even in comparison with tombs M 6 and M 16. It is the most sophisticated royal tomb on the site, and the first to be built largely of stone, including the whole cult chapel, which – judging by the limestone platform – must have been huge. Its superstructure consists of a brick casing



Reproduction of Rahotep's false door from his tomb in Meidum.

with a filling of pure limestone rubble, with no waste material except for ceramics. The ground plan of the substructure forms an upside-down letter T and the corridor leading to the room with the sarcophagus has unique rounded corners, which violates the geometry of the pure angular corners that was worshipped by ancient Egyptian architects. The room itself measures $6 \times 2 \times 5$ m, and each of the limestone blocks in the ceiling weighs 38 tonnes. Surprisingly, the sarcophagus is made of red granite, and is at least forty years older than the oldest red granite sarcophagus made for an Old Kingdom ruler, that of king Khufu in Giza. The chest weighs 8.5 and the lid 3.5 tonnes. The human remains found inside the sarcophagus consisted of several



Red granite quarries in Aswan which were in use at least from the Fourth Dynasty.

bones, each of which was individually wrapped in bandages. From this it can be deduced that the body of the dead person was not mummified immediately after the funeral but that it was first exposed to natural processes for a certain amount of time, which stripped the bones and destroyed the connections between the joints.

Non-royal symmetry

One of the direct consequences of the pressure on the country's economy during Sneferu's reign was the introduction of a new strategy for the building of the tombs of the royal family members and state officials. This period saw the creation of tombs with almost identical ground plans and internal arrangements. The tombs were arranged in several rows running from north to south. The oldest burial ground of this type that has been discovered is in Meidum, but the best-known, the "Lepsius tombs," lie between Sneferu's pyramids in Dahshur. Here there are four rows of mastabas, two in the easternmost row and eight in the others. The centres of the tombs lie on an intersection of networks of squares with the dimensions 63×63 m (120×120 ancient Egyptian cubits). It is interesting to note that there are large gaps between each tomb – the width of the north-south oriented pathways between them reaches almost fifty metres. The reasons may have been various – perhaps there was a large volume of building waste or the need to have enough free space around the tombs while they were being constructed. An important role may also have been played by the funeral rituals. This is confirmed by a find of unique burial ramps in the

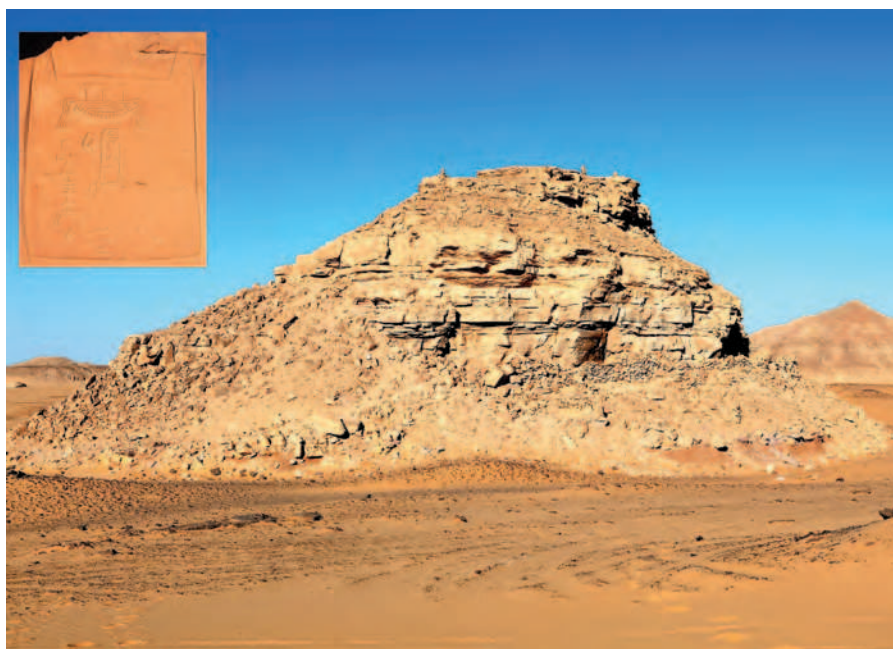
case of two mastabas, along which the funeral procession ascended to the top of the mastaba, towards the mouth of the shaft down which the body of the dead person was lowered into the burial chamber, and down which all the grave goods were also lowered. After the funeral ceremony was over, the shaft was filled in.

Tombs on the “horizon”

In order to gain a complete picture of the development of tombs in the Fourth Dynasty, we now have to go to Giza and look at the main innovations that were introduced into their architecture.

The history of modern research into this famous site is of interest. According to George Andrew Reisner's notes:

The systematic excavation of the Giza Necropolis began with the concession granted in 1902 by the Department of Antiquities to an American and two European expeditions – the Hearst Egyptian Expedition of the University of California (represented by myself), an expedition of the Turin Museum represented by Professor Schiaparelli, and the Sieglin Expedition of the University of Leipzig represented by Professor Steindorff. Acting under instructions from Maspero, then Director-General of Antiquities, to divide the site amicably among ourselves, the parties interested met in November, 1902, at Mena House Hotel,



Water Mountain in Egyptian Western Desert – so faraway sent the kings Khufu and Radjedef their expeditions for red pigment.

Professor Schiaparelli, Professor Borchardt (acting for Professor Steindorff), and myself accompanied by Mrs. Reisner. The chief area in which all were interested was the great Western Cemetery. This area was divided in three nearly equal E-W strips numbered 1-3 from south to north. The numbers were written on slips of paper and drawn from a hat by Mrs. Reisner.

The southern strip fell to the Italians, the middle strip to the Germans, and the northern strip to the Americans. The rest of the site was easily divided by agreement. The area of the Second Pyramid, including the Sphinx Temple, was assigned to the Germans, the area of the Third Pyramid to myself, and the area east of the First Pyramid up to a diagonal line from the SE corner of the First Pyramid to the Sphinx was given to Professor Schiaparelli, except that the part north of the medial line of the pyramid was assigned to me.

(Reisner 1942, 22–23)

No one follows this kind of approach today, but this precipitate event nevertheless decided the fate of the burial ground for nearly half a century. The person who worked the longest in Giza was Reisner: from 1902 until his death in 1942. During his time he was without doubt the best archaeologist in Egypt, and was famous for his disputes with Petrie. Reisner originally read Semitic studies at Harvard, later moving to Europe with the intention of studying Assyrian and Babylonian in Berlin. Before long, however, he started to take an interest in Egyptology, which he also studied. Afterwards he went to Cairo and the Egyptian Museum, where he took part in the cataloguing of objects. He also managed to obtain funds to excavate some sites in southern Egypt, and decided to try his luck at Giza. Reisner was famous for his methodological approaches, his meticulous numbering and recording of the objects found, and his almost pedantic photographic documentation. His works on the development of the tomb in the Old Kingdom are still used, and continue to be a source of much information. He was also fortunate in Giza, where before long he found himself in possession of the Italian concession.

German excavations were led from 1903 by the Leipzig professor and philologist Georg Steindorff. In 1911, however, he agreed with Hermann Junker to exchange concessions (Junker was then working in Nubia on the Aniba site). If Reisner was famous for his method, statistical evaluation and architectural analyses, Junker was a superlative philologist and an expert on tomb decoration and inscriptions. He had originally intended to become a Catholic priest, but like Reisner, studied Egyptian philology in Berlin, and in 1907 gained a place at the university in Vienna. The concession he gained in Giza in 1911 changed his academic career forever, making him one of the greatest experts on the Old Kingdom, its language and art.

To the group of famous excavators working at Giza belonged also Egyptian scholar Selim Hassan, originally an assistant curator in the Egyptian museum. He studied Egyptology in Paris and later gained his doctorate in Vienna. In 1928 he began archaeological work as an assistant on Junker's excavations, and a year later led his own expedition. He excavated a large group of rock-cut tombs to the east of Khafra's pyramid, some of which belonged to members of Khafra's family.

Let us return to the tombs, however. The ones that are of interest to us may be seen on several different burial sites that Khufu founded for his family and subjects to the east of his pyramid (the burial ground labelled G 7000) and to the west (G 1200, G 2100 and G 4000).

As a result of this policy, several dozen tombs were constructed over the course of a few years, built to a single plan, similar to that in the burial ground in Dahshur. This fact itself represents a notable innovation. Until this point, Egyptian burial grounds (with two exceptions in Sneferu's period) were not based on a regular network, but developed spontaneously in a haphazard way. Another significantly new element is that they are situated very close to the king's tomb. Thus the royal dignitaries spent their afterlife in the shadow of their king, under his immediate protection. Additional significant innovations were the standardisation of the size of the superstructure of the tombs, and the introduction of clear norms for their internal division. Under Khufu, rules were introduced for the size of tombs, their internal arrangement and decoration. It has already been indicated that this was partly the result of the ambitions of the king in relation to his own burial. He also wanted to prevent the tombs of members of his family and high-ranking dignitaries from consuming more of the country's economic resources than was absolutely necessary. Mastabas take up less than a thousand square metres in area and their decoration is also limited, often consisting merely of a stela showing the owner of the tomb at a table with offerings, together with his main titles and a list of the most significant foods. This reduced the burden on the king of having to provide a suitable afterlife for all his relatives and underlings. It was only in the second half of Khufu's reign that the situation became a little more flexible, as the king grew more certain that the project for his own complex would be successfully completed.

The Giza tombs from the start of the Fourth Dynasty usually have their superstructure cased with limestone blocks. They have no internal cult areas – these moved to the front of the eastern side of the tomb during this period. In the southeastern corner there is usually a brick building with several rooms, which is plastered on the outside and whitewashed so as to blend in with the white limestone casing of the actual tomb. The tombs had no serdabs or statues, and the central cult place was a small stela in the façade of the tomb. The mouth of the shaft leading to the burial chamber, the floor of which usually lay at a depth of about ten metres, was located in the northern part of the tomb. The bottom of the shaft opened into a horizontal corridor leading south, and ended in the burial chamber. In the southeastern corner of the burial chamber was a rectangular hollow for canopic jars. By the western wall there usually stood a limestone sarcophagus with no inscriptions. The walls and ceiling of the chamber were painted so as to resemble red granite.

Undoubtedly one of the most significant cemeteries from Khufu's reign is burial ground G 7000, with a total of eight tombs belonging to members of the royal family. The specialist name for the tombs is "twin mastabas." They were created by connecting two originally independent mastabas, each of which had a burial shaft and two cult niches in the east-facing façade – the main one at the southern end of the wall and the secondary one at the northern end. For the most part these tombs



“Reserve heads” were just another means of securing the identity of the deceased in the afterlife.

contained two burials, a man and a woman. The tombs are always arranged in pairs, arranged in four rows running north to south. The northern mastabas are slightly larger, with a ground plan measuring 83.55×19.93 m, compared to the southern ones with a ground plan of 68.47×18.90 m. This type of mastaba, with two cult niches in the eastern façade, appears to a greater degree from the start of the Fourth Dynasty, although its development can be traced from the end of the Second Dynasty, from the rule of king Khasekhemwy. It does not, however, appear to reach its high point until this burial ground.

The cemeteries to the west of the pyramid were arranged in a similar way. In most cases they were reserved for dignitaries of non-royal origin, who by their loyalty had earned the privilege of being buried here. Ten tombs were built in G 1200, eleven in G 2100 in four north-south rows, and a total of forty-two in cemetery G 4000. This last burial ground is dominated by tomb G 4000, which belonged to Hemunu, the architect of the original plan for the Great Pyramid. In all three cases these were family cemeteries in the sense that G 2100 was the burial place for people from the “family” of the owner of tomb G 2000, while Hemunu’s family members were buried in G 4000. Both men and women were buried in the tombs. There are many more men, but it is nevertheless clear that a woman of a certain status was able to have her own mastaba. In several cases it seems that on the northern side of a mastaba originally designed as a male tomb, an additional structure for a female burial was built. This is not always the case, however. In some tombs, we find two “reserve heads,” as they are called – one male one and the other female, which indicates that a husband and wife were probably buried in one chamber.

The mysterious “reserve heads”

This term is used to indicate the human heads made of stone that were found in dozens of Old Kingdom tombs, particularly in Giza. The ancient Egyptians used practically any means to capture or preserve the human form, whether through mummification, face masks or statues. The most unusual method, however, was to sculpture a stone head of a tomb owner, of which we know of about fourty examples. The custom of placing them in tombs is first found in Sneferu’s reign at Dahshur. This “policy,” if the custom be called that, experienced its heyday in Giza during the reign of Khufu, and stayed in fashion until the reign of Khafra. The reason for their introduction is still largely unclear, and from time to time interpretations have ignited fiery discussions among Egyptologists. The heads may have been placed at the bottom of the shafts in order to ensure the identity of the tomb’s occupant, especially during the period of austerity measures at the beginning of Khufu’s reign. Above all the ears and nose were deliberately mutilated, apparently to ensure that they were harmless, at least at a magical level. However, they may have also been intended to be more permanent replacements for mummified faces.

The animated debate regarding the emergence of reserve heads and their meaning is fuelled by the fact that, with one exception, these artefacts have never been found in the place in which they were originally placed. The one exception was found by Selim Hassan who recorded that the head was placed on the floor of the burial chamber to the east of the sarcophagus. Reserve heads and their purpose thus remain one of the many secrets of the builders of the pyramids and tombs of the Fourth Dynasty.

Khufukhaf and the newly-gained space

In the second half of Khufu’s reign, the economic situation stabilised and internal chapels with a ground plan in the form of an “L” began to appear. They replaced the



Khufukhaf's sons, Wetka and Iunka, read aloud a list of offering items for their father's funerary cult.

outside cult areas characteristic of the first years of his rule, and were also a reworking of the original cruciform chapels that were typical of the Third Dynasty and the pre-Khufu period of the Fourth Dynasty. They even appear to have been connected with a certain area, and this is one of several cases in which Saqqara and Abusir on one hand and Giza on the other indicate independence and dissimilarity. Only in the second half of the Fifth Dynasty, under the ruler Niuserra, did convergence between these two sites start to take place.

"L"-shaped chapels become one of the main types in the Fourth and Fifth dynasties. The amount of space they brought meant a significant increase in the possibilities for decoration, above all on the long eastern and western walls. Moreover, because the entrance was situated at the northern end of the eastern wall, and the false door at the southern end of the western wall, meant that they provided sufficient "visual protection" of the internal space and cult area as such. This protection lay in

the fact that when the chapel was viewed from outside, the central cult area could not be seen, and was thus protected from the “evil eye” and the possible effects of black magic.

One of the first to have been laid in such a tomb was Prince Khufukhaf I, who was buried in the Eastern Burial Ground in Giza. Tomb G 7130–7140 was designated for him and his wife Neferetkau. The tomb has everything that a typical Fourth Dynasty tomb was supposed to include: an internal, decorated L-shaped cult chapel, a shaft and a burial chamber with a granite sarcophagus. The tomb’s ground plan measured 68.5×20 m. In contrast with the almost 1 400 square metres of built area, a small chapel measuring 4.15×1.65 m stood close to the southeastern corner.

The tomb’s façade was decorated with his figures at the entrance to the chapel. At the southern end of the façade wall he follows his mother, Henutsen, while at the northern end he is in the primary place, followed by his sons Wetka and Iunka. Khufukhaf is depicted as very young and slim with his mother, and wears a mid-thigh-length kilt. Thus he seems full of energy and self-confidence. In his right hand he holds a piece of linen, a handkerchief, and over his chest he has crossed sashes and on his kilt a symbol of the cow goddess Hathor. In contrast, on the opposite wall he is depicted as an older man resting on a staff, although carved in a still upright position, his image with frail limbs, a sagging stomach and almost female breasts, indicates a different and later stage in his life. He now wears a long pleated kilt and a leopard skin. This contrast is typically ancient Egyptian, and attempts to show the dynamism of change through time: the human drama, with all its characteristic attributes.

The first scene is unique, and shows that the role of mother in Egyptian society was very important. In fact, the mother’s side of the family was one of the main factors that decided one’s position in society. The walls of the entrance contain more specific subject matter, and relate to the actual burial and subsequent events. The composition on the southern wall is dominated by depictions of the jackal god Anubis, and the following text:

A boon which the king and Anubis give, who is in front of the cemetery, beautiful high age in the presence of the Great God, king’s son, Khufukhaf.

The text on the northern wall is similar:

A boon which Anubis gives, who is in the embalming workshop (wet), power and nobility in the presence of the Great God, king’s son, Khufukhaf.

This is connected with the depiction of the tomb’s owner sitting on a chair, dressed in a short, heavily pleated kilt and leaning on a stick, a symbol of his power. Above his head some of his titles are listed, including one which labels him as the king’s son. In front of him there are depictions of sacrifices, and his sons Wetka and Iunka give to their father a report of the preparations of the grave goods for his burial. They keep detailed records on papyrus.

The chapel contains further significant scenes, particularly on the eastern wall at the left of the entrance. Here we see Khufukhaf sitting, with his wife standing behind him, holding a lotus in one hand and with the other gently touching her husband's buttocks. In front of them there are several rows of sacrifices brought from the House of Eternity (labelled as *per djet*). This was a type of funerary foundation that had one task only – to provide products, both of craftsmanship and agricultural, for the funerary cult. In particular we see a man bringing perfumed oils, and, in the bottom row, the bearers of three cloaks, which are labelled “a leopard-skin cloak from Upper Egypt, a cloak and a knee-length cloak.” Each of them is unfolded between two men. It is a unique scene, with only one parallel existing from the third millennium.

The underground tombs, already plundered during ancient times, were accessed by a shaft 13 m deep, which led into the burial chamber to the south of it. In the southwestern part of the burial chamber was a red granite sarcophagus, the outer walls of which were decorated with a niche pattern. In the neighbouring part of the underground tomb Khufukhaf's wife was buried.

The princess who lay unburied

Probably during the Fourth Dynasty a type of rock-cut tomb started to appear that gradually became more widespread, even becoming the predominant type for a while at the beginning of the second millennium BCE. Such tombs were sometimes built entirely within the rock, and in some cases had a superstructure in the form of a mastaba. The main cult areas with their decoration were therefore hidden in the rock, as were the mouths of the shafts or descending corridors that led into the burial chambers. There are not as many opulent female graves as there are male ones. This was not because the ancient Egyptians were gender biased, but given that the state administration was reserved only for men, it is not surprising that male graves were more opulent. The rock-cut tomb in question belonged to princess Meresankh, the granddaughter of king Khufu and the daughter of Hetepheres II and prince Kawab. Since her father died prematurely and her mother married again, this time to king Djedefra, Meresankh, later the wife of king Khafra, acquired the status of princess. She also gained the sumptuous rock-cut tomb that had originally been prepared for her mother. We also know, from the accompanying inscriptions in the tomb, that she was not buried until three quarters of a year after her death. The above ground part of the mastaba, clad in limestone blocks, has a ground plan measuring 36 × 17 m.

The entrance to the rooms under the mastaba, which are hewn into the rock, is situated in front of the tomb's eastern façade, and was originally closed by a single-leafed door. The decoration on the right doorjamb shows the princess standing, looking out, as if she was receiving visitors. On the left jamb she is shown smelling a lotus flower that she is holding in her right hand. She is dressed in a long, flowing dress with shoulder straps. Above her is the jackal god Anubis. The accompanying prayer – “*The offering given by the king and Anubis, who is in the embalming workshop (wet), lord of the necropolis, to the noble spirit in the presence of the Great God, the lord of the necropolis*” – aimed to ensure

that the dead princess had a suitable after-death existence. From the east, the princess is approached by a representative of the funerary priests named Khemetenu. He bows respectfully and in his outstretched arms holds a papyrus scroll from which he reads a report concerning the securing of the funerary cult. Meresankh's accompanying titles describe her as "*she who sees Horus and Seth, the great favourite, the beloved consort of Horus, successor of Horus, the king's wife, the king's daughter.*"

The entrance leads to a large room measuring approximately 7×3.5 m and 2.6 m high. Its northern wall is divided by two pillars and three passages, which open into a further room with ten standing statues hewn into the northern wall. The room was inaccessible and served as a serdab.

Through the western wall, with two passages, one passes into a smaller area hewn out of the rock. In its floor there is a shaft leading into the burial chamber of the princess. This is relatively large (ground plan 5.7×2.9 – 3.3 m, 2 m high) and originally obtained a burial that was plundered. All that has been preserved is a granite sarcophagus and the remains of the body of the princess, who died when she was about fifty.

It is not the architecture, however, which makes this tomb, still inaccessible to the public, so famous. The main attraction is its decoration, which is among the richest and most varied of the Fourth Dynasty tombs, including incredibly well-preserved colours. The most remarkable wall is on the east, broken only by the



Tomb decoration of a queen named Meresankh: she was the third queen of that name.

entrance to the tomb. The shorter wall, to the right of the entrance, starts with the very corpulent body of prince Kawab, Meresankh's father. He is dressed in a long white kilt with a pointed front tip, and has a large protective amulet round his neck. He is leaning on a long stick, and might be interpreted as possessing a somewhat disinterested look. He also has his back turned to all of the activity on the wall. Meresankh is depicted in a register to the left of him. She is floating, together with her mother, Hetepheres II, on a papyrus boat through a papyrus thicket. Her mother is standing in the bow, with Meresankh behind her, holding her round the hip with her left hand. Both women are engaging in the ritual of "rattling the papyrus." This ancient ritual was connected with the idea of rebirth – the god of the underworld, Osiris, was miraculously reborn in such a thicket – and the cult of the cow goddess Hathor. At that time, wild cows still lived in the swamps of the Delta. Egyptians themselves gave such a scene the pleasingly onomatopoeic name *seshesh wadj*.

If I had not come across cows in the thickets on the banks of the river Nile somewhere in Upper Egypt, I would probably not appreciate this scene in the same way. The sound of cows coming through the thicket is so similar to the ritual that it must certainly have evoked this scene in the ancient Egyptians – "Watch out, the cow goddess Hathor is coming!" During their associated rituals for Hathor Egyptians used the sistrum, a musical instrument made out of pieces of metal threaded on wires in such a way that at every movement the instrument evoked the sound of the approaching cow goddess pushing her way through the thicket.



Meresankh with her mother during a papyrus rattling ritual.

The rest of the composition consists of scenes with an agricultural theme: fishermen in boats pulling in their catch, shepherds, bird catchers hauling in nets full of birds and cattle breeders bringing well-fed cattle. The upper section represents the personification of the funerary estates from which sacrifices were regularly brought for the princess's funerary cult. There is a regular alternation of male and female figures, each person carrying wicker baskets full of agricultural products on their heads. Some figures have bags on their shoulders with other items, the men are carrying animals on a rope, while the women are holding bunches of lotus flowers or papyrus, onions and similar items. Given that the colours have almost been preserved in their original vividness, it can be seen that male skin is typically depicted in a dark red, while women's skin is light yellow. This difference was the result of their differing status. While men were often outside the house in the sun, it was thought proper for the wives of higher-ranking dignitaries to stay at home and not to expose their skin to the sun's rays because this would indicate that they, too, had to work in the fields.

The wall to the left of the entrance is no less interesting, since it depicts the preparation of various grave goods. At the bottom we see craftsmen melting metal (copper or gold), while to their left we see people making a carrier for the princess. The second register shows two men putting the finishing touches to a stone sarcophagus. To the right are further men, this time making a false door and some other items. Above them, in the third register, stone statues of the princess are being finished, painted and taken into the tomb. All three statues are made of limestone and have been placed on wooden sledges. The men, three in each case, pull them along with ropes. In other, similar scenes we can see another man pouring something on the ground to make the sledges run more easily, thus lightening a little what was clearly very heavy work. Note the fierce primary colours of the statues – red, yellow, black, blue, green and white.

The upper two bands are reserved for four rowing boats with crews of many members and Meresankh travelling to various places of pilgrimage in Egypt. Such trips were an established part of funeral customs, and it was thought proper to include these scenes in the tomb decoration. Piety, at least, demanded it.

The themes depicted on the southern wall of the room are similar. In a total of five horizontal decorative bands we see further scenes relating to the funerary cult. On the far right Meresankh sits on a richly decorated chair, smelling a lotus flower. In front of her are piles of various sacrifices, above all food and implements for purification with water. Among them runs her favourite dog, whose name we unfortunately do not know. The upper two registers feature sitting and standing men, and a procession of men carrying sacrifices. The middle band contains scenes of butchers slaughtering animals. There are detailed scenes showing the stage-by-stage cutting of the haunches, considered among the most precious offerings, and their subsequent offering to Meresankh. The bottom two bands once again feature grave goods being carried, in this case mostly furniture and some other items such as a head rest, bed, fans and a throne. It is interesting, however, that they are carried only by women, possibly the princess' ladies-in-waiting.

The northern room contains ten stone statues of women, which form three clear groups. The first three (from right to left) depict Hetepheres II, the other four the

occupant of the tomb, Meresankh, while the last three statues, substantially smaller, are of three of Meresankh's daughters. All the figures are dressed in tight clinging dresses and have different wigs.

The most important area for the funerary cult and the afterlife, however, was the western part of the tomb, consisting of a cult room, shaft and the actual burial chamber. The architrave on the western wall of the cult room contains a text which in this regard states:

'A boon given by the King and Anubis, lord of the divine land, foremost of the divine booth, that she may be buried well in the western necropolis. May she proceed in peace to the cemetery as a possessor of reverence before the Great God, lord of burial. May offerings go forth to her of bread, beer and cakes in this her tomb (and) in Busiris (and) in Abydos, and in every place, wherein there may be made a funerary invocation for a noblewoman, at the [opening] of the year, the first of the year, the feast of Tboth, the Wag-feast, the feast of Sokaris, the great festival, the rekeb-festival, the processing of Min, the month festival of sadj, on the first of the month, the first of the half-month. King's daughter of his body, bebolder of Horus and Seth, the King's wife Mersyankh'.
(Simpson 1974, 18)

The southern wall of the cult room is also very instructive. Here Meresankh is sitting, dressed in a leopard skin, and receiving sacrifices and sacrificial acts. An exceptional feature is the very detailed list of individual sacrificial items above her head – there are almost a hundred. At the beginning water, frankincense and seven sacred oils are presented, which in turn are followed by various items, such as food and drinks.



Giza cemeteries are also famous for numerous and varied rock-cut tombs.

The overall impression of the relief work is strengthened by the western wall, which seems to guard the mouth of the shaft in the floor of the room, that leads to the burial chamber. To the left and on the wall a false door is depicted for the spirit of the dead princess. To the right of them are two deep alcoves divided by further doors, this time smaller and much less executed. In each alcove a pair of women is depicted. In one case they are holding hands, in the other they are embracing each other around the waist and shoulders. Once again it is an expression of a very close emotional relationship between a mother and her daughter.

The tombs described above capture the spirit of the Fourth Dynasty, when most rulers were buried in or near to Giza. After several centuries of rapid development, Saqqara seemed to be resting and gathering its strength for another major ascent. This occurred at the start of the Fifth Dynasty, when the centre of the country returned to the Memphis region and its burial ground at Saqqara. Here the development of the tomb reaches its peak, and then, not unexpectedly gradually declined. Yet the stormy changes of the Fifth Dynasty led to the apex of Egyptian architecture, sculpture and relief work, but these were subsequently covered by the dust that followed the collapse of the golden age of the pyramid-builders. Today we can capture only slight glimmers of its original effulgence.

Sons of the sun



Pyramid complex of Sahura (MF).

The Fifth Dynasty is characterised above all by a change in the political and religious climate, caused mostly by events that took place at the end of the previous dynasty. While for most of the Fourth Dynasty the centre of development of both royal and non-royal tombs had been in the area of the pyramid necropolis in Giza, in the Fifth Dynasty it once again became Saqqara and now Abusir, to which the kings definitively returned, together with the highest-ranking dignitaries of the Old Kingdom (although Giza continues to be used as a burial ground). The first of them was Shepseskaf at the end of the Fourth Dynasty. The oldest necropolis of the unified state thus returned to the spotlight after several decades of neglect. During this time, Egyptian architecture grew closer to the classical concept of the royal burial complex. Kings sent the largest number of expeditions yet known during this era beyond the borders of the country, with the task of bringing back as many products as possible. The first known expedition to the mythical African land of Punt also took place. At the end of this period, *Pyramid Texts* appeared on the walls of royal pyramids, magical texts ensuring the king a smooth journey to the other world and his magical protection.

However, this was also a time when “hungry and ambitious” officials of non-royal origin burst on to the scene. The cult of the god of the underworld, Osiris, originally one of the exclusive parts of the royal ideology born in the swamps of the eastern Delta, gradually became accessible to non-royal dignitaries. One of the high points was the building of huge tombs belonging to the highest dignitaries in the country. These started to incorporate many elements originally reserved for royal architecture. From the point of view of the royal family what looked like catastrophe after catastrophe at the start of the Fifth Dynasty, by the end looked like everyday reality that surprised no one. But still, not even then would anyone suspect that this was in fact the beginning of the gradual disintegration of the Old Kingdom.

The founder of the dynasty, Userkaf, had his pyramid built close by Netjerikhet’s complex, probably so that he could express a return to the traditional values recognised under the Third Dynasty. Another reason might have been the expanding cult of the sun god Ra, of whom Netjerikhet himself was a major follower, as can be seen from the huge open-air altar in the northern part of his complex. Userkaf was also the first ruler to have married off his daughter, Khamaat, to a husband of non-royal descent, Ptahshepses. This act had an impact on the whole Fifth Dynasty, on which persons of non-royal origin would have a marked influence. For most of the dynasty, sun temples devoted exclusively to the cult of sun god Ra would be built. In total, six of them were constructed, but only two are so far known to us. The first was built by Userkaf in Abu Ghurab, and the second by Nyuserria very close to it. It is interesting that the remaining four have yet to be discovered.. The rulers Userkaf, Sahura and Neferirkara donated numerous gifts in support of the cults of the god Ra, the goddess Hathor and the temple complex in Heliopolis. These included financing Ra priests (*wabu*, or the clean ones), gifts in the form of a day’s allocation of offerings (in other words, payment in kind for priests), gifts from expeditions – during the reign of Sahura, for example, this was turquoise and copper from Sinai and myrrh and electrum from the mythical land of Punt. They also donated generous areas of land – including the inhabitants that came with them – throughout the country.

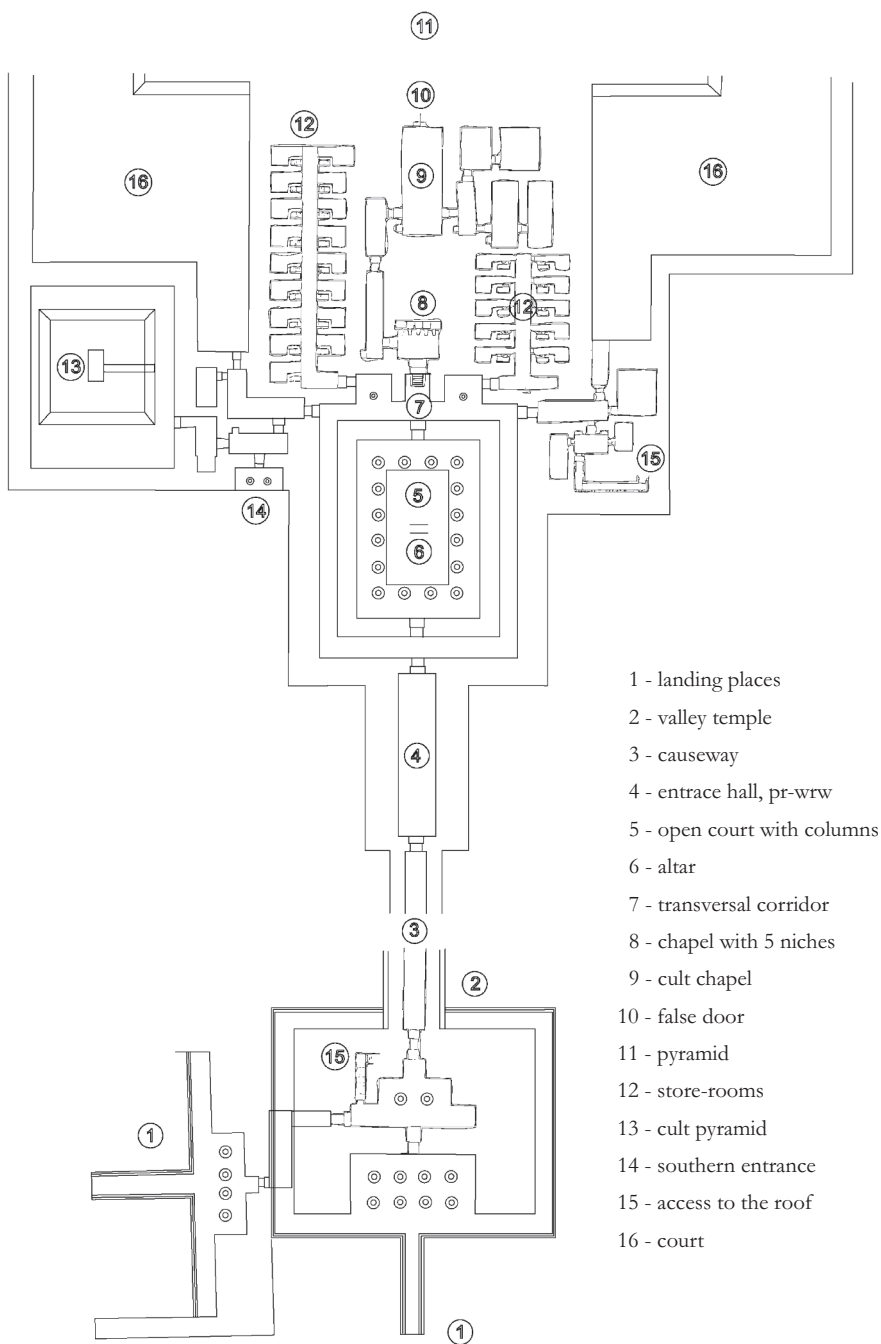


Pyramid of Userkaf, the founder of the Fifth Dynasty.

The textbook of temple architecture

Let us look first of all at the best-preserved complex, that of Sahura, son of Userkaf. Perhaps even without knowing, suspecting or intending it, he set the tone for the remaining part of the Old Kingdom period. His complex contains new elements in both architecture and decoration, characteristic of the coming “new times.” Sahura, the second king of the Fifth Dynasty, was essentially the founder of the necropolis at Abusir. It lies close by Saqqara, just under a kilometre to the north, and was part of the burial ground of the then capital city, Memphis. In ancient times this was all one burial area. The fact that today we use two different labels, Abusir and Saqqara, has been the result of the administrative development of the Egyptian state in the nineteenth century and its divisions. Abusir and Saqqara are now two huge villages on the western edge of the Nile plain. Both are already found on maps of Napoleon’s famous Egyptian expedition at the end of the eighteenth century.

The main entrance to Sahura’s pyramid complex was a valley temple situated at the place where the fertile Nile valley meets the desert. It was approached by a waterway, a canal, and there was a port close by. In this way the various commodities used in the everyday cult of the ruler in the funerary temple were transported to the pyramid complex. They were also used to maintain the priests who were serving, in a rotational basis, monthly. At the entrances to Sahura’s valley temple – the southern entrance clearly faced towards the port – were columns with capitals in the shape of palm leaves, imitating the sacred palm groves of the Nile Delta, symbols of rebirth. The



Main components of the funerary complex of Sahura.

black basalt floor was supposed to be a symbol of rebirth, like the black fertile soil of the Egyptian valley. The decoration of the inside walls of the temple merely emphasised the divine nature of the king, and the victorious aspects of his rule. It included a scene of the king being suckled by the Upper Egyptian female vulture goddess Nekhbet, and a scene in which he is shown defeating the ranks of his enemies.

The valley temple was connected with the funerary temple by a roofed causeway, the walls of which were also richly decorated. In these scenes the king, personified as a sphinx, is defeating his enemies and manifold forces of evil. There are also scenes of a secular nature, such as the completion of the pyramid complex, celebratory games, duels between young recruits, the return of a legendary expedition from Punt and many others.

The transition between the causeway and the actual funerary temple was an entrance hall, called “the hall of the great,” which was clearly where the country’s high-ranking dignitaries met in order to pay respect to the king. Just inside was an open column courtyard with columns ending in capitals in the shape of bundles of papyrus. Like the black basalt floor, these were again supposed to invoke the idea of rebirth in a papyrus thicket. The columns bore Sahura’s titles and depictions of the protective goddesses of Upper Egypt – Nekhbet (in the southern half of the courtyard) and Lower Egypt – the cobra Wadjet (in the northern half). In the northwestern corner of the courtyard was an alabaster altar, to which sacrifices were brought. Around the courtyard was a covered corridor, of which the blue-painted ceiling was studded with golden stars in an imitation of the night sky.

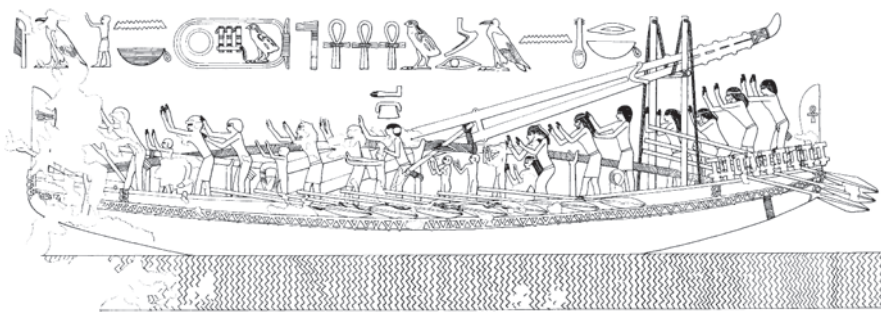


Mortuary temple of Sahura – the *wesekhet* court.

Then came the “inner” part of the temple, which was marked off from the previous areas not only by having a higher floor, but also by a transversal, north-south passage. Subsequently, one entered into a room with five niches containing statues of the king. There is still speculation today as to what these statues looked like. The most frequent hypothesis is that they showed the king in the most important aspects of his rule: as the highest priest of the sun god Ra, as the supreme earthly ruler, as Osiris – the ruler of the kingdom of the dead – or as the ruler of Upper and Lower Egypt. From here, a corridor ran further west and ended in the king’s offering chapel, orientated east-west, at the bottom of the pyramid’s eastern wall. This is where offering rituals were performed several times a day. The western wall of the chapel consisted of a false door made out of red granite covered with gold leaf. It was decorated with the titles and names of the king, and with offering formulas. One of the most significant innovations was the numerous storage areas built to the north and south of the chapel. This is where the cult implements and the various commodities for the daily cult of the royal *ka* were stored. The commodities were then used as payment in kind for the temple priests. In the southeastern part of the complex was a small “cult” pyramid. It was merely symbolic in character, but we do not know its precise significance.

The actual pyramid of Sahura contained a burial chamber, at the west wall of which stood a basalt sarcophagus with the king’s mummified body. A corridor starting at the bottom of the north wall of the pyramid led into the burial chamber; after the ruler’s funeral this link was then sealed with limestone blocks. Around the whole pyramid was a large open courtyard, in which religious processions took place. It should not be forgotten, however, that the pyramids did not stand in isolation in the necropolis, but were surrounded by all kinds of functional facilities: priests’ houses, archives for storing written records relating to the temple cult and its administration, and so on. These buildings were mostly found around the valley temples. The whole burial ground was thus largely a world for the living, filled with a strictly organised and controlled hum of activity.

This complex is also worth mentioning in another regard. It marks the definitive start of the path leading to the growing symbolism of pyramid complexes. While the



Causeway decoration from the complex of Sahura, featuring a ship containing Asiatics returning from an expedition abroad (LV).



Unique scene featuring king Sahura sitting on the throne, in the company of his family (JM).

actual size of the pyramid retreats into the background (possibly in part as the result of the poor-quality geological bedrock all around the capital city), an ever more important role is played by the intensification of the funerary cult which is indicated by the growing area given over to store rooms in relation to the overall built-on area of the temple – and the symbolism expressed in the rapidly growing elaboration of the decorative scheme of the whole complex. According to calculations, the relief decoration in Sneferu’s burial complex measured a mere 64 m, that of his son Khufu 100 m and that of Sahura’s direct predecessor, Userkaf, 120 m. In Sahura’s complex there are at least 370 m of relief decoration, and that figure has been rising in the last few years thanks to the discoveries of decorated blocks from the entrance path, excavated under the leadership of Tarek El-Awadi.

Kaaper, the Egyptian border guard

From the introductory paragraphs, it might seem as if the return to the “native” soil of Abusir and Saqqara was simple and free of complications. However, it came with a large number of problems. Building activity here had died down decades ago, and its original purposes and local traditions had been lost. The period when the cruciform chapels were built was so long ago that they were probably not even remembered. There was nothing but to adopt the newer building style that had developed over the course of the Fourth Dynasty in Giza. At the end of the Fourth and the beginning of the Fifth Dynasty, tombs were built with L-shaped chapels, with decorative motifs and themes taken from Giza. The first biographical texts also appear. This period is best illustrated by the tomb and life of the scribe Kaaper.

The tomb of Kaaper, an official and army leader, is a notable example of the sad fates of most of the once brilliantly decorated tombs of the era of the pyramid-builders. This is no surprise, since Egyptian burial sites hid – and continue to hide – numerous treasures. First there came the thieves, burial chamber robbers, who were able to break into even the best-guarded places in the tomb – indeed, often with the help of the guards themselves, sometimes immediately after the burial. During periods of unrest and anarchy the tombs became a source of wealth, and were plundered again. Particularly during the New Kingdom, but also in earlier and later times, pyramids and tombs were taken apart and the blocks used cheap source of building stone. The tombs suffered most during this period from the building activities and projects of Ramesses II, who in his hurry to find easily-available building stone did not hesitate to take apart many of the brilliant monuments of the past. The Romans were no better. During the Middle Ages, the ancient Egyptian monuments, above all the pyramids, were once again targeted by Egyptian rulers, with the aim of gaining as much of their gold and legendary treasures as they could. This treatment culminated under the rule of Mehmed Ali in the nineteenth century, who used the ancient Egyptian monuments as a political tool to soften up European rulers and important state visitors. Today, after over 4000 years of continuous plunder, Egyptologists are logically in a very difficult situation.

The unsettled history of Kaaper's tomb shows that, even during the past hundred years, it has been discovered and then lost again several times. Fate finally caught up with it at the beginning of the twentieth century, when it was plundered. The robbers took several large limestone blocks from the cult chapel, decorated with fine reliefs,



“L-shaped” chapel of Kaaper.

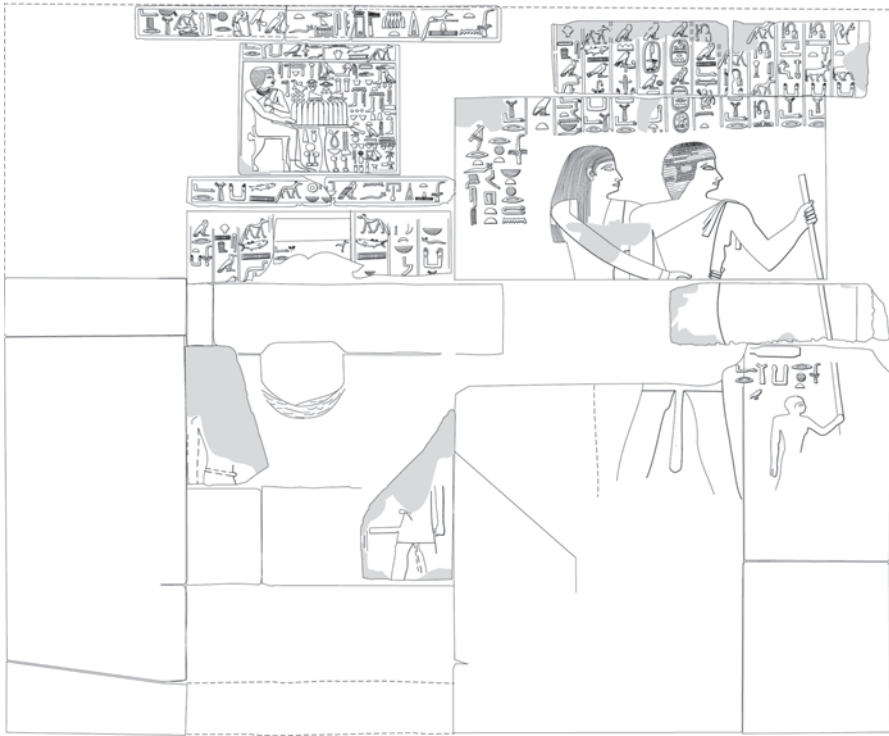
most of which ended up in museums in the US. It was “discovered” for the second time in 1959, when Henry George Fischer published a study on Kaaper and his titles, based on several earlier photographs taken in the tomb, which by that time lay in an unknown place somewhere in the Saqqara burial ground. The tomb was then discovered for the third and final time in 1989 by Egyptian archaeologists, who had to step in against the havoc created by modern-era grave robbers. From the badly damaged chapel they managed to salvage several more limestone blocks with relief decoration. This was followed in 1991 by the Czech expedition’s research.

The mastaba is built of good-quality Tura limestone from quarries on the eastern bank of the Nile, to the south of Cairo. It stands on the highest point of the central hill in southern Abusir, above Lake of Abusir, which in the third millennium BCE was the main entrance to the whole of the Saqqara burial ground. Kaaper’s tomb is almost 42 m long in a north-south direction, over 20 m wide and must have originally been at least 5 m high. In the southeastern part of the tomb was a small L-shaped chapel. Its decoration, as has already been said, suffered very serious damage in the past, and its reconstruction was one of our most pressing tasks. Work on the reconstruction of the original appearance of the internal decoration lasted several years and was finished only in 2001. On the eastern wall of the chapel and above the entrance there was originally a scene showing fishermen pulling in a large trailing net, equipped with floats. They have caught several kinds of fish, which are represented so faithfully that even today it is possible to determine precisely what species they are. The photographs of this part of the tomb’s decoration that were taken in 1959 show the scene more or less in its entirety, but if we compare them with the block now owned by the Metropolitan Museum in New York, we find that it is considerably incomplete. The rest of the eastern wall was taken up by a typical offering scene: Kaaper and his wife Tjenteti sitting behind a offering table with loaves of bread and other offerings. This part of the chapel’s decoration was the only section of which thieves took no notice, perhaps because it was very badly damaged by crystalline salts – one of the greatest scourges of monuments in present-day Egypt.

The northern wall was originally covered by a large standing figure of Kaaper, with his wife lovingly embracing him around his shoulder. However, this part of the decoration has also disappeared, and the last photograph of it originates from 1959. Even then, neither figure possessed a face because both had been previously cut out and sold in the antiquities market. Above the couples’ heads was a damaged hieroglyphic inscription, which has been reconstructed. In it, Kaaper addresses the tomb’s future visitors thus:

I built this tomb, I am justified before the god. I have built this tomb from my own property alone ... I have never said anything bad against anyone, I have never done anything bad against anyone. I shall not be punished by the Great God, the lord of judgment, the king’s official Kaaper.

This type of text is known in Egyptology as a “negative confession.” Its main aim was to persuade visitors to the tomb that the occupant had lived in accordance with



The western wall of the chapel of Kaaper, demonstrating a reconstruction of the decoration (PV).

the ethical norms of his day, and that he deserved regular offerings and prayers in his chapel, the aim of which was to ensure him an undisturbed existence in the afterlife. The inscription also shows what the usual offences at this time were. For example, Egyptian officials had older tombs taken apart to provide building stone for their own tombs. Slander and defamation were regular occurrences at court, and it often happened that officials with enough executive power abused it for their own enrichment. Unfortunately, Kaaper was probably no exception. The scene is completed by a depiction of him as a dignified and corpulent official. This feature, too, was meant to emphasise the importance of his office and position. After all, he did not have to labour in the fields for a daily wage of bread and vegetables and a beer jar.

The gradual reconstruction of the decoration of the western wall of the chapel has shown that its individual blocks are currently located on at least three continents. The central point of the wall's decoration was the false door, through which the spirit of the deceased official was meant to enter from the western kingdom of the dead into this world during offering rituals. Half way up the door was a small opening that led into an entirely closed room, the serdab, where there was originally a stone statue of the deceased Kaaper. In the middle of the door there was once a feature known as



Central panel from the false door of Kaaper, showing the tomb owner at the offering scene.

a “small lintel,” an architectural element containing selected titles and a name. This much we know from the photographs published by Fischer in 1959; but by 1991 it was, of course, no longer in place. Not until April 2001 was a partial explanation forthcoming. At that time I had a fellowship at the Albright Institute in Jerusalem, and I went to visit the Bible Lands Museum. To my great surprise, I found half of the lintel in a display case in one of the side galleries. Thanks to the helpfulness of the director, Joan Westenholz, I was able to inspect it more closely. The bottom part turned out in fact to have been drilled – the block had probably been displayed in the dining room or drawing room of an originally private owner. It must have been deliberately cut in half in order to fetch more money at auction. The upper part of the decoration of the false door consisted of a panel showing Kaaper sitting behind a table with offerings of bread. The surrounding hieroglyphic inscriptions mention further offerings, including food, drink and various luxurious commodities. Among the favourite ones were incense, natron, imported cosmetic oils, eye makeup with black and green pigment, dates, figs, grapes, wine, selected baked goods and drinks,

including various kinds of bread, cakes and beer, as well as stone vessels and fine cloth. Above the panel there was originally a lintel with Kaaper's name and other titles. To our great surprise, this was found in 1994 in loose sand approximately 500 m to the south of the tomb. It must have been buried here by modern-day grave robbers who were planning to take it later. The method and quality of the artistic work, the titles and its dimensions made it easy to identify and return to its original place in the tomb, as shown by a computer reconstruction of the walls.

To the right of the false door was a figure of Kaaper standing, accompanied by his wife and their son, also named Kaaper after his father. Above the heads of the married couple are several columns with hieroglyphic inscriptions giving over thirty of Kaaper's titles and functions in the royal court. However, these blocks are no longer in the tomb, but fortunately now guarded in the storage rooms of the Saqqara authorities. The inscriptions from the tomb are very interesting and important, since they describe Kaaper's official career in detail. He held the following functions, among others: "Keeper of the spotted cattle, scribe in the document division, overseer of scribes in the document division, scribe of the royal army in the forts of Serer, Tepa, Ida, in the area of the Turquoise Terraces and in foreign lands beyond the eastern and western borders... priest of the goddess Heqet, army general and overseer of all the royal works."

From this information we learn that Kaaper was a high-ranking official of his time. It is also important to realise that during this period, military, priestly and administrative functions were not strictly separated, and that one person could undertake all these functions at the same time. Kaaper's career also took place outside of the capital for a certain period. He served as the scribe of royal documents in several border districts, and was responsible for Egyptian expeditions to the Sinai peninsula, to the Serabit el-Khadim area and Wadi Maghara, where the Egyptians obtained the highly-valued blue-green mineral turquoise and copper. Later, Kaaper became the king's chief builder, or architect responsible for royal construction on the territory of Egypt. He was also a member of a funerary brotherhood that organised funeral processions heading towards tombs in southern Abusir and Saqqara.

An analysis of Kaaper's titles is also of great significance for our knowledge of the period of the Old Testament patriarchs. Some of his titles mention that he was in charge of guarding the Egyptian border and of supervising the pastures of the spotted cattle. From other sources we know that spotted cattle were particularly typical of the Asiatic nomadic tribes. The Old Testament suggests that during a period of drought, Abraham had to take refuge with his tribe and herds in the Egyptian Delta where there were extensive pastures. "And there was a famine in the land: and Abram went down into Egypt to sojourn there; for the famine was grievous in the land" (Genesis 12, 10).

From this historical context, it appears that various nomadic tribes from the Near East and the Sinai Peninsula entered Egypt during the Old Kingdom where pastures for their cattle were allotted to them. However, this only took place with the agreement of the Egyptian border guard service, for which Kaaper worked. Relations between Egypt and Syro-Palestine during the period of the patriarchs thus gain in interest with the discovery and interpretation of this tomb. If we add to this the find

of two imported Syro-Palestinian wine amphorae from the burial chamber, it looks as if this Egyptian official played a very important role in an area where several cultures and religions met, and indeed continue to do so today.

The man from the papyrus archive

Sahura's successor to the throne was Neferirkara, today famous partly as the result of the papyrus archive that was discovered in his temple. The texts on the papyri contain historically valuable information relating to many aspects of the operation of the ruler's funerary cult in the temple. In addition, they contain many names and titles of dignitaries who held various functions in the funerary cult to the king. Our expedition in Abusir has also, in recent years, successfully managed to find the tombs of some of them, and, with the help of archaeological research, to reinterpret the well-known written data. By combining the written evidence relating to individual dignitaries from the papyri with the archaeological we have taken our understanding of this section of the ancient Egyptian population to an entirely new level. Some essential details can be provided by anthropology, which also plays an important role in helping us to understand life in ancient Egypt.

One example provides a good illustration. The mastaba of the official and priest Fetekti is part of a larger burial ground of funerary priests, who were buried on one



Fetekti's courtyard as rediscovered in 1991.

of the slopes of the desert valley of the Western Desert in southern Abusir. Each tomb in this area had a fairly large open courtyard, from which one entered the cult chapel. The chapel took the form of a narrow corridor, with a false door in the west wall, or in some cases, several false doors. To the west of these were the mouths of burial shafts – there were always several of them – leading to burial chambers under the surface of the desert. Each tomb might contain several members of one Egyptian family, usually the male owner, his wife and children. If a member of the family managed to achieve a rank that was significantly high in the administration, he was able to build his own tomb, usually close to that of his family, and to have it decorated by an ancient Egyptian artist. Fetekti was one of these relatively well-off officials who was able to build such a tomb.

The superstructure of his tomb consisted of a courtyard with a central pillar and a corridor-shaped chapel to the south of it. In the western wall of the chapel were two false doors, evidence that the funerary cult of two people took place here. The southern door belonged to the occupant of the tomb, while the northern one belonged to an official called Mety (we do not know what sort of family relationship he had to Fetekti). To the west of the chapel were two shafts, which lead into the burial chambers of the two men. On the floor of Fetekti's burial chamber, at a depth of ten metres, were found bodily remains, completely strewn about, and the scant remains of burial equipment, of which only a few fragments of clay vessels have been preserved. An anthropological analysis of the bone fragments showed that Fetekti died at the age of 30–40. The walls of his burial chamber were the only ones in the burial ground to be cased with limestone blocks. Further evidence of his well-to-do status are the titles and functions that connect him with the royal weaving workshops, which produced high-quality fabrics for the royal court.

The walls of the courtyard were covered with decoration, painted on plaster and directly related to the everyday life of the ancient Egyptians. It included scenes of the preparation and transport of burial equipment, wine production, cabinet-makers at work, wild animals being hunted in the desert, boat trips and scenes from an ancient Egyptian market.

We also know about Fetekti's life from other sources, above all from the tombs in the Saqqara necropolis and from the papyrus archive in the funerary temple of king Neferirkara. In these written sources there are several mentions of him. In the written accounts Fetekti is mentioned twice, each time appearing as a lower-ranking priest (*hem netjer*, “servant of God”) who took part in a procession around the pyramid and was responsible for the temple inventory. In the tomb of the high-ranking official Ptahotep II, Fetekti is depicted twice, bringing offerings to his superior. Finally, in the tomb of two brothers, the manicurists Niankhkhnum and Khnumhotep, he appears three times— on a boat, dragging a boat on a rope during a burial ritual, and riding on a donkey.

All the evidence found outside Fetekti's tomb shows that he was employed as a funerary priest. In the temple of the deceased ruler he was responsible for part of the temple inventory, while in the tombs of his superior and earlier-deceased contemporaries in Saqqara, he participated in their funerary cult. This was no insignificant matter:



Original court decoration showing cloth and linen packing and transportation for Fetekti.

Egyptian priests were an established part of the “redistribution economy,” in which each priest received his pay, in kind, from the commodities sacrificed on the altars of the temples and tombs. Some of these goods a priest could then take to the market, where he could trade them further for agricultural or craft products.

The life-threatening touch of the sceptre

From Neferirkara’s time there comes a unique historical text, left by the dignitary Rawer in his tomb in Giza. Rawer describes how he managed to survive a religious procession headed by the king, during which he touched the royal sceptre by mistake. This was thought to be a life-threatening, if not directly fatal event. The incident was recorded as follows:

The King of Upper and Lower Egypt, Neferirkara, appeared as the king of Lower Egypt on the day of taking the prow-rope of the god’s boat. Now the sem priest Rawer was at the feet of his majesty in his noble office of sem priest and keeper of ritual equipment. The ames scepter which his majesty was holding blocked the way of the sem priest Rawer.

His majesty said to him: “Be well!”- thus spoke his majesty. His majesty said: “It is the desire of my majesty that he be very well, and that no blow be struck against him”. For indeed he was more valuable in the sight of his majesty than any man.

(Strudwick 2005, 305–306)

This short text describes an apparently innocent incident in which the ordinary mortal Rawer happened to touch the royal sceptre, *ames*. In the eyes of the ancient Egyptians, however, it was a fatal accident, since to touch a living god or his insignia

was considered something totally unexpected and sacrilegious. There was thus a need for the king to pronounce words that would ward off the potential danger.

There is one more interesting, although badly damaged inscription from the reign of the same king. It concerns the vizier Washptah, who received a great privilege during the king's visit to the funerary complex – it was suggested that instead of kissing the ground in front of the king, he be afforded the privilege to kiss the sole of his foot. According to the inscription, this made a great impression on all those present, partly because any sort of contact between a mortal and a living god was considered to be very dangerous. In the passage following we also learn that Washptah fainted in the king's presence when he met him in the palace. The king immediately ordered a doctor to be brought, while he himself prayed to the sun god Ra to protect his favourite dignitary, especially since Washptah had always carried out his orders conscientiously. In the end, however, Washptah died, and the king personally saw to it that burial equipment and an appropriate funeral were ensured.

These two incidents provide a vivid picture of the exceptional position that the Egyptian ruler held in the eyes of his contemporaries. He was a living god, and a totally different being from other mortals. He was also the guarantor of the status of all court officials, and ensured their afterlife existence – on condition that the officials served their master faithfully and followed his orders and wishes to the letter. Any kind of physical contact with the living god was, under normal circumstances, out of the question, being the privilege of certain selected priests.

Raneferef, the forgotten king

Egyptian archaeology is full of surprises. In the 1970s the Czechoslovak Egyptological Institute requested a concession for the locality of Abusir. Everyone assumed that the potential of the site had been exhausted by the researcher Ludwig Borchardt, who, at the start of the twentieth century, investigated the pyramid complexes of the rulers Sahura, Neferirkara and Nyuserra, as well as the adjoining burial ground for high-ranking officials at their courts. However, the opposite was to be proven.

The elder son of king Neferirkara was Raneferef. He ascended the throne when he was very young but died suddenly one or two years later at the age of about twenty. His pyramid complex was never finished. Indeed, it was still at that time in the process of construction. The substructure with a descending corridor from the north, an anteroom and a burial chamber were more or less ready, but the actual pyramid had only reached several metres above the base. In the same way, the funerary temple on the eastern side of the pyramid contained only the undecorated chapel. The other parts of the temple, together with the causeway and the valley temple, no doubt existed only on the architects' plans. Thus at the king's unexpected death, it had to be decided what to do with his pyramid and temple.

Time was passing, and the seventy days of burial ritual was a very short interval. Once again, the ancient architects showed their flexibility. The first level of the core of the pyramid was changed into the primeval mount, a *iat* in Egyptian. Its surface



Raneferef's unfinished temple and its incomplete pyramid.

was levelled and covered with a layer of large desert pebbles, which created a compact, impenetrable layer. The ruler was thus buried under a symbol of rebirth that appeared when the flood waters had retreated. In the case of the temple, the situation was easier – what could not be finished in stone was rapidly replaced by mud bricks. There was no time to build the causeway and valley temple, however.

The ground plan of the funerary temple respected previous building traditions, being composed of an eastern part with an entrance and a large courtyard, – the *wesekhet*. Adjoining this was the western part of the temple with a room with five niches and store rooms to the north and south and a cult chapel. In the southern part there was a new element, one of the earliest archaeologically attested hypostyle halls in Egyptian history. In the southeastern corner of the temple was another large complex called the *but nemet*, the House of the Knife. This was a slaughterhouse where animals were slaughtered for subsequent sacrifice in the temple, and where the meat was also processed and dried.

Because the temple was built mostly of mud brick it was safe from the stone thieves. Borchardt, however, was confused, having carried out survey work in the pyramid's filled-in descending corridor. He came to the conclusion that it was a damaged mastaba. If he had dug only a metre deeper, as it later turned out, he would have come across a cartouche with the name of the complex, "*Divine are the souls of Raneferef*," and would have gained incontrovertible evidence that this was a genuine royal tomb. The complex, excavated in the 1980s and 1990s under the leadership of Miroslav Verner, has gone down in gold letters in the history of Czech Egyptology. The temple, as I have already mentioned, escaped attention in later times



**Ranefere's unique statue
with protective god Horus
behind his head.**

as the result of its “poor” building material. This was the chief cause of the remarkable discoveries that were made over the course of several consecutive archaeological seasons. The rooms and spaces of the temple contained numerous items that were used during the varied activities the temple and the maintenance of the funerary cult. They included ceramics, stone vessels, faience inlays of furniture replacing original relief decoration, items of daily use, stone knives and seal impressions that provide historically-unique information. The temple also contained two buried solar boats, each covered with a layer of red carnelian beads. They were meant to serve the king on his journey in the netherworld by both day and night. A large collection of royal sculpture was

also discovered in the temple. They included beautifully carved statues of the king himself and numerous wooden statues of captives representing Egypt's adversaries – Asians, Bedouins, Nubians and Libyans. However, most exciting of all was the discovery of a papyrus archive documenting the everyday cult activities of the temple, and many of the economic and religious aspects of its functioning. The papyri also include a description of the architecture of the temple, together with a list of items that were stored in each room.

There was less luck with the work in the pyramid and in the actual burial chamber. During the excavation, valuable architectural knowledge was gained regarding many details of the construction of the pyramids during the Fifth Dynasty. As was the case with all the other royal burials of the Old Kingdom, the burial chamber had been plundered with extreme thoroughness. Nevertheless, the remains of the original burial equipment, as well as the scant remains of the mummified king, are among the largest collections of finds that we know of from third millennium BCE Egypt. Remains of pottery, alabaster vessels and canopic jars for mummified organs of the king were found, in addition to fragments of miniature models and pieces of a red granite sarcophagus.

To the south east of the complex was the burial ground of the members of Raneferef's family. In all, there are four mastabas, of which only the one belonging to prince Nakhtkara has been investigated so far. It represents something of a mystery, since its builder and owner decided to use an L-shaped chapel for his cult, a design that was already outdated at that time. Its decoration was badly damaged, and the burial chamber had of course been plundered. Nevertheless, the finds from the burial chamber included copper instruments and beautifully preserved alabaster models of offerings.

The reign of king Nyuserra

Several times in the course of Egyptian history we have come across the phenomenon of major progress taking place within a relatively short time. In the great majority of cases it is possible to trace the "responsibility" for these changes to specific individuals. This is also what happened in the middle of the Fifth Dynasty when younger brother of Raneferet, Nyuserra ascended the throne. He ruled for about thirty years, and his reign was in many ways a genuine watershed.

Nyuserra's funerary complex in Abusir contains a large number of innovations that indicate that fundamental changes in society took place during his reign. By this time, at the latest, many significant state offices had become hereditary, and had thus come under the control of a relatively small number of families of high-ranking officials. At the same time, there was a "democratisation" of the afterlife, in that the cult of Osiris started to be adopted by the non-royal sphere, having hitherto been the exclusive



Nyuserra's mortuary temple.

domain of the ruler. These innovations had a major impact on subsequent developments in society, religion and the tomb architecture, including both the design and decoration.

Among the most significant innovations inside of his funerary complex is the large leonine statue that protected the “transversal corridor” in the temple that divided the “outer” and “inner” parts, which differed in their degree of sacredness and accessibility. This was an area with a square ground plan behind which there followed an east-west oriented cult chapel. Another major innovation was the “Eckbauten/Corner structures” that stood at the northeastern and southeastern corners of the pyramid and are sometimes considered forerunners of the pylons that formed the façades of the temples of the Middle and New Kingdoms. It might also have been some sort of architectural imitation of the *akhet* horizon, the valley shut in by two mountains, between which the sun set.

Nyuserra was also famous for a double statue that depicts him as both a young god and an ageing ruler. This work of art is interpreted as a symbol of the identification of the ruler with the sun god, and is thus something of a symbol of the dualistic nature of the ancient Egyptian concept of royal government in the twenty-fourth century BCE.

Just under a kilometre to the north, at Abu Ghurab, Nyuserra built one of two temples that we know were dedicated to the cult of the sun god Ra. The temple, like the royal pyramid complex, had a valley temple connected with the Nile by a canal. It was joined to the actual temple by a causeway. However, the sun temple was arranged



Nyuserra's altar in the sun temple: from here the offerings travelled to individual mortuary complexes within the royal cemetery at Abusir.

differently than usual. Its main element was an extensive courtyard in the eastern part, which was dominated by a huge alabaster altar composed of four blocks, the top of which was modelled into the shape of a *betep*, an offering mat with bread, and a central rounded altar. Here, at the base of a high stone platform on which there originally stood an obelisk, a symbol of the sun god Ra, was the central place of the cult. From the west a corridor led up to the top of the platform, the walls of which were richly decorated with reliefs depicting the seasons of the Egyptian year: flood, *akhet*, sowing, *peret* and harvest, *shemu* – and the corresponding farming activities.

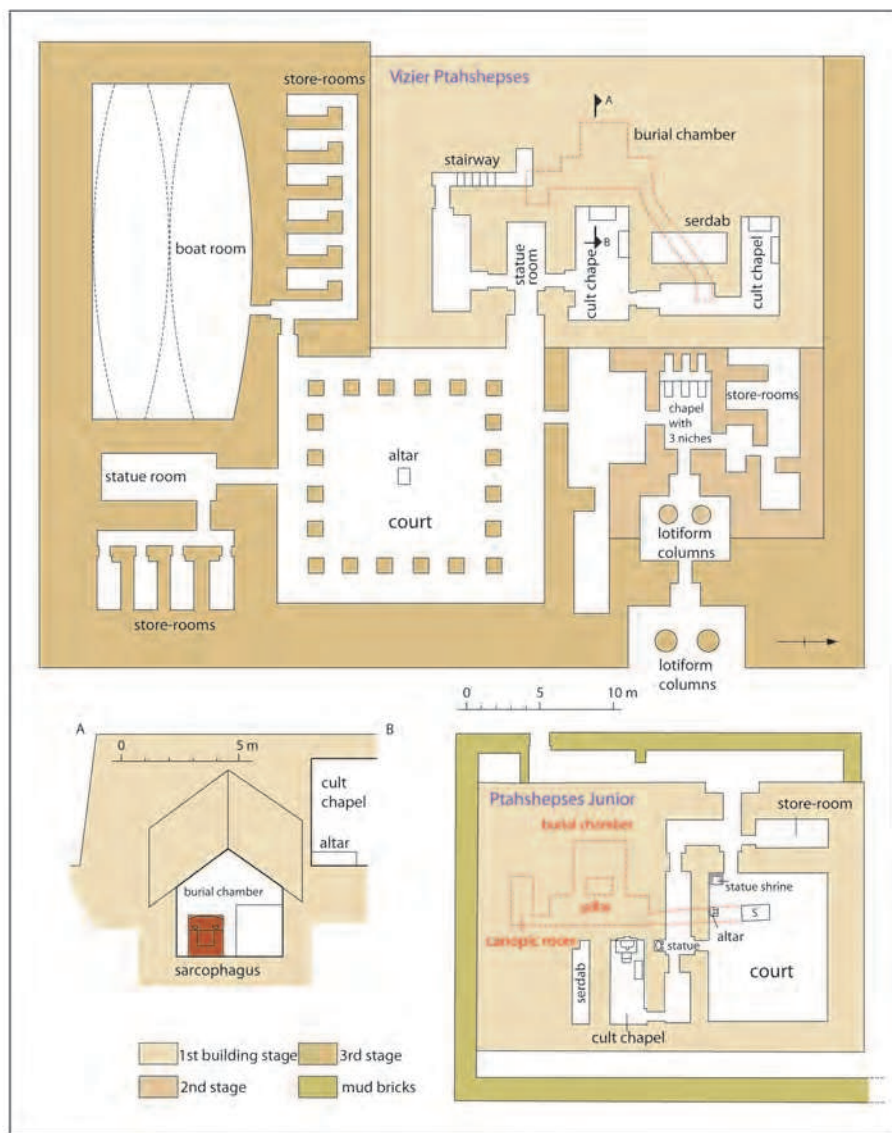
Ptah is noble

Not by chance did new types of tombs, for both high and low-ranking dignitaries, start to appear during Nyuserra's reign. From a comparison of the types of tombs built by high state official and the "family tombs" that belonged to lower-ranking officials and their families, it is possible to observe the trends that governed the society at the time and which had an impact on the development of non-royal tombs.

At the beginning of this unique development we find Ptahshepses' mastaba, originally discovered by Jacques de Morgan at the end of the nineteenth century, and excavated from the 1960s by the Czech expedition. Ptahshepses, whose name means "Ptah is noble," was one of the first Egyptian personages to include several significant elements in his cult complex that until then had been considered to be reserved exclusively for kings. He had every qualification for doing so. Although he started his career as the king's hairdresser, soon after Nyuserra ascended the throne he was appointed a vizier and the head of all royal works. Moreover, according to existing sources, he was only the second non-royal dignitary to have the privilege of marrying the king's daughter.

Archaeological research showed that Ptahshepses used the following elements of royal architecture in building his tomb: a monumental column façade almost 10 m high, a room with three niches designed for the cult of three statues, a large open courtyard lined with huge limestone pillars with figures of the tomb owner, an east-west orientated cult chapel with false door in the western wall and a bench along the northern wall, a room in the shape of a boat and a gabled roof above the burial chamber. In that room were two sarcophagi made of red granite for Ptahshepses and his wife, a princess named Khamerernebti. The sarcophagi also came from the royal workshops, and were quite equal to the royal sarcophagi. It is a pity that only about a fifth of the tomb's original decoration has been preserved, covering an area of about sixty square m.

Nevertheless, even what is left of the decoration is sufficient to reveal how much influence Ptahshepses and other officials in the country had, and the extent to which, by using inherited titles, they influenced the composition of the royal court and filled important posts in the administration of the country. From his two marriages Ptahshepses probably had seven sons (the first marriage seems to have preceded his marriage to the king's daughter). Most of the sons started their careers in the royal court, and almost all of them had the title "sole friend" "lector priest" and "priest of the *iset* room." These titles indicate that they received a steady income. Ptahshepses



Ground plan of the mastaba of Ptahshepses (LM).

Junior, the most successful of them, became the person “in charge of the diadem” and the “administrator of the palace.” These were roles that demanded considerable abilities and personal effort. His career culminated in the function of “overseer of southern Egypt,” as shown by the inscriptions on his own tomb, which lies to the east of his father’s.

Ptahshepses’ example gave rise to a further development. During the same period another vizier named Ti imitated Ptahshepses’ portico, but instead of columns he

used pillars, which later became much more popular in the non-royal sphere, possibly because of the simplicity of their form. After that, Ptahshepses' example was followed by the viziers Senedjemib Ihi and Senedjemib Mehi in the burial ground at Giza, to the west of the Great Pyramid. Starting with Nyusera's era, the tombs of these high-ranking state officials also became significantly larger. The number of rooms in each tomb complex increased as well – frequently there were more than ten – and the decoration became richer. Decoration now covered not only the walls of the cult chapels, but also expanded to cover the walls of corridors, store rooms and open spaces including courtyards. Indeed, large open courtyards became one of the main parts of these tombs.

The period was thus one of a major move towards grand-scale tombs for high-ranking officials. To take one example: Ti's decoration depicts a total of about 1800 figures (91% of them male), with Ti himself appearing about 100 times. The reliefs in his tomb are dominated by funerary priests (over 500 depictions), followed by boatmen and fishermen (almost 200), cattle breeders (150), scribes and overseers (150), family members (more than 100) and farmers (about 100). The number of figures and their breakdown by type and specialisation clearly shows what great attention was paid to the concept of tomb decoration, and to what extent this decoration may be considered to reflect conditions in the real world of the ancient Egyptians.

As soon as they were introduced, the large courtyards became a fundamental part of non-royal tombs, and frequently occupied a significant part of the built-on area. Important rituals took place in them, designed to ensure a peaceful afterlife for the dead tomb owner. This is confirmed by the numerous finds of offering altars and libation basins in these areas. The function of the courtyards may be compared to the



Mastaba of Ptahshepses, view from the southwest.



Façade of the mastaba with its unique lotus columns.

wesekhbet, which was an established part of the royal funerary temples. This is where burnt offerings were made to the spirit of the deceased ruler. The courtyards were also very closely connected with the statues of the tomb owner, idealised representations of him. In most cases, like the cult chapels, they were also closely connected with the serdabs by means of narrow apertures, through which the owner (in other words, his soul) could follow and participate in what was going on in the courtyard.

A growing fondness for statues is already apparent at the beginning of the Fifth Dynasty. In Babaf's tomb at Giza (G 5230) the two outer cult chapels had cruciform ground plans, and each was connected to four serdabs. Over twenty-four statues were found in them. The growing importance of statues during the Fifth Dynasty is shown by Rawer's tomb at Giza, which dates to the period of king Neferirkara, Nyusera's father. The tomb owes its fame largely to the fact that over a hundred of statues were found in it. It was composed of corridors and rooms connected with approximately twenty-five serdabs and twenty niches containing statues of Rawer. The tomb of the vizier Ptahshepses at Abusir, described above, contained at least nineteen stone statues belonging to the tomb's owner, including four female statues of his second wife.

The increasing number of rooms and statues in one tomb is clear evidence of the growing independence and significance of high-ranking dignitaries at the end of the Fifth and during the Sixth Dynasty. In direct contrast with the previous period, the changes concern not only the size of the above-ground part of the tomb, so typical of the First to the Fourth Dynasties, but above all its internal layout, the addition of new spaces with specific functions, extensive relief decoration and rich burial equipment.



Chapel with three niches where originally stood the statues of Ptahshsepse: from this room one could enter the pillared court.

In many cases the courtyards contained entrances to descending corridors that led directly into the burial chambers. These characteristic features, together with the statues and serdabs, underline their symbolic significance. They are one of the main cult areas, strengthening the everyday funerary cult of the dignitary, and were arranged in such a way as to enable the direct participation of the dead person in the rituals, and his communication with the living. His presence was ensured by means of statues – “living images,” as the ancient Egyptians called them, relief decoration and names and titles on the surrounding walls. In some cases this idea was strengthened by the depiction (painted, or in relief) of the palace façade above the entrance to the descending corridor. In keeping with the development of royal architecture, the tombs of the highest-ranking officials also contain store rooms, which served to preserve the inventories used during the cult in the tomb, and to store offerings, which indicates that in some tombs the cult was notably intensive.

The mystery of the unplundered tomb

It is very rare for a tomb to be discovered that has not been robbed. It is an exciting event, and one that occurred during our excavations in Abusir.

The excavation of the tomb of the priest Inpunefer, who lived in ancient Egypt in the twenty-fourth century BCE, began in spring 2006 when a routine find occurred. It was a badly damaged tomb with a chapel, used for the cult of certain Inpunefer –

whose name means “Anubis is beautiful” – and other members of his family. The actual tomb measured 14×9 metres, and in its eastern superstructure contained a long corridor chapel. To the west of it were the mouths of six shafts. These led into the underground part of the tomb, to six burials, four of which have been investigated to date. In the chapel, the bottom part of a false door was discovered in its original location. It belonged to the priest Inpunefer. The false door’s decoration is of unusually high quality, and in addition to Inpunefer’s name and an idealised depiction of him, it contains a list of his titles and the figure of his eldest son, Kahesuf. As a result we know that he was employed as a funerary priest in the pyramid complex of king Neferirkara in Abusir and as a priest of the sun god Ra in the sun temple of king Nyuserra in Abu Ghurab.

Inpunefer’s other titles show that he was also a confidante of the king, an overseer of the court of justice, a priest of the goddess of justice, Maat, the administrator of Hierakonpolis, head of royal building projects, an elder of the king’s court of justice, royal herald and a priest of Horus, who is “in the middle of the palace” and “in the middle of the country.”

In 2007 we returned with the aim of finishing our exploration of the tomb. Gradually, we investigated several burial chambers with lacklustre results. At the start of November, however, we found that the entrance of one of the burial chambers was closed off by an untouched brick wall. Immediately it became clear that the burial chamber was also untouched. We had to call further specialists, without whom it would not be possible to start research inside the chamber, and to coordinate



Abusir cemetery with the tomb of Inpunefer (the mastaba is in the upper left corner of the photograph).



Beautiful false door
of Inpunefer (MF).

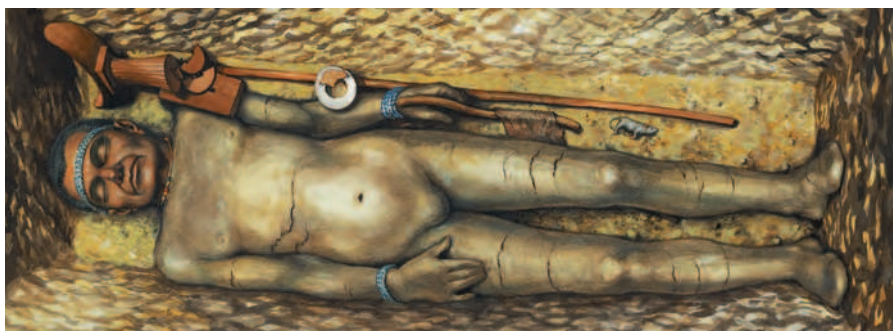


Inpunefer at the table of offerings: a detail from his false door (MF).

exploration of the chamber with our Egyptian colleagues. After some weeks we eventually found ourselves at the bottom of the shaft, gazing at the untouched mud brick wall. After its careful dismantling we were able to inspect the inside of the room. Remarkably, following the burial we were the first to enter this area. Work inside the chamber lasted for almost three weeks. The burial chamber is a room of approximately 4×2 m, just under 1.30 m high. It was almost entirely taken up by a huge limestone sarcophagus, which hid the untouched body of an ancient Egyptian dignitary. Around the sarcophagus were grave goods consisting of 10 beer jugs with seals, 75 small limestone vessels (bowls and cups) for symbolic amounts of sacrificial food offerings, including beef, drinks and stone blades. The beer jugs – one for each day of the ancient Egyptian week – were originally supposed to contain beer, but the ancient Egyptians were fairly pragmatic and so for reasons of economy filled them up with Nile mud. To the south of the sarcophagus originally stood a wooden canopic chest with four limestone boxes containing mummified organs, but as the result of considerable moisture it had totally fallen apart. However, the clay seal that had originally closed it had been well preserved – the only one of its kind from the Old Kingdom. Until then there had been no proof that canopic chests were sealed so early in time. It was also interesting to observe that the canopic vessels were found empty and were actually never used for storing internal organs of the deceased. Thus we can suppose that they were used, as with other cases from the Old Kingdom, as dummy containers symbolising mummification process (as a prestigious and expensive ritual activity) which actually never took place.



View of Inpunefer's intact burial chamber.



Inpunefer's burial (photo MF and reconstruction National Geographic, Czech edition).

However, the greatest surprise lay in the actual burial in the sarcophagus. After the heavy lid had been lifted we beheld the badly mummified and almost destroyed body of Inpunefer and his personal items. The priest lay stretched out on his back, his head to the north, his body being covered with a thick layer of plaster thus preserving the basic contours of his body. Along his left side he had a long wooden staff, decorated with gold bands, and in his left hand he held a *keberep*, a symbol of his high rank and authority. By his left shoulder he had a beautiful wooden headrest, and, a little lower down, an alabaster container that originally held perfumed oil. Its canvas lid had also been preserved. Round his neck was a golden string necklace with several pendants. His arms, head and wrists were decorated with bracelets of faience beads, of which we found several hundred. According to preliminary conclusions, Inpunefer died at the age of around fifty, which was relatively high age for an ancient Egyptian.

The chief significance of the find lies in the fact that we discovered the chamber in its pristine state. It is also noteworthy that the finds in the chamber were relatively poor and consisted mostly of small stone vessels but no copper implements. This all changed from the late Fifth Dynasty: as the independence of the high-ranking officials in the court increased, so did the number of copper instruments and vessels placed in their grave goods. Clearly enough, Inpunefer passed away just before these fundamental changes took place.

One question yet remains: do we have the right to enter unplundered tombs? In this case, the answer is probably yes. The tomb itself had been damaged by thieves

and its underground area was threatened by constantly rising ground water table and before long would probably also be destroyed. The name and appearance of the dead person would thus have disappeared forever. Thanks to us, they have continued – what would an ancient Egyptian have preferred?

The poor confectioner and his dog

During the same period in which high-ranking officials were building opulent tombs, officials of a lower rank arranged to have “family tombs.” This is the term coined to describe a tomb in which the superstructure has one or more shafts leading to burial chambers. On the basis of various pieces of evidence it may be assumed that these were for members of a single family buried in the tomb over a period of several generations. The mouths of the shafts were situated in the western part of the tomb, while in the eastern part there was a cult room. A typical example of this type of tomb architecture is Shedû’s tomb, discovered in Abusir by the Czech expedition in 1993.

Nyuserra was undoubtedly a great king, but he probably did not know the name of the confectioner who baked sweets and bread for the cult in his funerary temple. All the evidence suggests that Shedû’s tomb was used for many burials over the course of several generations. The ground plan measured only 7.6×9.0 m. In its eastern part was a small courtyard, which was entered from the south by several steps. The courtyard – the cult chapel – measured 4.6×2.2 m, and the light roof construction, built of organic materials, was supported by a wooden column which was found on the floor in the centre of the room. Three statues were also found in the chapel, representing Shedû, his wife and his son. The western wall of the courtyard was divided by three pairs of cult niches, which corresponded to the mouths of the three shafts to the west of them. There were altogether twelve shafts, arranged in four rows. At the bottom of the shafts were small niches, hewn into the side wall, and containing one poor burial in each. The first, easternmost row, with three shafts, was reserved for the owner of the tomb, his wife and son.

The individual burials and their grave goods provided an accurate reflection of the differing positions within the family. Two family members were buried in wooden coffins. An anthropological analysis of their remains clarified that these were Shedû and his wife: Shedû was buried in the niche of shaft no. 2, at a depth of 6 m, and lived to be approximately 40–50, while his wife was buried in the niche of shaft no. 3, at a depth of 5 m, and lived to the age of 40–60. Shaft no. 1, which was 8 m deep, was the burial place of a male individual aged 30–40. However, his body was wrapped only in a reed mat. The remaining three rows of shafts, to the west of the first one, were considerably shallower, approximately 3 m deep. Some of them remained unused, and their depth was not usually greater than 1 metre. It can be assumed that the shaft was only dug to its final depth just before the burial. The other shafts contained male or female burials wrapped in reed mats.

An exception to the general situation was a small shaft that we found in the floor of the small chapel belonging to the family, and which, at a depth of around 2 m, contained a simple burial of an elderly dog, 7–10 years old. In the filling of the shaft



One of many poor family tombs in Abusir erected on the ancient shoreline of the Lake of Abusir: the tombs date to the late Fifth and the Sixth dynasties.

were beer jugs that had been clearly placed there by members of the family during the burial of a pet who was a favourite of the family, or at least of his master, Shedu. Keeping dogs was not unusual in Egypt. Members of the upper classes, in particular, were fond of dogs, as is shown by their depiction on tomb walls. In Ptahshepses' mastaba in Abusir, for example, there is a dog named *Tep-nefer*, or "Beautiful head." In a tomb belonging to the judge Inti in southern Abusir, which we will discuss later, there is a dog called *Idjem*, or "Rusty" in part of a scene where Inti's wife kneels at her husband's feet, while the dog sits obediently under Inti's chair, and is held on a lead by a dwarf. Finally, from Giza, there is a stela belonging to a dog named Abutiu. His burial, the text of the stela shows, was ordered by the king himself, since Abutiu was part of his entourage and had protected the king:

The dog which was the guard of His Majesty. Abunwtiynw is his name. His Majesty ordered that he be buried, that he be given a coffin from the royal treasury, fine linen in great quantity, (and) incense. His Majesty (also) gave perfumed ointment, and (ordered) that a tomb be built for him by the gangs of masons. His Majesty did this for him in order that it (the dog) might be honored (before the Great God, Anubis).

(Reisner 1936, 97)

I do not think the relationship between the ancient Egyptians and their dogs can be better captured than by this text and the reliefs mentioned.

The silent ones...

The same message that is found in the architecture of tombs belonging to different social groups of ancient Egyptian officials can also be discovered in their titles. These often provide unique information regarding the duties of each of their bearers. Nyuserra, like most of his successors on the Egyptian throne, tried to limit the ever-growing power of the officials in the central administration. The degree of independence they enjoyed was becoming a problem, and this is evident from the growing numbers of private estates. At the same time, during Nyuserra's rule there was a decrease in the number of officials but an increase in the accumulation of functions among those who remained, thus giving the justified impression that power was being concentrated in the hands of fewer and fewer of the top dignitaries. Similarly, during the reigns of Menkauhor and Unas, the viziers also became the overseers of the priests who maintained the everyday funerary cult in their cult complexes. This development in the centralisation of power by a few major officials reached its height during the reign of Pepy I, when the last great tombs were built.

The roots of this development can once again be found at the end of the Fourth and the beginning of the Fifth Dynasty. It was then that the office of vizier, who after the ruler was the highest standing person in the administration of the country, moved from the royal family to the non-royal sphere. This fundamental change, among many others, was a logical consequence of the rapidly growing complexity of administration of the country. It had become clear that the royal family members were simply not numerous enough to run ever increasing complex state bureaucracy and administration. The royal family thus found itself more and more shunted aside, or at least some of its more ambitious members did. At the same time the king must have wished that, by promoting non-royal capable officials into high state offices, he would also ensure their unlimited loyalty and service.

This development is best documented by the metamorphosis in the bureaucratic title *keberî seshta*, "keeper of the secrets," which is found as early as the Archaic Period. Its bearers had close ties to the royal court in Memphis. Yet, the title was used only rarely. From the start of the Fifth Dynasty, however, we witness a huge growth in its use. There are 96 cases of its use at that time, and this is in connection with non-royal dignitaries. The explanation is very simple. Earlier, positions in the royal court had been held by officials from the members of the king's family. It was thus natural that they should remain silent concerning state secrets. In essence, "all was in the family." From the very beginning of the Fifth Dynasty the situation changed rapidly. The influx of non-royal dignitaries led to the necessity to keep sensitive information under control. This old but now revived and reinterpreted title – connected with obligatory discretion – proved to be the most appropriate reference to the newly acquired obligations of high state officials.

Through bread loaves and reed leaves to netherworld

The god Osiris had originally been connected exclusively with the king. Yet from Nyuserra's reign the concept of becoming Osiris after death also became accessible to

dignitaries of non-royal origin. The first evidence of this development is hidden in the symbolism of the standard offering scene that depicts the owner of a tomb sitting behind a table covered with bread loaves, an essential food of the ancient Egyptians. These loaves of bread were baked in small bell-shaped pottery moulds called *bedja*. During the Fifth Dynasty bread increasingly started to be baked in thin moulds called *aperet*. The loaves of bread in the offering scenes become longer and thinner, because their shape corresponded precisely to the loaves from these moulds. The decisive third stage of this transformation occurs during Nyuserra's reign. The representation of long, thin slices of bread from *aperet* moulds were slightly modified at the bottom in order to look like a reed leaves invoking the idea of the Nile Delta marshes. An explanation of this vital shift in interpretation of the scene is provided by the mythology connected with Osiris.

Osiris, lord of the kingdom of the dead, was originally an Egyptian king. According to the Heliopolitan mythology, he was a member of the great group of Nine Gods that provided the necessary support for the royal ideology. At the top of the genealogy stood Atum, who created Shu and Tefnut, the gods of wind and moisture. They became the parents of Geb, the god of the earth, and Nut, the god of the sky. Geb and Nut had four children in all: Osiris, Seth, Isis and Nephthys. Osiris took over rule on earth from his father, but he had to fight for it with his brother Seth. Their fight was violent uncompromising. In the end, Seth killed Osiris by deceit and had his body quartered and flung all over Egypt. Their sisters, Isis and Nephthys, collected up



The prestigious court official, Ti, depicted on a boat trip in the marshes of the Nile Delta.

the remains of his body and put them together in the swamps and thickets of the Egyptian Delta, bringing him back to life, just long enough for him to sire a son, Horus, by Isis. According to tradition, the place where Isis gave birth to Osiris was called Rasetau, most likely the burial ground at Memphis. Horus was brought up by the sisters in the depths of the impenetrable Nile Delta. Finally, after long years of fighting with his uncle, Seth, Horus gained the right to govern Egypt, and became the king of Egypt, while his father ruled over the netherworld.

In keeping with this myth, the offering scene with bread loaves was transformed into a kind of magical gate taking the shape of reed leaves of the mythical Delta associated with a miraculous rebirth of Osiris. As originally, the scene was still meant to ensure a peaceful afterlife for the dead person. Now, however, this function is not fulfilled by bread loaves in the traditional shape. They were replaced by reed leaves, symbolising the rebirth of Osiris in the thickets of the Nile Delta. Sometimes an Egyptian artist would go so far as to paint them green.

The sophisticated routes taken by ancient Egyptian iconography in using motifs from everyday life in such a way as to express complex concepts relating to the afterlife can be furthermore illustrated using a scene that depicts the owner of a tomb standing in a papyrus boat and holding in each hand a long spear, with which he is spearing fish. On the basic level this picture can be explained as the wish of the occupant of the tomb to be depicted in a favourite activity, catching fish in a papyrus thicket. In addition to this, however, there is another possible interpretation, based on the various meanings of the ancient Egyptian word *kema*, which can either mean “to throw” or “to create,” “to beget,” and may thus relate to the afterlife existence of the owner of the tomb, who is depicted in a scene related to rebirth in the netherworld in the role of Osiris.

New functions, new texts

The end of the Fifth Dynasty saw further changes. King Djedkara abandoned the traditional burial ground of the Fifth Dynasty kings in Abusir and moved to southern Saqqara, which during the Sixth Dynasty would become a significant royal necropolis. During his reign he had to face a growing wave of independence on the part of officials. For the first time, the autobiographical inscriptions of high-ranking dignitaries used formulas that drew attention to their own abilities and individual characters. Slowly but surely the ruler started to lose the role of sole designator and guarantor of his subjects' positions. In Sinai it can be observed that, starting with the rule of Djedkara, royal inscriptions are also accompanied by the names and titles of the royal officials who led these expeditions or took part in them.

The king had to react to this trend, and so he reached for new measures. He introduced an office known as “overseer of Upper Egypt.” In this way he hoped to strengthen his control over the southern part of Egypt, which was more difficult for the royal court to supervise from Memphis and so was susceptible to separatist tendencies. The official entrusted with the function was considered to be the ruler's confidante, and usually became a vizier after several years.



Ptahhotep I.

A further step to strengthen the royal ideology was undertaken by the last ruler of the Fifth Dynasty, Unas. He had the walls inside his pyramid in Saqqara decorated with the *Pyramid Texts*, a collection of over 750 brief religious compositions and spells relating to the royal burial ritual. These texts were including rebirth of the king inside the pyramid and the subsequent emergence into the heavens, the sacrificial rituals, hymns to Egyptian gods and the ruler himself, and magical texts. The *Pyramid Texts* became an integral part of the decoration of the inside of royal tombs of the Sixth Dynasty.

Blood of the earth

A large number of beautifully decorated tombs date from the end of the Fifth dynasty. Let us look at just one of them, the Saqqara tomb of Ptahhotep, the overseer of the pyramid complexes of the rulers Nyusera, Menkauhor and Djedkara Isesi. Its north facing façade is supported by two monolithic pillars. Behind them is a long entrance hall. Directly opposite the entrance, high above the floor, is a deep alcove where there originally stood a statue of Ptahhotep. On the left and right side a procession of offering bearers has been carved out. The figures are all heading towards the inside of the tomb. At first the depictions show just the contours of the bodies, without any sort of detail – at this point, work on the decoration of the tomb must have been prematurely ended. As we continue into the tomb the amount of details increases. At the end, the people assume individual features, and we can make out their clothes and the offerings they are bringing.



Procession of cattle and fowl, from the tomb of Ptahhotep I, in Saqqara.

There follows a large, undecorated hall with four octagonal pillars. From here the path leads directly to the chapel of the complex's founder, Ptahhotep. If we follow different corridor heading to the west, we reach another chapel belonging to one of his sons. Ptahhotep's chapel is only a little longer than five metres, and relatively narrow. The beautifully executed stone ceiling imitates tree trunks laid next to each other. The western wall is dominated by two false doors. The southern one is decorated with hieroglyphic inscriptions with the name and title of the owner. The beautiful details are visible in particular in the lower part, where Ptahhotep is depicted in a carrying chair carried by four men (to the left) and under a porch, where he is receiving offerings from his son, dressed as a lector or *kheri-heb* priest, who was traditionally in charge of the offering ritual. In each case he is wearing the same wig, executed in detail and bound with a wide ribbon. In his hand he holds the signs of his position – a staff and a *kberet* sceptre.

The second false door has no inscription, and represents a lavishly decorated gate leading to the netherworld. Between them is the main offering scene, with the tomb owner and reed leaves instead of bread loaves. Ptahhotep is dressed in a ceremonial leopard skin, and is shown smelling a small alabaster vessel containing "ceremonial and the best oil." In front of and above the table is a huge number of offerings, while from the right approach several rows of people bearing further offerings. Above them are six priests, who are engaged in three tasks – cleaning the chapel, offering to the spirit of the dead person and, finally, leaving the chapel, with the last one carefully sweeping away the traces on the floor.

The most beautiful and dynamic scenes are on the eastern wall, however. On the left stands a large figure of Ptahhotep in ceremonial dress – a carefully starched kilt

above the knees, with the projecting front tip, a long waving wig falling to his shoulders and a small, neat beard. Around his neck is a richly decorated necklace with a protective amulet in the shape of a heart. In his left hand he holds a handkerchief, while his right rests on a long staff. Next to him is a naked boy with a sidelock of youth, which in Egypt indicated boys who were not yet men. According to the inscription, it is his “eldest beloved son and the royal administrator of the fields, Akhtihotep.” He turns around towards his father, holding a staff in his right hand and in his left contains two hoopoe birds.

Several registers of decoration show various scenes from everyday life. The closest to the figure of Ptahhotep are present scenes of cattle and geese with ducks being brought from the estates of the funerary foundations in Lower and Upper Egypt. At the front, Kahap, the overseer of the granary and administrator of his household, bends forward respectfully as he walks. While no indication of the number of cattle is provided, the numbers of domestic ducks and geese indicated are staggering: 121,200; 121,200; 11,110; 1,225; 120,000; 121,022; 110,200. The result is a breath taking 605, 457 birds. These high numbers were certainly far from reality, but nevertheless, the fact that they were written on the wall of the tomb meant that they would have provided an extremely splendid banquet in the netherworld. The upper bands of decoration, partially damaged, show herdsmen looking after their cattle.

In the other scenes the various activities become more dynamic. The lowest register shows a struggle between scantily dressed boatmen. It is possible to make out the crews of three fully manned papyrus skiffs who are trying to proceed rapidly down a canal or branch of the Nile, and are racing to see who will be first. On board the boats are various products designed for the funerary cult – calves, birds in cages and various fruits. The relief shows an important part of the ancient Egyptian economy in the swamps of the Egyptian Delta, which is where wild birds were hunted seasonally, fish were caught and cattle bred. A further, similar scene shows the individual stages of a bird hunt. First, large nets are spread out at a sign given by a specially designated man. There are two nets, one spread out by six men and the other by seven. They catch a large number of birds, but nevertheless some confused ones fly around the nets, having managed to escape. Next, the birds are shut in cages and then taken away. The following register shows the making of papyrus boats. The whole composition is completed and balanced by two bands with scenes that take place beyond the borders of the fertile Nile Valley, on the edge of the desert, which was steppe-like in character. On the left a hunter crouches with his tethered dogs. These then throw themselves at gazelles and strangle them. On the right another hunter ties up wild cattle. The scenes are complemented by pictures of mating foxes and leopards, and a lion attacking a wild cow.

The decoration would not be complete without scenes of butchers slaughtering cattle for sacrifice in the funerary cult. These scenes were placed on the northern wall of the chapel right next to the entrance. There are four in all, full of tumult, bustle, inner tension and typical human nervousness. It is easy to distinguish the butchers, who work in short kilts, with knife-sharpeners on strings at their backs. In their hands they hold large flint knives. Additional men help them to hold the animals as they cut



Life and hunting in the desert, from the tomb of Ptahhotep I, in Saqqara.

them up. All of these men are undoubtedly of fairly low social status, as indicated by their poor clothing which consists of simple loincloths. In the left corner of the lowest register two butchers work, with a slaughtered cow lying on the ground. The left one holds the cow's front leg and says "Hurry up!," while the man on the right cuts it off with a stone knife, replying or independently adding "Hold tight!" A man is shown leaving them carrying a bowl full of blood. As he goes he turns round and says "Look at that heart!" (which he holds in his right hand). The men on the right are similarly engaged, with the one on the right cutting off a haunch with a knife, and calling "Bring (it), mate," while his assistant holds the front leg of the bound cow and replies to his colleague, "Here I am." From the right a further assistant hurries in with a bowl to catch the fresh cow's blood, announcing "Give me that blood!"

In the second decorated register, the butcher on the left cuts off the front leg of a slaughtered cow, and says "Come and get this front leg, O funerary and purification priests." Here, he refers to the custom of the freshly-cut front leg, like the fresh blood caught in the bowl in the previous scene. The meat is to be immediately sacrificed in the chapel of the deceased tomb owner. His partner slices a further front leg in similar fashion, and calls out "Look, I'm cutting off this front leg!" as it is being held by an assistant, who says in turn "Come on!" The last butcher, cutting off another front leg from a slaughtered cow, says "Hold it tight!" His command is aimed at the assistant



Butchering scenes, from the tomb of Ptahhotep I, in Saqqara.

behind him, who holds the animal's back legs. He, nevertheless, is busy watching the arrival of a high-ranking dignitary, to whom he calls "Look at this blood!" The dignitary is clad in a ceremonial kilt, and the accompanying titles indicate that he is the "overseer of the royal palace, purification priest and doctor, Irenakhti." He compliments the assistant, saying "How clean it is!" (referring to the blood).

Scenes like these were an entirely normal part of the funerary cult of rich dignitaries of the time. The scenes clearly show the haste involved in ensuring that the sacrifices were brought as soon as possible, so that the meat and the blood did not go bad.

Livestock, and in particular their slaughter, can be seen as one of the indicators of the rise and fall of the Old Kingdom. The period when a census of both large and small livestock was held was one of the most significant events in a given year. As an important part of the offering ritual, this slaughter was one of the main features of the ancient Egyptian economy, because when the offerings were divided up, most of the meat ended up in the pockets of the officials and priests as a significant component of their salaries. But as the number of state officials increased during the Old Kingdom, so it became more and more difficult for the state to ensure their pay. A figure from the papyrus archive of king Raneferef in Abusir appears to represent a significant performance. For a religious holiday in the Ptah temple at Memphis that lasted seventeen days, 221 heads of cattle were slaughtered. There is no need to point out that the ancient Egyptian calendar was full of holidays. And this is a reference to just one temple. Parallel to it the same if not far more extensive offerings were carried out in several dozens of other temples too. Was it any wonder, therefore, that the ancient Egyptian economy began to be overburdened, and that this, together with the above-mentioned developments in society, contributed to the growing crisis of the centralised state that appeared in full during the Sixth Dynasty?

The sun sets in the south



Offering table of Sankhuptah. It features all necessary elements for a safe afterlife: Sankhuptah's figure in a company of his two consorts and children, his name and titles, prayers for an undisturbed afterlife existence, receptacles for water and beer offerings, offering table, bread loaves, washing set and seven sacred oils table (MF).

During the Sixth Dynasty Egypt begins to exhaust its possibilities. The burden of continuity and the corresponding economic, political and cultural “obligations” became so heavy that the previously effective economic and administrative system slowly began to unravel. Creeping political crisis gradually began to be felt. This is the period about which we have probably the best information relating not only to Egyptian history itself, but also to the wider issues connected with the development of society in the third millennium BCE. During this troublesome time we find some new answers to questions concerning the meaning and essence of the functioning of the Egyptian state. This is also where the development of the non-royal tomb of the Old Kingdom period drew to a close. In parallel with this, there was a dynamic development of the country to the south of the capital containing opulent burial grounds for the local ruling elites. This indicates that the centre of development had moved in this direction. The decay of the centrally managed state, the blossoming of the provinces and of “provincial” culture(s), but also military conflicts and deep social and economic shocks that lasted for almost two centuries created the necessary conditions for the later rebirth and renewal of the ancient Egyptian state at the beginning of the twentieth century BCE.

At the beginning of the Sixth Dynasty, opulent tombs were still built, consisting of areas that served both cult purposes and for “communication” or storage. Often these were family tombs, containing several different cult chapels for various members. There were also family tombs for lower-ranking officials, constructed of cheap mud bricks and simple tombs that consisted of only one or two rooms. The residential burial grounds indicate that over the course of a single dynasty, lasting approximately 150 years, there was a movement away from magnificent tombs with luxurious superstructures to tombs in which the emphasis, as at the beginning of the third millennium BCE, was on the subterranean sectors. For security reasons, the burial areas took over to a large extent the decoration that was originally designed for the superstructure or easily-accessible parts of the tombs, which were also much more vulnerable to depredation. The preference was for an even more secure life in the netherworld, as the state continued to decline. Things were gradually coming full circle: the spirit of the First Dynasty was returning in part, and over the next two centuries Egypt would be drawing breath and gradually returning to its roots, its basic means of expression and power.

The Sixth Dynasty is traditionally seen as the closing phase of the Old Kingdom pyramid-builders. During this period, under the rule of Teti, Userkara, Pepy I, Merenra and Pepy II, several processes occurred. In particular, there was a loosening and finally, it seems, a crisis, of the central administration of the country, the base of the efficient tax system. The mechanism of shared executive power, which until then had been formally controlled by the king and administered by selected officials in line with his orders, began increasingly to fail as the officials gradually usurped power and became more and more independent. This appropriation of functions and offices was the result of the dignitaries’ strong economic positions, and the fact that offices which had originally been allotted by the ruler to capable individuals started to be inherited within powerful and influential families. The global climate change taking part around 2350–2200 BCE did not make the things any better. The Sixth Dynasty was, in short, an arena in which the last kings of the Old Kingdom battled with phenomena with which they were by no means able to handle.



Changes in the social standing of the individual officials proceeded slowly and almost unnoticed by the king. King's legitimacy and power eroded heavily during the Sixth Dynasty.

Teti and the harem conspiracy

The beginning of the Sixth Dynasty saw considerable social upheaval, of which we have only indirect evidence. The dynasty was founded by king Teti, of whose family origin we know almost nothing. He had a pyramid built in central Saqqara, with underground areas decorated by the *Pyramid Texts* – a disparate collection of magical and religious texts that were meant to ensure the ruler's ascension to the heavens and immortality, and to identify him with the highest gods in the ancient Egyptian pantheon. Teti, who probably ruled for as long as thirty years, had to face numerous problems at the start of his reign, above all the growth in the power of the highest-ranking officials. This was clearly the reason why he married off one of his daughters, princess Watetkhethor, to the dignitary Mereruka, whose tomb is among the most beautiful and most-visited monuments in the Saqqara necropolis. Under Teti's reign the tombs of some dignitaries from the royal court were destroyed. Thus it appears that the king took brisk steps to deal with the existing opposition. The end of his rule is shrouded in mystery. According to the ancient historian Herodotus, Teti was killed by his own bodyguard during a harem conspiracy.

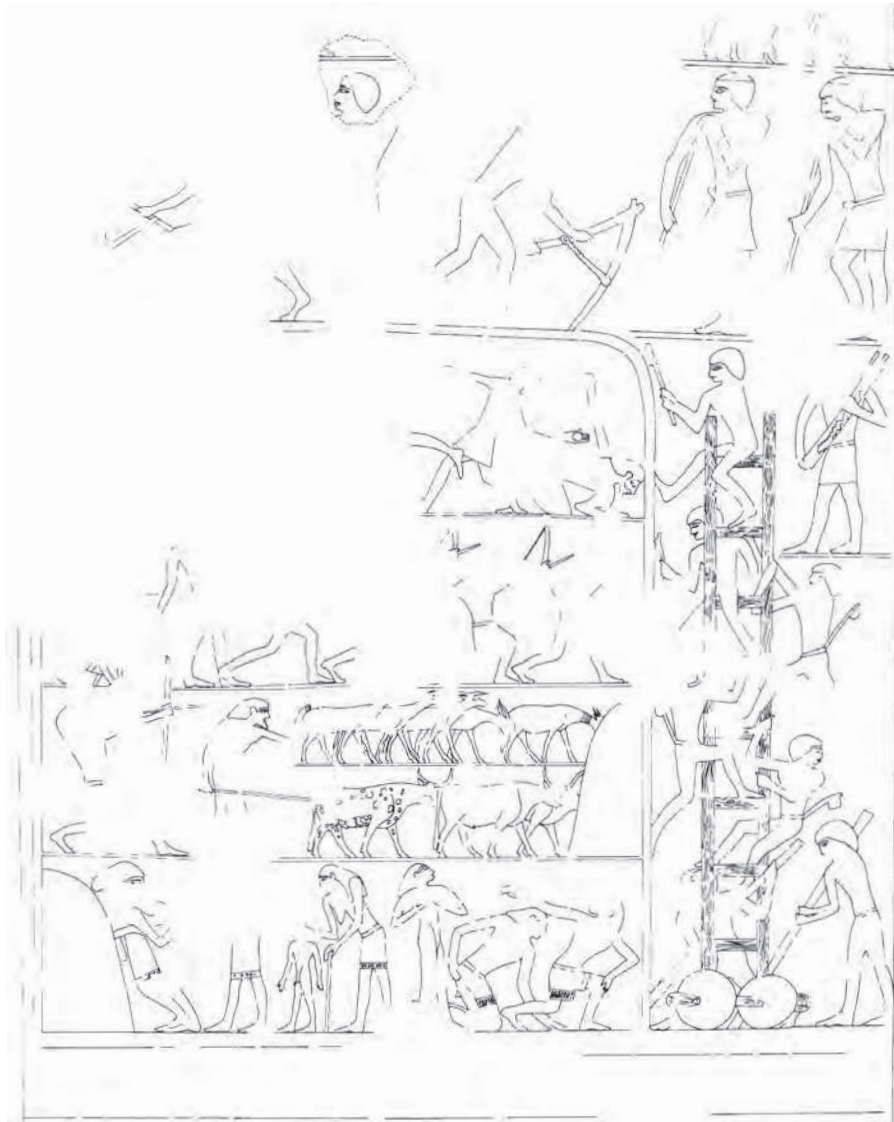
The last pharaohs

After Teti, Egypt was briefly ruled by Userkara. Unfortunately, we do not know the location of his pyramid complex. Moreover, given the short length of his rule, it seems he only had time to build the pyramid's basic platform, possibly in the Tebbet el-Guesh



Destroyed mortuary temple of the king Teti bears a silent testimony to a sad destiny of the Sixth Dynasty era.

area in southern Saqqara. His successor was Pepy I, the son of Teti and his wife Iput I. Pepy I's complex is situated in an area of southern Saqqara that is closed to tourists. The building must have been so splendid and remarkable when it was created that it was called *Men-nefer-Pepy* (Pepy's beauty is enduring). This name later came to be used for the then capital of Egypt, which at that time was further to the east of this burial ground. It was from later pronunciation of the shortened name *Mennefer* that the Greek



Tomb of Kaiemheset in Saqqara. The scene of besieging Asiatic town and a unique proof for a wheel use in the Old Kingdom.

name for the city – Memphis – arose. Pepy ruled for approximately 50 years, and his pyramid complex was surrounded by at least nine further complexes, in which his favourite wives and other significant members of the royal family were buried.

We also have information on the political system from the autobiographies of significant dignitaries, found in their tombs. An autobiographical inscription by Weni, an important dignitary from the period of Pepy I, contains one of the oldest known descriptions of the military campaign against the enemy Bedouins in the Syro-Palestinian region. The description is surprising for the unusual colour it provides, as well as its blunt description of the cruelty that accompanied this and similar campaigns:

*When His Majesty turned against the Asiatic Bedouin,
His Majesty summoned an army of several tens of thousands (of men)
from whole Upper Egypt, from Elephantine in the south
all the way to Medenit in Lower Egypt,
completely from the Two Sides of the House, from Sedjer and Khensedjeru,
of the Nubians of Irtjet, of the Nubians of Medja,
of the Nubians of Yamu, of the Nubians of Wawat,
of the Nubians of Kaau and from the land of Irtjet.*

His Majesty sent me at the head of this army...

*I was also the one who was in command,
as the messenger of the king, overseer of peasants,
because I was righteous.
No one touched his comrade,
no one stole a loaf or sandal from a pilgrim,
no one took hold of a skirt in any city,
none of them seized anyone's goat.
I led them from the Northern Island to the gate of Iibetep
in the nome of Horus, the Lord of Truth,
I assembled these troops,
that no servant (of the king) had ever compiled.*

*This army returned in peace,
having pillaged the Bedouin land.
This army returned in peace,
having trampled the Bedouin land.
This army returned in peace,
having destroyed its strongholds.
This army returned in peace,
having cut down its figs and its grapes
This army returned in peace,
having set all their houses on fire.
This army returned in peace,*

*having killed tens of thousands of troops, who were in it.
 This army returned in peace,
 having brought hence numerous files of captives.
 His Majesty praised me for it more than anything.*

Of course, Pepy I also had to cope with the growing independence of the officials, above all in the southern provinces. To ease the pressure, he decided to marry two sisters of a highly-placed dignitary from Abydos in Upper Egypt, and to make their brother, Djau, a vizier in charge of practically the whole administration of the country. The two women both had the same name, Ankhesenmeryra, and they became the mothers of two further kings.

After Pepy's death, the country was briefly ruled by his son, Merenra, who died very young. Merenra was succeeded by Pepy II, who was still a minor, so his mother,



Tomb of Mereruka in Saqqara, tomb's façade.

Ankhesenmeryra II, ruled as his regent. Having ascended the throne aged only 6, Pepy II went on to rule for an incredible 94 years. We have relatively little information about his rule: we know that he continued in the political traditions of his father, and that he had at least four wives. During his rule there was increasing unrest in the south of the country, where the Egyptian troops were no longer capable of securing the country's border as a result of growing economic and political problems. Pepy II's favourite shipbuilder, Anakhet, was killed on the banks of the Red Sea, together with his men, and a special expedition had to be sent to bring their bodies back to Egypt. In Nubia, too, high-ranking Egyptian dignitaries were killed. The centralised ancient Egyptian state was definitively breaking down, and royal power was waning.

The Sixth Dynasty is, however, paradoxically the period from which we have the most evidence regarding Egyptian military conquests beyond the country's borders, as if the declining state felt the need to make a formal, albeit simulated, display of strength. From this period we also have evidence that ancient Egyptian civilisation was acquainted with the principle of the wheel, although the country's dense network of irrigation canals for fields and orchards meant that it did not begin to use the wheel until it was introduced to military practice in the second millennium BCE. A relief from Kaiemheset's tomb in Saqqara features a scene showing the conquering of a fortified town in Palestine, in which the Egyptians are using a wheeled machine to bring down the fortifications.

Mereruka, owner of the largest tomb of the Sixth Dynasty

One of the best-known tombs of the Sixth Dynasty is situated in the very heart of Saqqara, in the immediate vicinity of Teti's pyramid. This is Mereruka's tomb, which features on all the tour operators' itineraries – at least for now. The tomb is visited daily by thousands of tourists, who with their breath, greasy fingers, large rucksacks and flouting of the ban on flash photography are contributing to its slow depredation.

Mereruka was one of the highest-placed men in the country, the king's father-in-law and one of the few men on whom pharaoh could rely. This is also clear from his titles, which make it straight that this was a man with almost unlimited power. In addition to being a vizier, he also held the following important state functions: overseer of both (i.e. Upper Egyptian and Lower Egyptian) treasuries, overseer of the six great courts (of justice), overseer of the royal scribes, overseer of both granaries, overseer of all the royal works, overseer of both chambers of adornment (i.e. jewellery), controller of kilts, chief of all the guards of the royal palace, scribe of the divine scrolls, supervisor of (royal) kilts, embalmer of Anubis, the only friend, the administrator of the royal complex called "Enduring are the places of Teti," keeper of the secrets of the divine words (i.e. of what was spoken by the king), and keeper of the secrets of the morning house. One could prolong this list and I believe that Mereruka's titles reveals quite a lot about his importance.

His tomb provides unique evidence of how ancient Egyptians imagined their after-death residences. The tomb, designed for Mereruka, his wife and his son Meriteti, is a maze of dozens of rooms and corridors. Most of them are covered in brilliantly



Tomb of Mereruka in Saqqara – scene of a hunt in the papyrus thicket.

executed scenes relating both to everyday life and the afterlife. The tomb's façade features an image of the vizier in which Mereruka is depicted standing, with a heavy, waving wig that falls to his shoulders, and wearing a ceremonial kilt that ends above the knee. In his left hand he holds a long staff, while in his right he holds a *keber* sceptre, a symbol of authority and supremacy. He has a heavy pectoral hanging around his chest. This simple yet impressive relief shows an official at the height of his power, a man with an athletic figure that leaves no one in doubt as to his vitality. The surrounding inscriptions strengthen this impression by listing his numerous high-ranking titles. At his feet stands the considerably smaller figure of his beloved wife, Seshseshet. She wears a long, tight dress, and in her right hand holds a lotus blossom, the symbol of rebirth, which she smells.

Immediately after entering the tomb we come across a unique depiction that was designed to emphasise that Mereruka's cult was tended to all year round. The tomb owner sits on a little stool with a cushion and is dressed in a kilt with the white sash of a lector priest draped across his left shoulder and chest. He has writing implements hanging from his right shoulder, and in front of him there are personifications of the three seasons of the year.

In the entrance hall Mereruka is carved hunting hippopotami in a papyrus thicket. From the entrance hall corridors lead to two different parts of the tomb. One of the rooms is dominated by a long scene showing tax inspectors, a very uncommon representation. On the far left we see a porch supported by two wooden columns with lotus capitals. The main character is the "overseer of the royal scribes, keeper of the secrets of the office of the royal palace, Ihy." His figure has largely been destroyed, but



Tomb of Mereruka in Saqqara – merciless tax collection.

it is still possible to distinguish the large representation, which was the usual artistic method of indicating superior status. He is dressed in a long kilt reaching to his ankles, and on his lap he has a large papyrus scroll. At his feet he has writing implements and a container of water for dipping his pen into. In front of him are two smaller male figures – scribes who are making careful notes on unrolled papyrus scrolls. They have several spare reed pens behind their ears. The men are named: the royal scribe, Qar and the steward, Khnumankh. While these three men are working in the shade of the porch, the others are not so lucky. From the right, three figures approach the scribes, bowing. They are the administrators of the estates and supervisors of the royal scribes, Mereri and Uhem, and the scribe Gefgef. The situation becomes more dramatic, since behind them, in a pressed kilt and carrying a staff, the estate administrator and head of the scribes of the fields, Nedjemib, now arrives. He has his left hand around the neck of an unlucky farmer who clearly has not paid the assessed amount of harvest tax. Behind them comes another inspector who is about to beat the poor man over the back with a stick as he is being dragged along. There then follow another two inspectors with two additional tax evaders. At the end, there is a very vivid scene showing one of them being punished. The offender is squatting, naked, by a pole, while one of the bailiffs, named Ptahshepses, the administrator of the estate and overseer of the scribes of the fields, holds him by the arms and shouts “Beat him with the stick!” To the left and right are two further men with raised sticks.

One of the tomb’s central cult places is a huge courtyard, the ceiling of which is supported by four stone pillars. Its focal point is a large niche in the northern wall, hiding a life-sized statue of Mereruka. He looks down on visitors from a height of almost a metre, and commands well-deserved respect. The niche was originally closed off by a wooden double door. In front of it is an altar, to which no doubt abundant offerings were brought for the spirit of the dead vizier. The walls of the room are covered with scenes depicting Mereruka accompanied by his two sons, boat trips to the religious centres of Egypt, Mereruka’s burial, agricultural work and the favourite pastimes of the courtiers of the time, such as dancing and board games.

The main cult place, however, was the large east-west oriented chapel immediately behind the courtyard, in which the scenes mostly show endless processions of sacrifice-bearers, and personifications of funerary estates.



Mereruka's burial chamber is one of the largest ones of its kind.

A shaft, almost 15 metres deep, leads into the underground part of the tomb under the surface of the terrain. Its bottom is connected with the burial chamber by a small corridor leading west. The dimensions of the chamber, $9.90 \times 4.30 \times 3.0$ m, make it one of the largest in the Old Kingdom. Its western part is totally filled by a north-south oriented limestone sarcophagus, with a wide ramp leading to its lid. The walls of the chamber are vividly decorated with paintings on plaster, which depict the offerings essential to Mereruka's afterlife existence, as well as granaries. Offering formulas are naturally also included. This is, without doubt, the best-decorated burial chamber of a dignitary's tomb from the Old Kingdom, and it is thus probably a good thing that it is closed to ordinary visitors.

The mystery of the vizier Qar and the punishment of his sons

The development of the tomb from Teti to Pepy II is particularly well reflected by the tomb complex belonging to the vizier Qar and his family, discovered by the Czech expedition in 1995 and still being explored today. In subsequent years not only the decorated and perfectly preserved chapels of members of his family were discovered, but also burial chambers with grave goods virtually intact.

The complex consists of a large open courtyard, from which one enters Qar's tomb as well as the chapels of several of his sons. The actual tomb comprises two chapels connected by a long corridor. To the west of them is another corridor chapel with six further cult places, and corresponding burial shafts for the lesser members of the family. Qar's first chapel is undecorated, with the exception of the monolithic false



Vizier Qar seated at the offering table watching his three sons bringing haunches of meat as offerings (MF).



False door of Qar (MF).

door. The inscriptions on the door indicate that Qar originally served as a judge. Towards the end of his life, however, he was unexpectedly promoted to the office of vizier, and his tomb was enlarged to include a vizier's chapel, reflecting his newly-gained position. The chapel's ceiling, almost four metres high, consisted of large limestone slabs, which had to be removed during our team's excavation in order to work inside the chapel without any danger. Its walls were completely preserved and the western one was taken up wholly by a huge false door. In the entrance to this cult room are depictions of servants bringing offering animals – gazelles and livestock. The walls of the chapel are almost completely covered with reliefs showing long rows of priests and bearers carrying grave goods and offerings for the dead owner. They include butchers, who are depicted at work, slaughtering and cutting up the animals with large stone knives. In the registers under the ceiling of the chapel there are pictures of various offerings and grave goods, mostly food, stone and ceramic vessels, furniture, various implements and so on. In the western part of the chapel the vizier Qar can be seen twice, reviewing the procession of the bearers with an enthusiastic gaze. Immediately in front of him are his sons, each of whom is labelled with his name – Qar, Senedjemib, Inti and Tjenti – with their most important titles.

The entrance to the vizier's burial chamber is situated in the open courtyard. From here, a descending corridor (only 1 m high and 1 m wide) leads into the burial chamber, deep under the ground. At its end is a spacious burial chamber with a huge limestone sarcophagus, weighing several tonnes. The chamber and the sarcophagus were both plundered, however, and the only thing that remained of the grave goods was a wooden comb. The walls were originally covered with decoration painted on plaster, but only a few fragments remain.

During further exploration, several smaller tombs, belonging to Qar's sons, were found to the north of his complex. Remarkably, however, they had all been deliberately destroyed. With the exception of a few small blocks, all the decoration in the chapels had been broken into fragments of various sizes, which had been left just as they were when they were destroyed. Why did this happen? What might have motivated someone to come and, undoubtedly expending considerable energy in the process, destroy the tombs of several members of Qar's family, leaving the vizier's tomb untouched? It seems that Qar was probably on the right side of the power elite in the court of the ancient Egyptian king. However, some of his sons may have unsuccessfully conspired against the ruler. As a result, an order may have been given to destroy these sons' tombs, in order to prevent them from having an after-death existence.

The singer of the oldest love song in the world

Exploration of this area of Abusir continued until the year 2000 to the south of the vizier's complex. Under the surface of the desert a remarkably well-preserved complex belonging to Qar's favourite son, Inti, was found. First the entrance area to a mud brick tomb was uncovered, the entrance being preserved in its total height of several metres, and cased with high-quality limestone blocks. On both sides of the entrance into the courtyard are two figures of the official in fine sunk relief, standing



Façade of the tomb of Inti (KV).

opposite each other, with a long autobiographical inscription. They are accompanied by the figures of his two sons, Ankhemtjenenet and Senedjemib, members of the third generation of Qar's family. In front of this decorated façade there stood originally four obelisks, symbols of the sun god Ra, one of the most-worshipped ancient Egyptian gods.

Behind this entrance lay a smallish courtyard paved with large limestone slabs, from which one entered the cult chapel. The chapel was richly decorated and had a false door in its western wall. The monolithic limestone stela was painted red in order to imitate Aswan red granite, a valuable building stone. The inscriptions on the false door contained offering formulas, titles and the name of the owner. This has allowed us to partially reconstruct Inti's career: he was active as a priest, judge and a member of the high court in the king's palace. The decoration on the walls of the chapel was, however, even more beautiful and more finely executed than that of his father. It depicts Inti receiving a procession of dignitaries and offering bearers. At his feet kneels his wife Merut, and under his chair stands a dwarf holding Inti's favourite dog, Idjem, on a lead. Inti himself is wearing a dazzling white kilt, and on his chest he has a wide, finely worked necklace. He is also wearing a carefully-curved wig. Inti's face is evidence that he was highly demanding as far as the quality of work produced was concerned. It can still be seen today that the craftsman who modelled Inti's face had to chisel his brow three times before he achieved the desired shape. The owners of ancient Egyptian tombs personally supervised the work of the builders and the craftsmen responsible for the decoration, as is clear from several scenes from other



Musicians and the love song from the tomb of Inti (MF).

tombs of the same period. These show tomb owners carried in a carrying chair by servants, monitoring the state of the construction of their tombs. The north wall of Inti's chapel hid a surprise, concealed within a seemingly very commonplace scene. It consists of two couples comprising a harpist and singer, in both cases facing each other. The two harpists both have knee-length kilts, and their harps rest on their left shoulders while they are playing the melody with both hands. The singers have their right hands to their ears, as if they were listening, while with their left hands they beat time. The scene is completed by a two-line inscription that is interpreted by, Břetislav Vachala. The first line appear as to be some sort of meaningless melodic chant, which probably went "haa tjeeraa." The second line can be translated as "I love, being bewitched by your beauty," which seems to be the start of a love song addressed to Inti's beloved wife Merut. As yet, no older evidence of a love song has been found, and so it appears that the Czech expedition has found another first: the oldest love song in the world.

The greatest surprise, however, was yet to come. After several weeks of dangerous work in a shaft 22 m deep, situated close to Inti's chapel, we managed to reach his burial chamber. Even as we were clearing the shaft it became apparent that the burial chamber had not been plundered after it was closed off and the shaft filled in. This was clear from the fact that at various levels of the shaft we found the offerings that had accompanied its ritual closing. They included alabaster vessels, pottery and an altar. To the west of the bottom of the shaft was the actual burial chamber. Along its western wall stood a huge, 3 m long and 2 m high limestone sarcophagus, bearing Inti's name

and title. On and around the sarcophagus were further grave goods, such as ceramic vessels, copper implements and miniature stone vessels. In front of the sarcophagus, on its eastern side, stood a stela in the shape of a false door, a truly unique object for archaeologists dealing with the period of the pyramid builders. By all appearances it was the symbolic gate through which the dead person entered the underworld.

During the actual documentation of the chamber, however, it became clear that the sarcophagus had been plundered. The ancient Egyptian workers who were meant to be in charge of Inti's burial had evidently broken into the already-closed sarcophagus at an unguarded moment and robbed the dead person's mummy of amulets and other personal items. Therefore, Inti's bones were strewn all over the room, and were even found on the lid of the sarcophagus together with several dozen miniature alabaster vessels. This must have occurred some time between the laying of the body to rest, with the grave goods, and the filling in of the entrance shaft. On the basis of modern-day parallels, it is possible to estimate that five adult men would have taken several days to fill in this shaft.

During the same year, the Czech expedition also discovered the tomb of the vizier Qar's eldest son. His burial chamber lay 16 m under the surface of the desert, with a short connecting corridor leading to it from the bottom of the shaft. We found its content surprising in many ways. In the southeastern corner of the chamber, over an area of several square metres, there were large two-handled amphorae with flat bottoms. It gradually became apparent that they were probably faithful copies of the amphorae in which high-quality Syro-Palestinian wine was imported into Egypt. This much sought-after and valuable wine came from an area that now forms part of the Levant, and was imported for the royal court and the country's highest officials. Why did Qar have copies? Probably because it was more economical solution to emulate and express his high status and preserve it for the afterlife existence by this way. Moreover, in the ancient Egyptians' symbolic concept of the afterlife these vessels were all equal.

In the opposite corner was a pile of dozens of small copper implements, which were meant to be part of the grave goods of the dead person in the other world. Next to them were bones from sacrificed cattle. Further to the west, on the floor of the chamber, we found numerous small stone vessels and tools. Some of them were designed for the symbolic ritual of "opening the mouth," in which the mummy of the dead person was brought to life during the funeral ceremony in preparation for eternal life in the afterlife. Along the western wall of the funeral chamber a pit had been hewn into the rock, in which the body had been placed and later covered with large limestone slabs. As with Inti, however, the body had also been plundered and then strewn around.

The most recent progress in the investigation of Qar's family was made in autumn 2001, when another 16 m deep shaft was discovered. To the south of its bottom there was a burial chamber with a huge stone sarcophagus and the mummy of another of Qar's sons, Senedjemib. Some of the grave goods were also found, including several alabaster vessels, further stone vessels, copper tools, stone headrests and a fantastically well-preserved sacrificial tablet for seven sacred oils. At the head of the sarcophagus were several beer jars, filled with Nile mud. The mud was meant to give the impression of rebirth and the afterlife, since it was in the black and fertile Nile mud that new life was born and the harvest grew each year after the inundation.



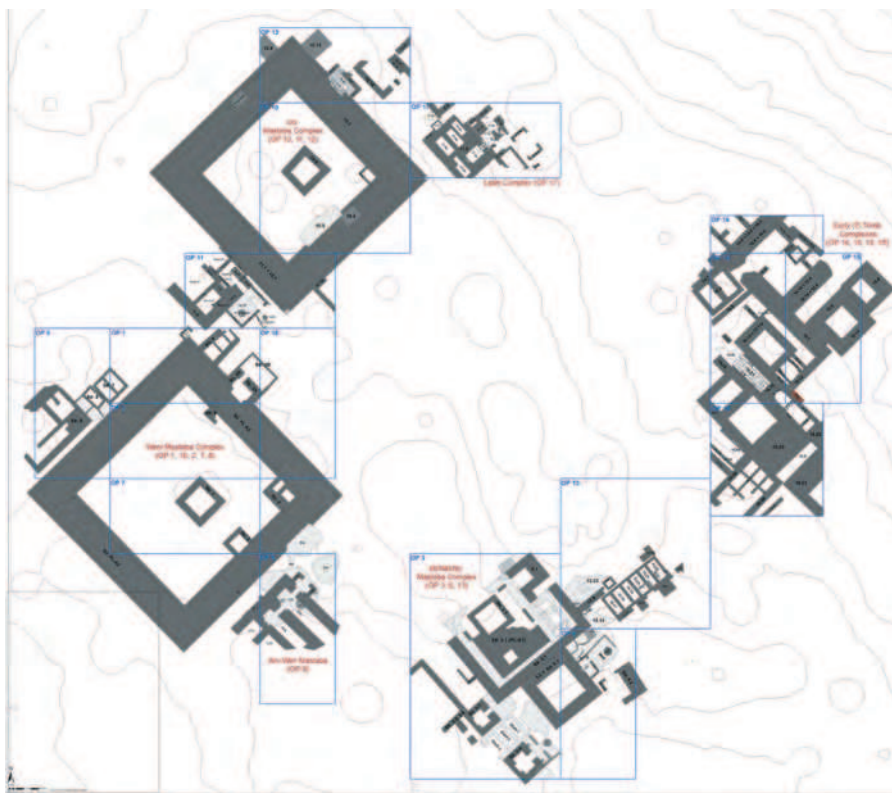
Copper tools from the tomb of Qar Junior (KV).

Self-made men from the provinces

The Sixth Dynasty was also a period of dynamic development in the provinces, as shown in particular by the growing independence of the provincial administrators. A good example is that of Weni from Abydos, one of the best-known non-royal figures of the Sixth Dynasty. In addition to his tomb, which was not discovered until 1999, he also left an extensive autobiographical inscription, in which he does not hesitate to boast about his many achievements. We are thus able to form a relatively vivid picture not only of the man himself, but of the time in which he lived. From the inscription, of which I shall quote only the most important parts, it emerges that Weni began his career at court under the rule of Teti, and it culminated under Pepy I and Merenra. The inscription suggests that he was aware of his personal qualities and did not hesitate to make that clear:

*‘[It was a youth] who tied the headband under Teti,
when my office was that of overseer of the storeroom,
and then I became supervisor of the kbenty-she of the Great House.
[It was...] lector priest and elder of the palace under Pepy (I);
his majesty promoted me to the office of companion and supervisor of priests
of his pyramid town when I held the office of...*

*His [majesty promoted me] to judge and mouth of Nekhen,
 as he preferred me to any of his servants.
 I heard cases alone (just) with the vizier relating to all secret matters;
 I acted in the king's name for the royal harem and for the six great mansions
 because his majesty preferred me to any of his officials, his nobles, or servants...
 When there was a legal case in secret of the royal harem
 against the royal wife, the "great of affection",
 his majesty had me proceed to hear it on my own.
 No vizier or official was present apart from myself,
 because I was excellent, I was rooted in his heart,
 and his heart was full of me.
 I alone, together with (just) one other judge and mouth of
 Nekhen put it down in writing...
 (Strudwick 2005, 353, No. 256)*



The cemetery of Weni at Abydos (Map by G. F. Compton and T. Landvatter for the Abydos Middle Cemetery Project. Used with permission).

Towards the end of his life, under the rule of king Merenra, Weni also became the overseer of Upper Egypt, which was the high point of his career. The extensive autobiographical inscription indicates that he led a military campaign to Nubia and also against the Asian Bedouins, and that as the king's confidante he was in charge of an interrogation of the queen, who took part in a harem conspiracy against Pepy I. In the text he emphasises that neither the vizier of the time nor the chief of justice took part in the interrogation except for himself. In addition, he was in charge of deepening of canals in the southern part of the country, and organised an expedition in search of minerals.

Although he undoubtedly achieved a high position within the court, and would have been able to build himself a tomb in the royal burial ground in Saqqara or Abusir, he nevertheless preferred to return to Upper Egypt, to Abydos, from whence he came and where his father Iuu, also a vizier, was also buried. Weni was even assisted in this by the king, who saw to it that he was sent a sarcophagus of fine Tura limestone there.

...in the great court boat, with a lid too, an entrance [to the tomb, consisting of a] lintel and two jambs, and a sacrificial altar. Never before had this been done for any servant – because I was the favourite in the heart of His Majesty.

The reasons that led him to build his tomb in the place of his origin were various, but in doing so he demonstrated his origin and his legitimate right to the property that his family had undoubtedly owned in the area. It was not only an emotional gesture but also a carefully-considered political one, which would have important ramifications for the future of his family. And the king had no choice but to respect this.

The superstructure of Weni's tomb consisted of an imposing brick-built square perimeter wall, with sides 30 m long and 3.5 m wide. Even today, it reaches a height of 5 m. The architect first had a huge pit dug, in which he built a burial chamber and a shaft leading into it. He then had everything covered in sand. Next he built the perimeter wall, a serdab in the inner southeastern corner, and another shaft to the south, on the axis of the main burial shaft. Around the mouth of the burial shaft hundreds of beer jugs from the Sixth Dynasty were found. They show that Weni was a truly exceptional individual, whose burial and subsequent cult was of great importance and deserved an appropriate mortuary cult. After he finished his tomb, he was also unexpectedly promoted to the office of vizier, and so a new false door had to be put in the northern wall in order to reflect this new status, as well as his new name, Nefernakhetmeryra – "Beautiful/good is the strength of Meryra (i.e., of king Merenra). American researchers in this area, led by Janet Richards from the University of Michigan, managed to find the tomb of the vizier Iuu, Weni's father. One fragmentary scene shows Iuu receiving a sacrifice from Weni "the elder," Iuu's son, and Weni "the younger," Weni's son.

The cult chapel of Weni adjoined the eastern wall of the tomb, and comprised one offering room and an anteroom. In front of the entrance to the tomb were two obelisks, and on the wall was the significant autobiographical inscription mentioned above. Weni's burial chamber was found 14 metres under the surface of the desert,

and half of its area was taken up by a stone sarcophagus. His chamber, cased with limestone blocks, was originally decorated, but after the end of the Old Kingdom someone set fire to it and in order to strengthen the blaze, poured oil over the walls, destroying everything. Nevertheless, Weni's tomb and the surrounding burial places of his family members provide an illustration of what was so characteristic of the decline of the Old Kingdom – the crumbling of power into small pieces, the erosion of state authority and the regionalisation of development, resulting in the growing independence of influential local families.

The adventurers of Aswan

Similar developments can be observed in Aswan, where the families of the local administrators of the border area had rock tombs built on the western bank of the Nile, in the burial ground of Qubbet el-Hawa. Towards the end of the Old Kingdom a total of seventeen rock-cut tombs were built here. Most of them have a similar structure to the royal pyramid complexes of the Old Kingdom: a staircase with a ramp along which the sarcophagus could be dragged in the middle, connecting the landing place with the actual tomb higher up the hill (a kind of equivalent to the valley temple and the causeway). The tomb begins with a large open courtyard (the equivalent of the temple courtyard) from which one enters the rock-cut tomb, usually divided inside by several rows of stone pillars (the equivalent of the inner part of the funerary temple). In the western wall is a niche with a false door for the tomb owner (the equivalent of the cult chapel). The burial chamber is usually accessed via a shaft or a descending corridor hewn out of the floor of the cult room.



The cemetery of Qubbet el-Hawa.

One of the oldest and most remarkable tombs belongs to Harkhuf, who was in the state service under Pepy II. From his autobiographical inscription we know what an adventurous, and often risky, life he led. The long inscription first states that Harkhuf lived an orderly and just life, observed the principles of Maat and was god-fearing. The main part is devoted to a description of his abilities, as shown during several military and commercial expeditions to Nubia, and the way in which he was praised for them each time by the king.

The sacrifice brought by the king and Anubis, who resides on his mountain, the shrine, in the place of embalming, the lord of the necropolis. May he be buried in the burial ground in the Western Desert, at a great age, provided for by the Great God! ... Count, administrator of Upper Egypt, bearer of the seal of the king of Lower Egypt, the unique friend, lector priest, administrator of the caravans (expeditions), protected by Ptahsokar, Harkhuf...

The offering brought by the king and Osiris, the lord of Djedu. May he walk in peace along the holy paths of the west, as one provided for! May he ascend to the god, the Lord of the Heaven, provided for [by the god, the Lord of the Heaven! Count, chamberlain] guardian of Nekhen, mayor of Nekheb, unique friend, lector priest, provided for by Osiris, Harkhuf ...

*I came from (my) city
I came down from (my) region.
I built a house and erected (its) gates,
I dug a lake and planted a fig tree.
The king praised me.
My father made a will in my favour.
I was distinguished ...
 loved by my father and praised by my mother,
 the one who is loved by his brothers.
I gave bread to the hungry and clothes to the naked;
I brought a man with no boat to dry land.
O you, who live on earth,
[when you pass by this tomb] to the north and south
 and say: a thousand loaves and jars of beer
 for the owner of this tomb –
I will take care of you in this cemetery!
I am a distinguished, blessed spirit,
a lector priest, who knows what he should say!
Anyone who enters this tomb [unclean,
 I shall seize by the] throat like a bird
and he shall be tried by the Great God for it!
I am the one who speaks beautifully and repeats well.
I have never said anything evil about anyone to the powerful one,
 since I wished to be on good terms with the Great God.*

*Never [have I passed judgment between two people in such a way]
as to deprive a son of his father's property...*

His Majesty, Merenra, my lord, sent me together with my father, the unique friend and lector priest Iry, to Yam, that I might explore the way to this foreign land. I did so in seven months, and brought back beautiful and rare gifts of all kinds, for which I was very much praised.

His Majesty sent me alone a second time. I set out on the Elephantine route and passed through Iret with a minor journey to the desert areas of Terres and Irtjet, which took eight months. I returned and brought back from this foreign land many gifts, such as had never been brought to this country before.

I passed through the region of the lord of Satju and Irtjet, and explored these foreign lands. I found that this had never before been done by any friend (of the king) and administrator of the caravans (expeditions) who had gone to Yam before me.

Then His Majesty sent me to Yam a third time. I set out from the nome of Thinis on the road (leading to the) oasis (of Kharga). I found that the ruler of Yam had (meanwhile) gone off to the land of Tjemeh, to dash Tjemeh at [?] the western edge of heaven. And so I set off after him to the land of Tjemeh, and calmed him, so that he praised all the gods for the (Egyptian) ruler.

[And I sent a message with a man from Yam in the services] of the guide (Hor) in order to tell His Majesty Merenra, my lord [that I had gone to the land of Tjemeh to support the ruler of Yam.

When I had satisfied the ruler of Yam [I successfully reached a place that is] to the south of Irtjet and to the west of Satju. And I met the ruler of the coalition of Irtjet, Satju and Wawat, and then when I arrived with three hundred donkeys loaded with incense, ebony, oil,



Harkhuf and his biographic inscription on the façade of his tomb.

aromatic substances, leopard skins, elephants' tusks, wooden spears and all kinds of beautiful things. And when the ruler of Irtjet, Satju and Wawat saw the strong and numerous troops from Yam with which I came to (his) residence, and the troops with which I had been sent, this ruler accompanied me, gave me cattle and goats and took me along the mountain paths of Irtjet, for my alertness was more remarkable than that of any other friend (of the king) and administrator of the caravans (expeditions) than had ever been sent to Yam before.

Now, when as a loyal servant I travelled north by boat to the residence, (a count) was sent to meet me, the only friend and administrator of both slaughterhouses, Khuni, with a boat laden with date wine, cakes, bread and beer.

Count, bearer of the seal of the king of Lower Egypt, only friend, lector priest, guardian of the divine seal, secretary of the orders, one who is provided for, Harkbuf.

The seal of the king himself, the second regnal year, the third month of inundation, the fifteenth day.

The king's decree (issued to) the only friend, lector priest, administrator of the caravans (expeditions) Harkbuf:

Notice has been taken of the contents of your letter, which you wrote to the king in his palace, that he might know that you had safely descended (into the Nile valley) with your troops from Yam. In your letter you said that you had brought back large and beautiful presents of all kinds, which were provided by Hathor, Lady of Yam, to the spirit of the King of Upper and Lower Egypt Neferkare, living for eternity. In your letter you also said that you had brought back large and beautiful gifts of all kinds, provided by Hathor, Lady of Yam, to the spirit of the King of Upper and Lower Egypt Neferkare, living for eternity. (You also) said that you had brought from the lands of the inhabitants of the horizon a dwarf (who performs) divine dances, similar to that which was brought from Punt in the time of Isesi by the guardian of the divine seal Bawerdjed. You told My Majesty that no one who had visited Yam had yet brought back anything similar. You certainly know how to do what your master wishes and praises. You certainly spend days and nights fulfilling what your master desires, praises and commands. His Majesty will ensure many splendid honours for you, which will benefit the sons of your son for ages to come, so that all people will say, when they hear what My Majesty has done for you: What did Harkbuf, the unique friend, receive when he descended from Yam, as a result of the care with which he did what his master wished, praised and ordered.

Go immediately downstream to the royal seat. Hurry, and bring with you the dwarf from the land of the inhabitants of the horizon, alive, fresh and healthy, so that [he may perform] the divine dances, cheer and gladden the thoughts of the king of Upper and Lower Egypt Neferkare, living for eternity. When he gets into the boat with you, choose reliable people to stay on each side of him. Take care that he does not fall into the water! When he sleeps at night, choose reliable people to sleep next to him in his cabin. Check on him ten times a night. My Majesty is keen to see this dwarf more than (all) the gifts of the land of mines and the Punt.

If you reach the royal seat with this dwarf, alive, fresh and healthy, My Majesty will do more for you than what was done for the guardian of the royal seal Bawerdjed in the times of Isesi. So very keen is My Majesty to see this dwarf!

Orders have been given to the administrators of the new cities, the friends (of the king) and to the chief priest, to ensure personally (during the journey) that you have supplies from all the warehouses and all the temples without exception.

This text reveals characteristic attitudes of this final closing period of the Old Kingdom. Harkhuf emphasises his origin and that in his province he took care to observe the law and to help the poor, which was expected from a man of his position. He also points to his standing within his own family, thanks to which he had undoubtedly obtained his office. Moreover, he had behaved in accordance with moral norms, respected his father and mother and had taken care to maintain good relations with his brothers. Finally, an important part of the text is devoted to the protection of his own tomb and the promise that in the other world he will act for the benefit of his family members, as long as they do not stop showing him due respect. And, of course, he does not fail to emphasize his own piety and abilities.

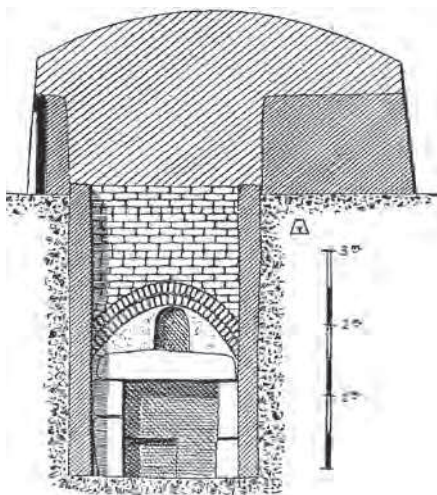
When he returned from his expedition to Punt, the young king Pepy II sent him a letter which was so important that Harkhuf had it copied on to the wall of his tomb. From it we learn of the king's promises – that if Harkhuf fulfils his duties and brings a dwarf to the palace for him, he will receive many honours and privileges, not only for him but for his descendants. Would king Khufu or Neferikara have ever done something like this?

The last of the Mohicans

The sad fate of the tombs in the Memphis necropolis stands in sharp contrast to the boom in non-royal architecture in the provinces. Southern Saqqara and its deserted plains carefully guard their secrets, many as yet unrevealed. They provide a silent testimony to the last years of the falling empire. Among the ceaseless dunes of sand are tombs of dignitaries from the end of the reign of Pepy II, once explored and now lost again. These were the true last Mohicans of the glorious Old Kingdom, and the Pharaoh's last loyal men.

These tombs are concentrated in two areas – to the east (Cemetery M) and to the north of the complex of Pepy II. Their architecture continues to show some of the typical characteristics related to development from the second half of the Fifth Dynasty to the start of the Sixth, such as the concept of the family tomb with an open (although now small) courtyard for cult gatherings in which the bereaved honoured the memory of the deceased, and decorated burial chambers. Nevertheless, most of the tombs were built rapidly, superficially and above all economically. They attest to the declining power of the central administration and thus of the courtiers who represented the central state administration of Pepy II.

One good example is tomb “N V,” which belonged to a vizier called Pery, who also bore the titles of bearer of the king's seal and overseer of Upper Egypt. His small tomb had an almost square ground plan, and its superstructure consisted of a mud brick casing filled with building rubble. At the base of the northern wall was the mouth of a descending corridor which led to a decorated burial chamber, lined with limestone blocks. In front of the eastern façade were two rooms – an entrance courtyard with a pillar in the middle, and a chapel oriented towards the northeast, divided by seven pillars and with an altar in the middle. The chapel was originally decorated with reliefs, and parts of a statue of the tomb owner were found here. Although this belonged to a man who was one of the highest officials in the state, its form and execution stand in sharp contrast with previous developments.



One of the small tombs in the cemetery of Pepy II in South Saqqara.

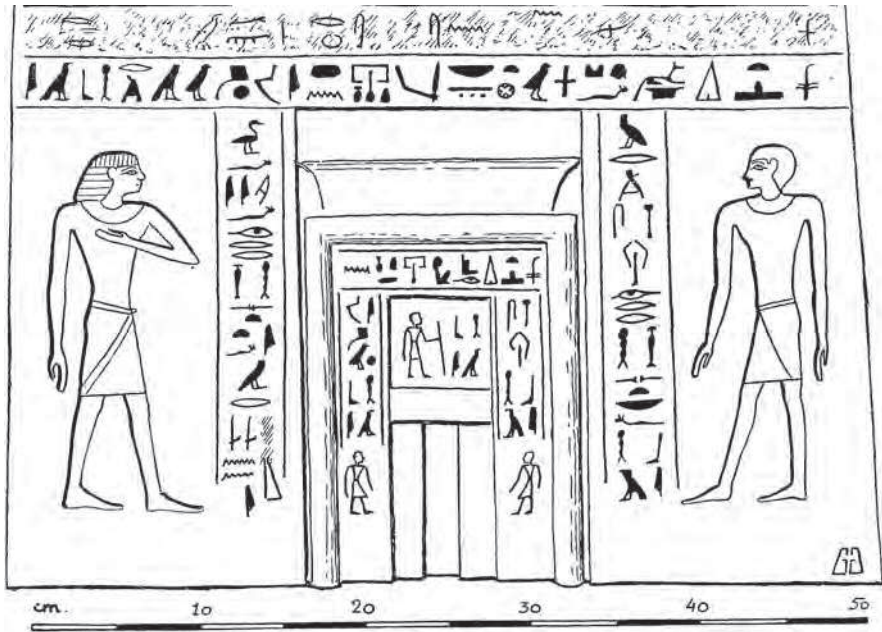
Very often these tombs take the shape of rounded boxes, and appear to be real mastabas, with two niches in the eastern wall for false doors made of limestone and an offering altar. From the top of the tomb a shaft leads to a decorated burial chamber cased with limestone blocks. In addition, there is another variation of the above-ground part of the tomb including both the whole superstructure, the chapel and its decoration, and false doors, known as

“*stèles maison*,” smaller versions of the tombs described above which were clearly a result of the pressing shortage of funds being experienced by lower-ranking court officials. They were small limestone stelae, with ground plans measuring approximately 50 x 30 cm and about 50 cm high, with a rounded top. Their front wall was decorated, while a false door formed the central part. To the left and right of this the owner of the tomb is depicted standing and sitting at a table with offerings.

During this period there was no longer any connection between the position of a dignitary and the appearance and design of the superstructure of his tomb. A good example belongs to the dignitary Shy, from which a shaft led into an exquisitely decorated burial chamber built of limestone blocks. The side walls of his chamber were beautifully decorated with preserved polychromy, while the ceiling imitated red Aswan granite. The western wall of the chamber was decorated by pictures of large grain silos and the long north and south walls were covered with long bands depicting offerings. In the middle of these two walls was a painting of a beautifully decorated false door. The eastern wall was covered by a list of offerings with ninety-seven items, with food including meat, drinks, wine, poultry, various kinds of bread and cakes, and cosmetic and cult implements. The list ends with an offering of cool water and a wish that prayers be recited for the administrator of the estate and unique friend (of the king), Shy. The rest of the area is covered by naturalistic depictions of offerings – jugs of beer, meat, domestic poultry, fruit and vegetables.

The western wall is largely covered by a list of various kinds of linen and their amounts (134, 435 [cubits?] of *maa* linen, 43,750 pieces of *sekbentiu* linen and a mere 25,725 pieces of *batu* linen...). There are also other items essential to the afterlife, such as green and black eye makeup, stone vessels with seven sacred oils, necklaces, a headrest and writing tools, kilts and vessels for ritual purification.

Not long after the end of Pepy II's reign, Egypt entered an approximately two-hundred-year period of deep social change, dominated by regionalisation, local

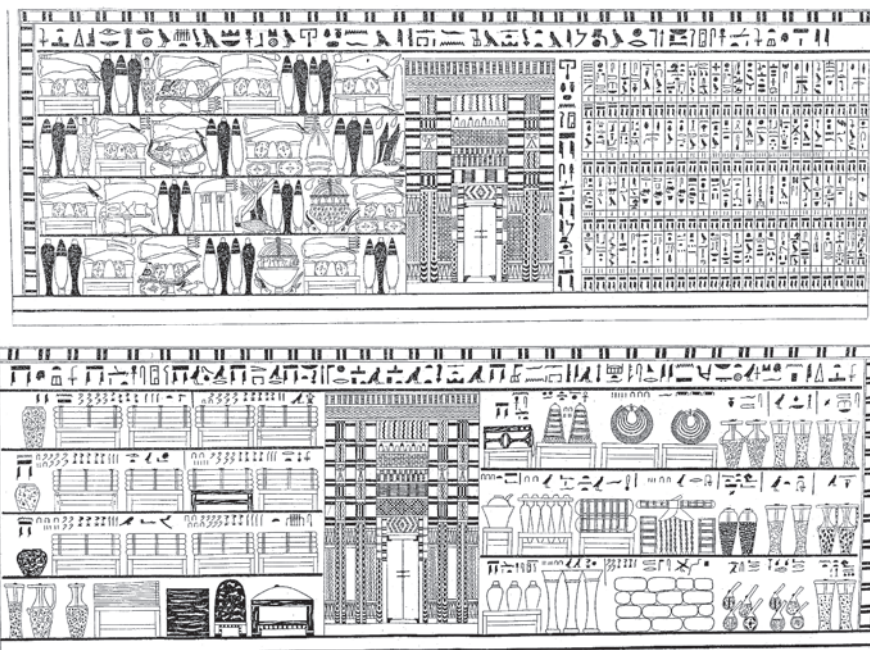


Stèle-maison of the official Hebai.

development and power struggles between provincial dignitaries. An illustration is provided by this description, known as the Admonitions of Ipuwer: it describes the conditions that prevailed in Egypt after the Old Kingdom period:

*The serf becomes an owner of serfs.
 Lo, [scribes] are slain,
 Their writings stolen,
 Woe is me for the grief of this time!
 Lo, the scribes of the land-register,
 Their books are destroyed,
 The grain of Egypt is "I go-get-it."
 Lo, the laws of the chamber are thrown out,
 Men walk on them in the streets...
 Lo, those who were entombed are cast on high ground,
 Embalmer's secrets are thrown away...
 He, who could not make a coffin owns a tomb,
 See, those who owned tombs are cast on high ground,
 He who could not make a grave owns a treasury.
 (Lichtheim 1975, 157)*

There follows hunger, confusion and lawlessness, exacerbated by the relatively low level of annual floods. It will be almost two centuries before conditions become ripe



Shy's coffin decoration.

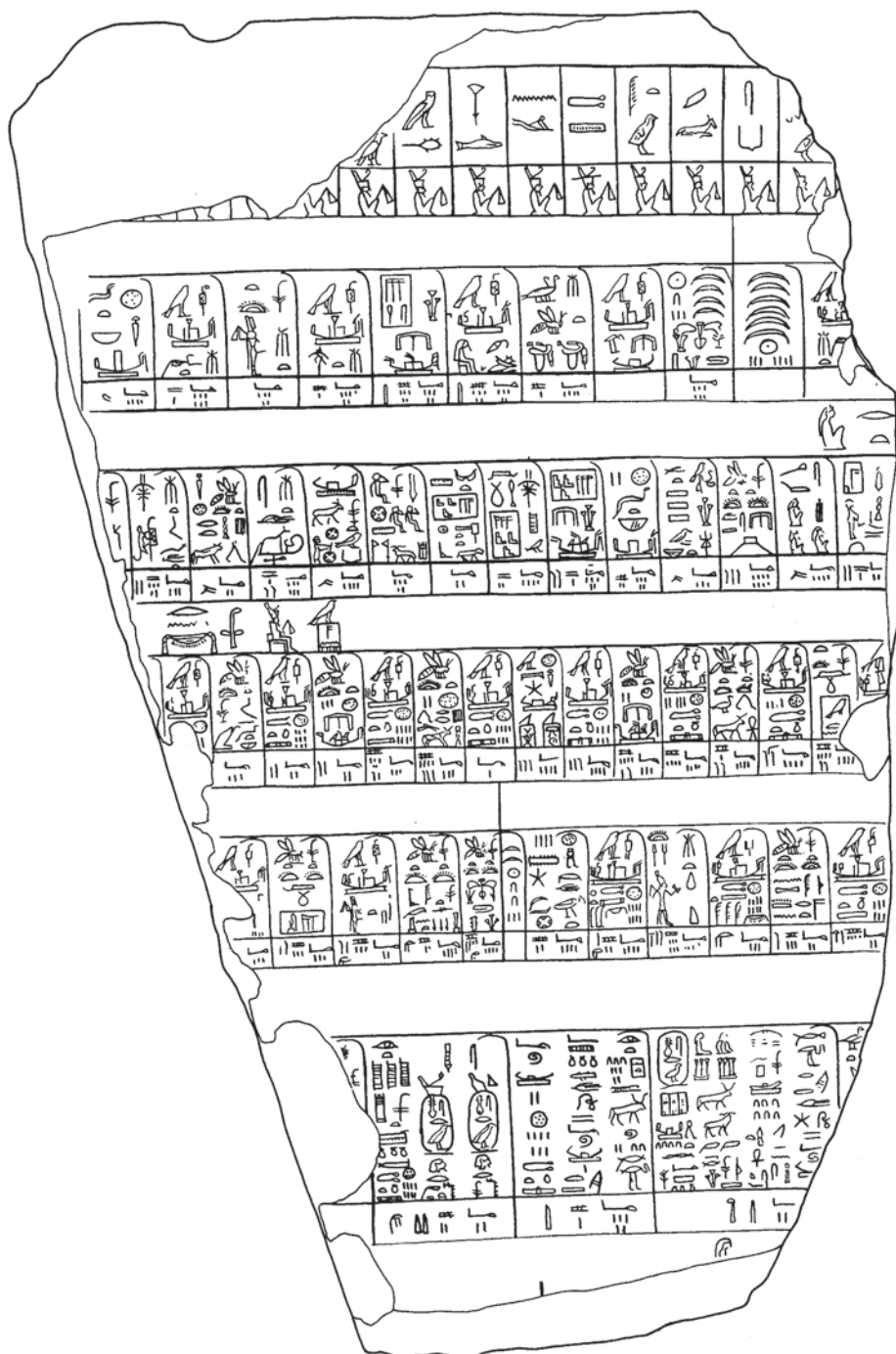
for the creation of the state that is known as the Middle Kingdom, and the country is once more united politically and economically with the arrival of Mentuhotep II. That, however, is another story.

The message of the Nile god

Trying to understand the character of the Old Kingdom development, its rise and eventual demise, we are right to focus our attention at internal factors. Yet there was one additional cause on which no one reckoned, and which no one could have influenced. Towards the end of the third millennium BCE there seems to have been a major and long-lasting drop in the level of the regular annual Nile floods, which had a direct influence on the size of the harvest and thus the welfare of the whole country.

The Nile floods were a significant factor in both the birth and the decay of the ancient Egyptian state during the third millennium. It could even be said that it was the gradual drying out of the Western Desert that allowed the Nile valley to be settled. During periods of abundant rainfall the Nile floods reached levels of several metres, and it was not easy to deal with such an amount of water in the closed valley of the Nile. As the rain belts pulled more southerly, the fluctuating level of the Nile became dependent solely on the level of rainfall in the area of the White and Blue Niles and the Atbara.

The Nile retained its influence during the historical periods of the Egyptian state. It left traces of its activity not only in the valley sediments, but also in the sources



Palermo Stone (JM).

discovered by archaeologists and Egyptologists. Written records dated to the Old Kingdom help us immensely to unravel this situation, and, in recent years, archaeological research has contributed much. The conclusions that can be drawn from their interpretation show clearly that the ancient Egyptians had to react to the changing levels of the Nile floods, which each year influenced the size of the harvest. Floods that were too high meant economic damage, while too low a level meant an insufficient harvest.

The first significant source is the Palermo Stone, so called because its most important fragment is kept in the Archaeological Museum in Palermo, Sicily. It appears to come from Memphis, and judging by its elongated shape and the texts on both sides, must have been exhibited at an easily accessible place, possibly in the actual temple precinct of the god Ptah. This diorite stone tablet contained, among other things, a list of the rulers of ancient Egypt of the First to Fifth dynasties (although not all of them) with the years of their rule. Each year was characterised by an event that was considered to be the most significant. Information about the height of the Nile floods naturally also belonged here.

The Palermo Stone contains a total of 91 entries relating to the Nile floods in particular years. The flood levels are given in ancient Egyptian units of measurement: cubits, palms and fingers. One cubit equalled 0.524 m, which was seven palms or 28 fingers. From the First Dynasty we have 43 entries about the floods, of which 12 are connected to king Djer, 15 to Den and 9 to Semerkhet. The average flood during this period reached a height of 2.8 m. The highest flood comes from the end of Den's reign, when the Nile rose by 4.25 m. From the Second Dynasty the Palermo Stone provides 21 entries regarding the state of the Nile, of which 13 come from the reign of Ninetjer and 8 from that of Khasekhemwy. The lowest flood occurred during the reign of Ninetjer, when the Nile rose only by 52 cm. From the middle of the Second Dynasty until the reign of king Nebka in the Third Dynasty there were relatively low floods, averaging only 1.6 m. It was during this period that Egypt's population of giraffes, hippopotami, elephants and gazelles was decimated. Lions and wild sheep met a similar fate. From the start of the Sixth Dynasty we even have a picture, preserved in Mereruka's tomb in Saqqara, showing the hunting of wild beasts in an enclosure. The likely reason for this is that these species were no longer much found in the wild, and so they had to be gathered in a certain place.

Better floods occurred during the period from the Third to the Fifth Dynasty, when the average height of the floods was just over 2 metres. The highest levels come from the reigns of Djoser and Sneferu (2.7 m). The Palermo Stone does not, of course, give the absolute height of the inundations which saw an increase in the height of the Nile by about 8 metres. The given data definitely relate to heights read from a certain fixed point at one of the nilometers in the then capital city or its surroundings.

Although the text of the annals has not been preserved in full, an analysis of this data shows that the highest floods in the third millennium occurred during the First Dynasty, and that there was a sudden fall in flood levels at the end of the First Dynasty. Historical sources also indicate that at the beginning of the Second Dynasty the country was dealing with a certain amount of internal crisis. Egypt was better off



Rich sediments on the island of Elephantine (today's Aswan) reflect diminishing Nile floods by the end of the Old Kingdom.

under the Third Dynasty but from then on there was a gradual decrease in the level of the annual floods. Unfortunately, for the period that we would find most interesting, the second half of the Fifth and the Sixth Dynasty, when important events took place that decided the fate of the Old Kingdom, there are no similar sources available. In addition, we are not sure where these floods were measured, whether in the south of the country, the capital city or somewhere else altogether.

Given that these annals mostly relate to the Old Kingdom, it is likely that the data relates to the height of the floods in the then capital city. The nature of the data also suggests that the measured height was not influenced by the growing alluvium. It is estimated that in the space of a hundred years, the surrounding terrain rose by up to 10 cm as a result of mud deposits.

Archaeological research on the island of Elephantine, close to modern-day Aswan, improves our knowledge about Nile floods to some extent. Elephantine was a significant border town with a fort. It is here that, from the First Dynasty onwards, the border of the buffer zone between Egypt and Nubia was located. The history of construction on the island and the traces left by regular floods provide further significant information for our knowledge of the periodicity of the fluctuations in the Nile floods during the third millennium BCE – significant because it casts light on the end of this period. During the first half of the First Dynasty, the level of the floods was maintained at a height of 96 m above sea level. The fortress that was subsequently built on the island clearly shows that during the first half of the Second Dynasty, the floods reached a maximum level of 94 m above sea level. During the



Abusir's "beetle" bowl with entrapped beetles *Poecilus pharaoh*. This species can survive only in a dry desert environment and they represent an explicit proof for a climate depredation during the Sixth Dynasty.

Fourth and Fifth Dynasties it seems that the level of the floods went down almost to 93 m above sea level, settling at 93-94 m above sea level. At the end of the Sixth Dynasty and during the First Intermediate Period, the level of the floods fell to almost 92 m above sea level, and it was not until the beginning of the Middle Kingdom, during the 20th century BCE, that there was a renewal of higher levels of Nile flooding, reaching 96 m above sea level.

We can thus see a clear connection between the fall in the level of Nile floods and the prosperity of the ancient Egyptian state. This is not likely to be by chance, since several studies comparing the fluctuations of the Nile waters in ancient and mediaeval times show a very interesting and regular correlation. It is clearly also not by chance that the high flood levels come at times of significant social change – periods such as the reigns of Den, Adjib, Semerkhet, Netjerikhet, Sneferu and Khufu.

The fact that the Sixth Dynasty saw climate change and a gradual drying out that lasted approximately two centuries is shown also by environmental data from the pyramid field cemeteries at Abusir. In 2002 a shaft was discovered with the ritual burial of a mummification set used during the reign of Pepy II. The set consisted of broken ceramics, bandages and remains of natron. Most of the ceramics even bore traces of the resin used to mummify the dead body. In one case, beetles from the family *Poecilus pharao* had become stuck in a bowl of still-hot resin. These beetles live

exclusively in a dry, salty environment, which shows that during this period the area of the Abusir-Saqqara burial grounds was already dry desert.

The end

The social changes, individualisation and growing independence of the high-ranking officials and their families, particularly in the provinces, the growing economic burden



View of Central Saqqara with the Step Pyramid Complex, third millennium BCE (scientific reconstruction, courtesy of Luca Bonatti/Laboratoriorosso Productions).



View of the development of Central Saqqara as a result of climate depredation, end of Old Kingdom (scientific reconstruction, courtesy of Luca Bonatti/Laboratoriorosso Productions).

caused by the maintenance of extravagant funerary cults and the change in climate all hindered further development. As a result, the Sixth Dynasty is a period when the development of non-royal tombs reaches the end of one phase, and developmental trends that had lasted for several centuries reach a climax. The burial grounds surrounding the capital city gradually grow poorer, while those in the provinces begin to flourish, culminating during the Middle Kingdom. It can be observed that under the Sixth Dynasty the ancient Egyptian tomb builders returned, with formal variations, to the period of the First and Second dynasties – to their roots, so to speak. It is an interesting culturally-conditioned paradox.

In general, we can see that the declining Egyptian state suffered from several critical factors which consisted of the gradual erosion of the centralised machinery. Various major problems arose and remained such as a crisis of identity (the way the former ruling elite was accepted), a crisis of participation (who takes part in the state administration and in what form), a crisis of executive ability (to control and run the state's administration and economy and to redistribute the economic surplus), a crisis of legitimacy and a crisis of land-ownership (because more and more land was being transferred from the state to the funerary, non-taxable domains, whose only *raison d'être* was to provide economic means for the upkeep of both royal and non-royal cults, revenues from which sustained and ever increasing number of officials participating in them).

On a general level, we can describe this economic and social decline of the empire by a distribution of power and rule crisis and a general failure of the state to set and keep the norms and standards in every possible walk of life. These long-term trends, visible and present at least from the late Fifth Dynasty onwards, were at its terminal stage sped up by a continual worsening of the climate around 2300–2200 BCE. In a way, we may consider the ancient Egyptian situation a kind of parallel to our modern world. This is probably one of the crucial and important contributions to modern Egyptology as it reveals how we can observe main traits in the development of our modern societies as well.

The struggle with death



This unique seven sacred oils tablet belonging to an official Inti was discovered in Abusir during the season of 2002 (MF).

Even today in Egypt, almost two thousand years after the end of the ancient Egyptian civilisation, there are strong ties between the living and the dead. If you are in the area of the Cairo Citadel, after leaving the main roads you will suddenly find yourself in a “city of the dead”, a huge mediaeval burial ground, which is still inhabited by numerous families. It is a real city, with its guards, literally called “doorkeepers,” *bannwaba*. Each family tomb has an enclosure wall, a yard and actual burial space, and thus resembles a house for the afterlife. During religious holidays crowds of people come here from Cairo and its surroundings, and the burial ground is briefly transformed into a “city of the living”: families from youngest to oldest spend all day in the courtyards of the tombs, where in addition to paying the necessary respects to their ancestors, they have lavish picnics, sing and enjoy themselves. Is it possible to imagine a livelier tradition, one that has lasted for six thousand years?

Houses of eternity

The ancient Egyptians’ attitude to issues connected with death is captured particularly well in a literary composition entitled *The Instruction of Hardjedef*:

*It is for the son you build a house,
When you make a place for yourself.
Make good your dwelling in the graveyard,
Make worthy your station in the West.
Given that death humbles us,
Given that life exalts us,
The house of death is for life.
(Lichtheim 1975, 58)*

The ancient Egyptians believed in life after death regardless of social position. This can be clearly seen from the monuments that their civilisation left behind – the Egyptian desert is strewn with burial grounds with innumerable graves and tombs of all kinds, types and ages. It was one of the ancient Egyptians’ most widespread beliefs that the soul of the dead person lived in the tomb itself. Anyone who wanted a hope of life after death had to build a tomb, or at least a grave, and to ensure they would have an afterlife cult. In fact, the Egyptian civilisation may be the only one on that left behind such a wealthy testimony relating to the life after death.

The tomb was considered a house, the home of the dead person. It was his afterlife residence, the concept of which underwent significant change over the centuries. The sphere of influence and movement of the spirit of the dead person was limited to the area of the burial ground of the “west” (Old Egyptian *amentjywt*). Alternative names used by the ancient Egyptians for this area were “the beautiful west” (*amentjywt neferet*) “the holy country” (*ta djeser*) and “that which is under the (protection of the) god” (*keheret netjer*).

Given that the dead person was tied to the area of the burial ground, there was also a transfer of the “everyday” profane world to the burial ground so that it would be available to the dead person. This was achieved through the decoration of tombs and



Cairo's city of the both dead and alive.

their inscriptions. The architecture of the tombs reflected the concept of them as houses, eternal homes, and this was true of both the sub- and superstructure, although with different emphases during different periods. The underground parts of the tombs could be designed to be like real houses, with entrance courtyards, a hall, bedrooms, storage rooms and even a bathroom, or as a simpler residence with a single burial chamber and maybe some storage rooms for grave goods. The superstructure also became more complex in arrangement. The whole pattern of the burial grounds was very similar to that of a city or village, with streets, suburbs, a centre, individual “houses” and also, of course, “inhabitants” – priests tending to the funerary cult, and the tomb guardians, who sometimes even built their houses (however temporary) on the actual burial ground.

Evidence that the place of residence in the netherworld was in the tomb, and specifically in a burial chamber deep under the surface of the ground, is also found in texts of the period: “I descended from my city (*nint*), I descended from my region (*sepat*) and I descended into this tomb of mine (*iz pen*)”. Egyptians tended to have strong ties to their place of origin, and to the region in which they lived: mobility in ancient Egypt was very limited, and usually only concerned dignitaries. Moreover, the words used to express “going forth” to the burial ground (*per*) and “descent” into the tomb (*ba*) are very precise references to what happened on the journey to the other world. While it was usually necessary to ascend to the burial ground from the Nile valley (most burial grounds were on the raised edge of the Nile valley, at the point where the fertile ground became desert), the word *ba* refers to the dead person’s journey down the shaft to the underground part of the tomb, the burial chamber.



Kaiemheset's unique burial chamber in Giza was decorated with scenes of everyday life and depictions for offerings for the afterlife. This was the place of eternal life of the tomb owner (courtesy P. János).

How to obtain a tomb?

Building a tomb and finding a location for it was far from being as easy a task as it might seem to us today. The great majority of Egyptians were buried in simple hollows, with only a few gifts and with a small above-ground construction to mark the place of burial and show the family where to maintain the funerary cult if only for a limited period. Only in a few number of cases did an official have the honour of being buried in the royal burial ground, close to the pyramid of the ruler. They had to have the requisite social and economic status, which was almost always connected with the office, or offices, that a person exercised in the bureaucracy (palace or otherwise) or in the religious sphere. It was without doubt a highly significant event, and thusly reflected in the inscriptions in the tombs of some officials. One such account at Giza says:

As far as this tomb is concerned, it was the King of Upper and Lower Egypt, Menkaura, may he live forever, who assigned me to this place.

From the Sixth Dynasty, the end of the period of the famous pyramid-builders of the Old Kingdom, we learn how the king took part in the building of the tomb of his faithful official Weni from Abydos:

When I requested from the majesty of my lord that a sarcophagus of white stone of Tura be provided for me, his majesty had the seal-bearer of the god and a boat-crew under his command cross over and bring back this sarcophagus from Tura. He brought it himself actually in a great barge of the Residence, together with its cover, a false door, an architrave, two jambs, and an offering table. Never before had the like been done for any servant, (for) I was excellent in his majesty's heart

(Strudwick 2005, 353, No. 256)

Because the king's pyramid cast a literal shadow of privilege over the tombs of his trusted and highly placed officials, as well as serving as a guarantor of life, so those with little power built their eternal homes in the shadow of these powerful officials. It very often happened that the tombs of high officials were also the burial places of other members of the family, both men and women. In the same way, the smaller and poorer tombs of the less successful were built in their vicinity.

We do not have much written evidence relating to the construction of tombs. All we have are inscriptions concerning the pay of workers who were employed in their construction. There are also texts relating to the funerary cult in tombs already built and to the contracts that the deceased tomb owner entered into during his life with the priests whom he hired to maintain his funerary cult.

A unique text – albeit only partly preserved – from a burial ground in Middle Egypt provides some interesting details concerning the construction of certain parts of tombs. The structure in question is a shaft for the wife of the tomb owner. The journey to this particular tomb leads through one of the modern-day centres of central Egypt, Nag Hammadi, a hub of the sugar-making industry. From the city you cross one of the few bridges in southern Egypt to reach the eastern bank of the Nile, from where a small asphalt road takes you to a huge rock massif, several kilometres long and riddled with tombs from all periods of pharaonic Egypt. One section, known today as Qasr el-Zayyad, hides the tomb belonging to the magnate Idi Seneni, dated to the end of the Old Kingdom. It is well guarded. During my visit in autumn 2004 we set off for the burial ground in the company of a police car, allocated to us for our safety. When we reached the place, several local guards were already waiting to open the entrance for us.

Everything took place as in ancient Egypt: a committee was established, which met in front of the entrance to the tomb. First a small stone wall made of carefully-placed stones, guarding the actual entrance to the tomb, was taken apart. There followed an inspection of the state of the seal on the doors. Then, after the seal was unanimously declared to be intact, the massive iron doors were opened and we were able to begin our tour. Meanwhile, the committee had begun to write a detailed report of its actions. Here, we are particularly interested in the inscription on the wall to the left of the entrance, which contains a passage concerning the burial of Seneni's favourite wife, Asenka. The actual inscription is located very close to her burial shaft, above the mouth of it. It translates as follows:

Seneni says: As far as this shaft is concerned, which I had dug, with a mouth 6 [+ x cubits wide] and 3 deep [+ x] cubits and which I gave to my beloved wife Asenka. My prosecution



Qasr el-Zaiyad in Middle Egypt and the tomb of Idi Seneni. The shaft was assigned to a woman according to a treaty written on the wall above it.

of all people who might want to take it from Asenka will be justified. I will bring charges against them in front of the Great God, the lord of the sky. I will wring their necks like geese. I am an outstanding and distinguished spirit (i.e. dead and justified) and I know all the mysteries of the divine words, through which a man becomes justified in the burial ground... I shall not allow anyone to approach this [shaft] with the aim of obtaining it, because I have [buried Asenka] in it. According to the documentation, I am its legal owner. I did this for Asenka, out of the great respect for her in my body, she never said a sentence that my heart did not like, and she was never angry for as long as she was alive.

After this passage there follows an addition formulated by the owner of the shaft, Asenka:

I was a priestess of the goddess Hathor, beloved of all of my city. If anyone wishes to obtain this shaft, I will be judged with him by the Great God.

Next to this inscription there is a partly preserved false door belonging to Asenka, on which her eldest son, called Iau, is approaching her from the right. In his outstretched hands he is bringing a haunch of beef, one of the most valuable sacrifices.

When the tomb was built, its owner had to face another immediate danger, the “recycling” of building material. At that time, dismantling old tombs in order to build new ones was a fairly widespread vice. Archaeologists are still finding traces of this activity: reused blocks of stone with damaged or well-preserved decoration in new tombs. Tomb owners tried to prevent this by appealing to potential intruders in inscriptions that were placed directly on the façade or inside the tomb:

If anyone should do anything bad to this tomb, anyone should damage it or remove its inscriptions, he will be judged by the Great God, lord of the court, in the place of the court.

The expression “The Great God” usually referred to the deceased ruler, or rulers, under whose protection the burial ground lay. This is because originally the ruler was considered to be the lord of the netherworld, who decided who would attain the happy afterlife existence. For this reason, the biographical inscriptions of Old Kingdom officials usually refer to the loyal service performed to the ruler. It was up to the ruler alone whether the dead dignitary would achieve a peaceful and secured afterlife existence.

The components of immortality

For the ancient Egyptians, in addition to the tomb and cult the most important factors in ensuring the afterlife were – the body, the heart and the name. The body was not only a receptacle for the life force, but a means of ensuring the identity of each tomb owner. As a result, every effort was made to preserve it after the physical death of the individual, which led to the unique ancient Egyptian art of mummification. The success of this practice can be judged by a visitor to any museum with ancient Egyptian collections. Even today, several thousand years later, it is possible to distinguish original features in the faces of many mummies, and, without too much effort, to imagine approximately what they must originally have looked like. If the body were to be destroyed after death it would mean the end of any hope of a peaceful life in the netherworld. The force and the *ka* spirit (see below) would have nowhere to return to. However, the ancient Egyptians also took into account worldly imperfection, and were understandably afraid of tomb robbers. They thus tried to ensure that their identity and afterlife existence was also preserved by other means. In addition to decoration and inscriptions, they also put statues of stone or wood in their tombs. Not for nothing was a statue called *hwt ankh* in Egyptian, “a living image.”

Of no less importance was the heart, which the ancient Egyptians considered to be the centre of thought. One of the highest gods in the ancient Egyptian pantheon, Ptah, created the world from a thought born in his heart and a word formulated by his tongue.

As far as personal names were concerned, the ancient Egyptians usually distinguished four different kinds: the great name (also known as the right name), the junior (or the small) name, younger (or little) name and elder name. If someone’s great name was Merefnebef (He loves his lord), his junior name would be Fefi (these were diminutive versions of the first), his younger name Unasankh (Unas is alive,



Statue of Mereruka (MF).

referring to the ruler under whom the man was born) and his elder name again Merefnēbef. In this particular case we refer to the vizier Merefnēbef whose Saqqara tomb was discovered by Polish Egyptologist Karol Mysliwiec. Due to fortunate circumstances all four names of this previously unknown vizier who lived in the time of Teti were recorded. This is the first known time that all four were recorded at once.

A human was made up of several components, which were called *ba*, *akh* and *ka*. The *Ba* might be compared to life force, energy, a person's psychological and physical strength, which enliven his body in his earthly life. Originally this term was reserved for the life energy of the gods, as well as the rulers of the mythical cities. *Ba* returned to the body after its physical death, and ensured the continuity of its life after death. Thus it took part in the funerary cult as the receiver of offerings on the altar in the chapel, even if it also moved freely around the other world, working or resting in keeping with its earlier earthly position.

Another complex manifestation of humanity, above all after death, was *akh*. This term is related to the root of the verb “akh,” to shine or be clear. According to some historians of ancient Egyptian religion, the term ought to be connected with expressions for hidden, invisible and mysterious power. The word can also be connected with Egyptian terms for the horizon above which the sun rises each day, *akhet*. This concept makes sense above all in relation to the most recent interpretation of the expression by my colleague, Jiří Janák, who in his 2010 study managed to show a clear relationship between *akh* and the rock ibis that descended each morning from the mountains to the Nile valley. In the minds of the ancient Egyptians, the ibis' behaviour evoked the temporary return of the dead person's soul from the other world to this one. The concept of *akh* thus clearly shows the ancient Egyptian differentiation between day and night. While day was considered a symbol of life, and the sun's journey across the heavens was seen as symbolic of human life, night was the symbol of death and rebirth. As such, night (and thus death) was an unavoidable prerequisite for rebirth and life during the coming day.

Without doubt, the most complicated aspect of the human being was *ka*. In the hieroglyphic script the expression was written using the sign for a pair of raised arms. The meaning of the term is not clear – it could mean an embrace, but also a pair of arms receiving or giving a sacrifice. *Ka* was the life force of a human being, which after death separated from the person, and was connected both with the person's existence and his procreation. As such it was transferable, passing from a father to his first-born son and clearly also to his other offspring.

After physical death, the *ka* departed for a “rest,” which ended as soon as all the burial rites had been performed and the mummified body had been laid in the grave. At this moment, the *ka* could return to its body.

It is striking that very similar concept of the human being is found among the Sudanese tribes of the Shilluk several millennia later. Seligman and Seligman describe it as follows:

Every living man has both wei and tipo, the former signifying “breath”, “life”, the latter “shadow”, “image”, as in water or mirror. We have already referred to the cen of one dying in



Collection of prayers on the central false door panel of Inpunefer from the late Fifth Dynasty.

anger and malevolence... and there is a word aneko, meaning ghost, i.e. the spirit of the dead. So far we are reasonably certain of our facts, but there may be an element called winyo (lit. bird) of whose functions we can predicated nothing.'
(Seligman, Seligman 1932, 103)

However, the above-mentioned components of the ancient Egyptian human being were far from being sufficient to ensure immortality. Several other factors were required. An important role was played by the Egyptian ruler, the representative of the Egyptian gods on earth and himself a god. Another factor was the art of mummification, the secrets of which were gradually learned by the Egyptians over the course of several centuries.

Prayers and afterlife arrangements

The funerary complexes of the ancient Egyptian rulers had little in common with the ordinary world, since they served exclusively religious and divine goals. The ruler's after-death existence was connected with the world of the gods who resided in the heavens, with whom he joined after his physical death. Ensuring the king's afterlife was a matter of fundamental importance to the Egyptians. The king's priority during his earthly existence was to insure that the order created at the very beginning of the earth's existence was maintained and preserved. The Egyptians called this *maat*, a word corresponding to the world created by the gods. The gods were represented on earth by the king, who carried out their will. *Maat* was the principle of the creation of the world and its fixed order, the source of the laws of nature and the arrangement of ancient Egyptian society. *Maat* ruled the life of every individual in ancient Egypt, and the meaning of each individual's life was to live in accordance with these principles. In the ancient Egyptian pantheon, *maat* was personified by a female goddess with an ostrich feather on her head.

The ancient Egyptians were always looking for new means of expression for ensuring immortality. At the beginning of the Fourth Dynasty they began to write prayers (the *hetep di nisut* formulas) on the walls of tombs, the aim of which was to ensure, through magic, the undisturbed existence of the tomb owner after his physical death. The oldest prayer known to us from ancient Egypt is very simple and contains a request addressed to Anubis, the god of the cemetery, and maybe also to the king (this part is damaged) regarding a place for burial, so that the deceased person, such as the royal son Rahotep from Meidum, could come to the burial ground as someone who was well provided for. "Provided for," *neb imakhu*, was in the minds of the ancient Egyptians a concept with several aspects: a place for burial, the actual tomb, the burial, properly-performed burial rites, the provision of burial goods and finally the assurance of an afterlife cult for the dead person. This was the task of the family members, or of professional priests who were paid for their work in kind.

Rahotep's prayer was situated on the false door in his tomb. In the period following this, similar prayers were usually placed above the entrance to the tomb, on false doors, close to a depiction of the dead person sitting at an offering table or on altars and on some votive objects. Such prayers soon became an integral part of a tomb's decoration, and today provide an important means of dating the tombs found. Formulas beginning with the standard words *hetep di nisut*, "a boon which the king gives," indicate that this was a privilege originally provided by the king to those officials that deserved his goodwill. If you became *neb imakhu*, it meant you no longer had to worry about your afterlife. In addition to the king, these formulas also feature the gods of the Egyptian pantheon who were closely connected with burial grounds and the west. In particular, these were the jackal god Anubis, the earth god Geb and, from the second half of the Fifth Dynasty, Osiris, the lord of the kingdom of the dead.

With the passing of time, the opening formulas became more elaborate. They expressed the main aims of the prayers being put forward, and might go like this, for example:

*May there be invocation offerings during the feasts,
1,000 loaves of bread, 1,000 beer jars, 1,000 pieces of fowl...
1,000 of all beautiful things, every day,
May he be beautifully buried.
May he attain beautiful old age.
May he be buried in the cemetery in the Western desert.*

One of these formulas expresses with great cogency the essence of the ancient Egyptian after-death existence:

A boon which give the king and Anubis, who is in front of the god's booth, (to the one) who was given this his tomb and the burial therein, after he has attained good old age, in the presence of the Great God, lord of the burial, as well-provided by the king.

In addition to these short texts we also find a prayer that aimed to guarantee a peaceful afterlife. It went as follows:

A boon, which Anubis gives, lord of the god's land [i.e. cemetery], beautiful burial in the presence of the Great God, invocation offerings.

Gradually, these prayers started to mention particular holidays in the religious calendar which were related to the beginning of the year as well as to important gods or important days in the civil calendar. To these may be added further expressions for a feast at the start of the month, one in the middle of the month and *habu nebu*, “every feast.” For those who were very pious and also rich enough to provide for a funerary cult in their tomb on all the above-mentioned holidays, the tomb doors would hardly ever close.

The length of the funeral period

The time before the body was laid into the tomb was in Egypt traditionally taken to last for seventy days. This period was needed for the mummification or treatment of the body of the dead person, preparations for burial and of the tomb itself, and of the accompanying burial goods. The Egyptians placed burial goods in the burial chamber itself, close by their buried owner. In theory, the tomb was supposed to have been complete at the moment of death, but there were cases when the construction had to be finished in a hurry so that it could be used. Sneferu, Menkaure and Raneferet did not have time to finish their funerary temples – the last was not even able to finish his intended pyramid – and they were completed using bricks. Raneferet's pyramid was altered into the shape of the primeval mound on the basis of an alternative religious concept.

One of the best-known cases of a late burial was that of queen Meresankh III, who was interred after 273–274 days. And yet this was no lesser person than the wife of king Khafra and the granddaughter of the builder of the Great Pyramid, Khufu. Meresankh III died after reaching the age of fifty. Her age and her high position suggest that the queen's tomb should have been long finished before the time of her death. The inscriptions relating to her burial can still be seen in Giza, at the entrance to the rock-cut chapel in one of the most beautifully decorated tombs of its kind. The first inscription gives the date of the queen's death:

King's daughter, Mersyankh. Regnal year 1, month 1 of shemu, day 21. The resting of her Ka and her proceeding to the house of purification [embalming].

(Simpson 1974, 18)

The second inscription relates to the date on which her funeral took place:

King's wife, Mersyankh. Regnal year after year 1, month 2 of peret, day 18. Her proceeding to her beautiful tomb.

(Simpson 1974, 8)



Lord of the Egyptian Netherworld, Osiris.

The ancient Egyptian record-holder in burial delay, however, was the dignitary, architect and vizier Senedjemib Inti, whose son writes in a unique inscription that it took a year and three months (!) before a tomb was built for his father, who meanwhile remained in the embalming workshop. Given that this inscription provides particularly vivid evidence of the way in which the funeral rites of a high-ranking dignitary took place, I shall quote it whole, using the new reconstruction and completion recently provided by Edward Brovarski:

The hereditary prince and true count, overseer of all works of the king, sole friend, royal chamberlain, royal master builder in both houses, Senedjemib Mehi, he says:

I did this for my father, the chief justice and vizier, overseer of all works of the king, overseer of royal document scribes, overseer of the two treasuries, overseer of royal regalia, overseer of the two granaries, Senedjemib.

...The Majesty of my lord ordered the making of decrees to assemble the officials together with the six crews who were engaged in apportioning the god's offerings of Memphis so that there might be made for him the share of the time-service, which is one that my father had formerly claimed, once the harvest was brought from the apportionment of the divine offerings from Lower and Upper Egypt, namely the share of the time service

His Majesty has had the decrees concerning it sealed with the documentary seal. Funerary priests were appointed for him. I have had them put in writing in a preliminary sketch on this his tomb and they were carved by the sculptor. The stipulations in them were recited in my face according to the apportioning in the court council. Then I begged from my lord that a

sarcophagus be brought for him from Tura to this tomb of his, which I made for him in one year and three months, while he was in the embalming workshop in his estate which is in the necropolis of the pyramid Izezi-is-Perfect.

(Brovarski 2001, 102)

The final journey

What were the different stages of the funeral ritual in ancient Egypt, and what had to be done to ensure that the dead person rested safely at the bottom of the funeral shaft in his tomb, and that “sand drifted into his eyes,” as the *Pyramid Texts* put it? The numerous sources available to Egyptologists in this regard, in particular iconographic and archaeological ones, allow us to reconstruct the course of a funeral with great precision. From some of the texts and pictures, grief, fear and anxiety convey themselves vividly to us even over a distance of more than four thousand years.

Immediately after death, a procession with the body set off to the embalming workshop. Professional mourners had already gathered in front of the house of the dead person. They can be seen on reliefs, tearing their clothes and hair in distress, with loud cries. One of the most dramatic scenes capturing this moment comes from the tomb of a vizier named Ankhmahor in Saqqara. Four women in the house gesticulate and cry out in reaction to news of the death of the master of the house: “*O, father, master, you who are provided for!*”

In front of the house is a crowd of men and women (the sexes are separated from each other, one of many customs that have been preserved in Egypt until the present day). A total of eleven women wail and gesticulate. One has fainted while two catch her. A further woman is pregnant. Others tear their clothes, beat their faces with their hands and lament, supporting one other. The men behave in similar fashion: some have their head in their hands, others sit curled up on the ground with their heads on



Dramatical moments: women mourning for Mereruka during transportation of the deceased's body from Mereruka's house (MF).



Journey to the cemetery, tomb of Qar at Giza.

their bent knees. One lying unconscious on the ground, while two others attempt to bring him round. The accompanying inscription states that this is *“a coming out from the estate to the beautiful west.”*

Three priests can also be seen in the funeral procession on the way to the embalming workshop. At the front is the honoured one who bears the title “overseer of the keepers of the divine seal, embalmer.” He is dressed in a clinging kilt, with a characteristic strip of white cloth over his left shoulder and chest. He leans on a high staff, and in his right hand carries the *keberet* sceptre. Immediately behind him are the “embalmer of Anubis” and the “lector priest.” The lector priest holds a papyrus scroll in his left hand, from which he reads various religious texts during the religious rites. These literary compositions were meant to ensure a successful funeral for the dead person, a smooth transition to the other world, and an undisturbed afterlife existence. Both priests wear kilts with pointed tips at the front, and over their shoulders and chests is a smaller strip of white fabric. The relief ends in a scene in which the coffin with the dead person is taken to the bier.

The procession also includes high-ranking dignitaries who pay the obligatory respects to their dead superior. Behind the carriers walks a woman in flowing robes and a wig that falls to her shoulders; she is a professional mourner, or *djeret*. There were usually two of them. They are most frequently depicted travelling in a boat or barge together with the coffin of the dead person, kneeling at his head and feet. They symbolise Osiris’ sisters, Nephthys and Isis who, according to Egyptian myth, were able to bring the dead body of Osiris back to life. They are thus the guarantors of “resurrection” after death.

Another stage in the funeral procession was the journey across a body of water, which served as an entrance gate to the burial ground. In Abusir and Saqqara, the burial grounds of ancient Memphis, this water is nowadays called the Lake of Abusir. Funeral processions would pass over it during the Old Kingdom when taking dead bodies to the embalming workshops that were probably located on its western bank. In this case, the religious topography of Memphis played a significant role because the area around the Lake of Abusir was a frequent burial place for the priests of the frog goddess Heqet, who were in charge of funeral rituals. In ancient Egypt the frog was



Detail of a mummification workshop – tomb of Qar at Giza.

a symbol of rebirth. From our archaeological finds we know that Lake of Abusir was a seasonal water area, which dried out for several months of the year. When it refilled, frogs hidden in the mud hibernating, woke up. For the ancient Egyptians this sudden burst of life “out of nowhere” was very incomprehensible yet significant, and they therefore considered the procession’s journey across the lake to be something connected with magical rebirth and the renewal of existence.

A relief from the tomb of the official Qar in Giza shows a funeral barge with a roof in the middle of the deck to protect the body of the dead person, who lay in his coffin on a podium. There is one professional mourner at the bow of the boat and one at the stern. There are also three men in the bows. The first is a boatman, the second the embalming priest (called *wet*) and the third is the lector priest who reads from the holy scrolls. The main priest, the “head of the embalmers,” sits in the middle of the boat, in front of the coffin, and touches it with one hand. There are two further boatmen in the stern. On reaching the western bank, the edge of the necropolis, the body was taken out of the coffin and ritually cleansed in a purification tent or *ibu*, built of light plant materials. Various items can be seen on its roof: three small tables, two bowls and two jugs, a sack, sandals and a model of the palm of a hand with a forearm. Inside are two separate rooms. In the left-hand one an inscription states that it contained equipment here for the *ibu* and also food. Under the inscription there are indeed four sacrifices: a haunch of beef, a goose or a duck, bread and a beer jar. The inscription in the right-hand room mentions “equipment

(for) the lector priest,” which consists of two chests. Following this, the body was transported to the nearby mummification workshop, called the *wabet*, into which the lector priest is shown entering. First we see him with a jug in his hand, entering the courtyard. Then he is already in the entrance hall, through which the actual mummification workshop was entered. However, the ancient Egyptian sources are discreetly silent on what happened here, and we can only guess on the basis of indirect evidence.

While the body underwent a period of mummification lasting seventy days, it was essential to undertake journeys to holy places in the Delta and southern Egypt. These places were the town of Sais, an ancient cult location in the Western Delta, Buto, a city to the east with sacred palm groves and the tombs of the prehistoric rulers of Lower Egypt, Heliopolis, the centre of worship of the sun god Ra, and Abydos, the centre of Osiris’ cult. These visits took place only on a symbolic level, however, and their accomplishment took the form of depictions on the wall of the tomb owner.

Achieving perfection in the struggle with death: mummification

The aim of the mummifying procedure and rituals was to protect the body from physical decay. During the period of the pyramid-builders, in the third millennium BCE, the mummification techniques that we know from later periods were still being perfected. For as long as the Egyptians built simple tombs, burying the dead in pits and covering them with sand, everything was all right. Nature, in the form of the hot sand and dry climate of the Egyptian desert, did the job: the bodies were perfectly dried and thus created natural mummies. As soon as underground burial chambers started to be built and the bodies placed in wooden coffins or stone sarcophagi, however, the air and moisture wreaked havoc with the bodies. New methods had to be found of preventing the natural processes of decay in the human body. One of them was to wrap the body in linen bandages. We have evidence of this process as early as predynastic Hierakonpolis, as well as of the practice of removing some of the vital organs from the body.

One of the oldest pieces of evidence of the process in the historical period comes from the tomb of king Djer in Abydos in which the king’s forearm was found wrapped in linen – together with several golden bracelets with semi-precious stones. Here, however, modern Egyptologists are confronted by a problem: were the bandages wrapped directly around the body, with the skin and muscles preserved, or were the skin and muscles removed and only the bones wrapped? At present this issue cannot be decided, and it is likely that for a certain period both approaches existed alongside each other. This is indicated by the unique find of bones in Mastaba 17 in Meidum from the early Fourth Dynasty which show that the skeletal remains were wrapped in linen, but no muscles or tissues were found. Moreover, some bones were wrapped in such a way as to make it clear that the skeleton must have been dismembered and each of the bones wrapped separately. This presumes a fairly long period of preparation – the body may, for example, have been buried somewhere in the sand, dug up again, the bones cleaned and then wrapped before the actual burial



An Early Dynastic attempt at mummification – Archaic cemetery in North Saqqara.

of the remains. This method did not neglect the secondary sexual characteristics: the wrappers managed to “immortalise” the male genitals so successfully that we can even distinguish the circumcision that was already typical. In the case of women, the breasts were modelled, including the indication of the nipples in black.

An important step forward took place at the beginning of the Fourth Dynasty when embalmers discovered that by removing the internal organs from the body, the quality of mummification could be improved significantly. The innards were wrapped in linen to make small parcels and placed in niches in the walls of the burial chambers. At the same time, in the case of royal burials, the internal organs began to be stored in stone containers. The oldest evidence of this practice is an alabaster cabinet belonging to queen Hetepheres I from Giza. The stone cabinet is divided into four compartments, in each of which the queen’s internal organs were placed, after having been wrapped in linen. The empty space was then filled by a stuffing that included natron.

At the end of the third millennium BCE the art of mummification expanded and reached a relatively advanced level. By now the internal organs (stomach, intestines, lungs and liver) were removed from mummified bodies, dried using natron and put into four stone vessels called canopic jars. The dead body was covered with natron and exposed to its dehydrating effect for over twelve days. The dried human body was then stuffed so that it regained its original proportions, and the individual parts of the body were wrapped in linen. During the Old Kingdom the arms, legs, trunk and head



Arrival of the funerary procession to the cemetery, tomb of Niakhkhnum and Khnumhotep in Saqqara.

were wrapped separately. Towards the end of this period the need to preserve the individual features of the dead person as faithfully as possible led to the face – and in some cases other parts of the body – being modelled out of plaster. Several dozen plaster face masks capturing the individual features of mummified persons have been preserved.

Of course, mummification was an expensive process and in many cases officials paid for their canopic vessels only to place them inside the burial chambers empty to symbolise, on a religious level, the process of treating their bodies which actually never took place.

After successful mummification, the last phase of the burial ceremony took place, involving the journey to the tomb, the final ceremonies, the reviving rites and the descent of the dead person into his house of eternity, the burial chamber. This stage is especially well captured in depictions from the Saqqara tomb of Niankhkhnum and Khnumhotep. They show a vessel with a mummified body shortly after its arrival at the edge of the burial ground. The procession set off on the short journey to the tomb, where the lector priest performed the last rituals connected with the burial. Further to the right, a priest and one of the women are depicted performing a sacrificial ritual. The whole composition is completed by depictions of sacrifices and three ritual dancers called *mnw*. On the far right is the schematically-indicated entrance of the tomb itself. The accompanying inscription provides the final touch:

Descending to the house of eternity in a very beautiful peace to become well provided before Anubis, Foremost of the Westerners, after invocation offerings on the roof (of the tomb), after traversing the lake, after performing rituals by the lector priest, to become well provided before the king and Osiris.



Mummy of Nefer from the late Fifth Dynasty.

Unfortunately, few sources relating to the final rituals have been preserved. The most vivid is the relief inside the tomb of the dignitary Debeheni, situated close to Khafra's pyramid in Giza. It is a badly damaged rock-cut tomb, and the relief is hard to make out. Within the tomb, you can see the drama of the final minutes of Debeheni's burial unfold. The first thing you are likely to notice is the procession of male sacrifice-bearers, who climb up some sort of ramp to the roof of the tomb in order to make offerings at the close of the ceremony for the deceased, who is represented by a statue. The offerings can be easily determined: geese and ducks, beer jugs and bread. On the relief depicting the interior of the tomb the false door can be seen, and in front of it are four rows of loaves of bread, some of them still in their moulds, and beer jugs. These foodstuffs were doubtlessly intended to be sacrificed on the altar inside the tomb.

The focal point during this closing phase was the ritual of the "opening of the mouth," when the deceased's resurrection took place. This involved the return of speech, hearing and sight for life in the other world. The ritual was performed on a statue, or later also on the mummy. During it the *sem* priest touched the mouth of the dead person with various cult implements, in particular a stone knife called *peseshkef*. Afterwards the body of the dead person was put into the burial chamber, sarcophagus or wooden coffin. The burial chamber was then filled with offerings and grave goods, which were intended to serve the needs of the dead in the afterworld.

Debeheni's burial ceremony ended at the moment when the entrance to the chamber at the bottom of the shaft was bricked up and the shaft filled in. From then

on offerings were made to the dead person at regular intervals in the chapel situated in the superstructure of the tomb, most frequently on its eastern side, and facing the rising sun. Carrying out the regular rituals was the task of paid funerary priests, who took food and drink for the soul of the dead person to the altar in the chapel while reciting religious texts.

The journey to the other world and back

The priests regularly came to the tomb to carry out the essential tasks connected with the cult of the dead person's spirit. The world of the living and the world of the dead were now divided and only a means of sophisticated "communication" could connect them. We have already mentioned that the main means of communication between this and the other world was the stela in the western wall of the cult chapel, known in Egyptian archaeology as a "false door." This term relates to a stela made of stone, wood or brick, similar in its shape to the real doors of an Egyptian house. In the minds of the Egyptians, the imitation provided a connection between this living world and the afterworld, and thus allowed the spirit of the dead person to pass from one to the other., especially during the offering ceremonies. There can be no doubt that the ancient Egyptians understood this form of communication. Modern archaeology, however, is in a much more difficult position. We cannot ask anyone what actually happened, and often we do not even know how to focus our research or what to look for. Yet there is one preserved example of a "path" between the two worlds.



Burial chamber of the judge Inti at Abusir South (KV).

The find occurred in 2002 in southern Abusir during the excavation of the burial chamber of the judge Inti, the son of the vizier Qar, who dates from the twenty-third century BCE. Inti's tomb has a ground plan measuring approximately 12 × 20 m, and was built as a typical residence for eternal life, which the spirit of the dead owner was to inhabit. The superstructure consists of several rooms, all dominated by the cult chapel. The shaft leading into Inti's burial chamber is situated not far from it, and located in a southeasterly direction. In the south wall of the chapel was a door that led, apparently absurdly, into this very shaft. This was a unique element that had not before been seen in excavation. As it turned out, however, Inti had a very good reason to insist that it be created. In the bottom of the shaft at a depth of 22 metres there was an entrance into the burial chamber which opened up in a westerly direction. The greater part of the space was taken up by a huge limestone sarcophagus, 3 m long and 2 m high, with Inti's name and titles. However, probably the most significant find was a limestone stela reminiscent in shape to a false door. The stela was situated in front of the eastern face of the sarcophagus, close to its northeastern corner.

The unique stela is made of a single piece of high-quality white limestone. Its shape is exactly the same as that of the false door situated in the cult chapel. It is decorated with hieroglyphic inscriptions practically everywhere, just as a real false door is. The first of them is on the upper rim and contains a prayer to Osiris:

An offering that the king gives (and Anubis) who is upon his mountain, lord of the sacred land: Invocation offerings (consisting) of t(j) and pꜣn bread and beer, every feast and every day, for Inti.

The central panel of the stela contains a prayer, the aim of which was to ensure a sufficient number of sacrifices:

Greylag goose 1000, greater white-fronted goose 1000, northern duck 1000, s(r)- goose 1000, turtle dove 1000, large cattle 1000, small cattle 1000, bread 1000, roasted goose 1000, beer jars 1000, alabaster jars 1000, menekbet cloth 1000, two copper libation sets.

The location of the stela in front of the eastern side of the sarcophagus was not a matter of chance, but a definite part of the burial chamber's design. This is clearly shown by the hieroglyphic inscription on the chest of the sarcophagus which finishes exactly where the stela covers the sarcophagus, and continues at the point where the wall of the sarcophagus is once again visible. What might have caused this false door, the first of its kind in Egyptian archaeology, to be placed more than 22 metres under the earth's surface?

The political situation at the close of the Old Kingdom provides an answer. During this period there was a deepening crisis in the Egyptian state and society, with high-ranking officials usurping more and more power, and a growing tendency for untrammelled enrichment. One of the forms it took was tomb robbery. The natural reaction of the tomb owners was to expect a certain amount of damage to the superstructure of their tombs and to design burial areas in such a way that they could

ensure the afterlife existence of the spirit of the dead person if superstructure ceased to function. This is why in Inti's burial chamber we have a stone stela in the shape of a false door. Only later, clearly for practical and economic reasons, did this feature become part of the painted decoration of wooden coffins. The decoration of the stela is in keeping with this: it mostly consists of lists of the main offerings essential for sacrifice to the spirit of the dead person in the other world, prayers that were meant to ensure its undisturbed existence in the burial ground. Inti's stela may be considered a type of transitional form, a very expensive variation that was soon abandoned in favour of the later custom of putting the false doors and the inscriptions with sacrifices on the inner and outer sides of the coffin.

For us, however, it is more significant that the stela represents some sort of entrance and also exit for the dead inhabitant of the sarcophagus. If the spirit of the dead person sets out to take part in the sacrificial ritual in the chapel, it passes up the shaft. At the mouth of the shaft there is no other way into the chapel than through the connecting doors between it and the shaft. After the rites have finished, the spirit is then able to leave, satisfied, along the same path. It thus appears that this is symbolic journey of the spirit of the dead person to the world of the living and back. Its significance is not diminished by the fact that the false door in the western wall of the chapel served exactly the same purpose. There is a similar explanation for the niche in the western wall of the shaft. This, on the other hand, was the connecting gate between the burial chamber and the statue, or statues, of Inti in the serdab to the west of the shaft and to the south of the chapel. The spirit of the dead person could thus also enter the statue, and through the small window in the north wall observe the actions of the funerary priests and the course of the rituals. Given these measures, it might seem as if Inti had thought of everything. Was that really the case, however?

Thieves in the burial chamber and the end of the mummy

We have already mentioned that in ancient Egypt the best time to rob a grave was right after the burial, probably during the night, as soon as the burial rites were over but before the burial shaft had been filled in. Those who stole were well informed – they may have been priests whose task it was to watch over the dead and to ensure their welfare in the other world, or the burial ground guards and local workers and craftsmen (this is something we are informed of in later texts). Only these two groups knew precisely where the burial shaft was, when the burial had taken place, how long the journey to the burial chamber was and what was hidden in the actual room with the burial. This is shown by the fact that most very poor graves were not plundered. To get by as a thief in ancient Egypt you would have to know that in these tombs the bodies had been laid to rest without any personal jewellery. The grave goods of the lower echelons in Egyptian society consisted only of several ceramic vessels. Moreover, thieves were not remotely interested in the things that fascinate modern era archaeologists. They did not care if tombs contained stone containers for meat offerings, copper vessels, tools and ceramics imitating imported goods from the Levant, limestone and alabaster sacrificial bowls and other “valuable” items. All that was worth



Burial chamber of Pepyankh Inti buried in Abusir South – despite the fact that it was robbed in antiquity, it still contains some burial equipment such as alabaster and copper vessels.

taking away was the jewellery and amulets on the body of the dead person in the stone sarcophagus. This was also the reason why even the famous tomb of Tutankhamun in the Valley of the Kings was robbed twice after the burial. The focus on jewellery meant that either mummy or simply buried body had to be taken out of the sarcophagus and properly inspected. Thieves might have considered taking copper implements, but there was little use in this given that they were centrally registered and issued.

During the cleaning of the shaft in Inti's tomb, it appeared that the burial chamber might not have been plundered. This was suggested by the undisturbed offerings that were found at various levels of the shaft's filling. They consisted mostly of alabaster vessels, everyday ceramics – beer jugs and bread moulds made of unfired clay – and an altar. Moreover, the shaft was filled with the original ancient filling, which was very difficult to remove. During the documentation of the burial chamber, however, it was revealed that the burial had in fact been robbed, and that this had clearly happened during the burial ceremonies. The workers who had the task of taking care of Inti's burial had, in an unguarded moment, broken into the already-closed sarcophagus and robbed the mummy of amulets, jewellery and other personal items. This happened in the same way as most other cases for which there is evidence. The thieves decided it would be too hard and take too long to remove the limestone lid, which weighed several tonnes, and so they chose a much simpler method. They made a hole in the eastern side of the sarcophagus, close to its southeastern corner, through which they



These vessels were used in the mummification process as witnessed by the black patches of resin. They had to be broken ritually thereafter.

could pull out Inti's mummified body. Then, in the open space of the burial chamber, without piety or conscience, they stripped the mummy of the personal jewellery hidden on the body and in the wrappings. We found the remains of the mummy strewn around the burial chamber. In addition to the bones, dozens of miniature limestone bowls were found in the room, above all on the lid of the sarcophagus. There were also numerous copper implements, also in miniature, several ceramic vessels and a fragment of gold leaf from the original burial.

How did it happen that the tomb was plundered while the filling of the shaft and the sacrifices in it had remained untouched since they were placed there? On the fateful day, the burial took place according to plan, the sarcophagus was sealed and a stone wall was built between the shaft and the chamber. This was clearly all that could be achieved at the close of the funeral ceremonies in a single day. The family then went home, and on the next day returned to supervise the filling of the deep shaft. In the meantime, however, professional tomb robbers got to work, with the tacit agreement of the burial ground guards. During the night they broke into the burial chamber, made a hole in the sarcophagus and pulled out the unfortunate body. They took away jewellery with semi-precious stones, precious stones and precious metals, and quietly returned to the village from which they came.

There is also one other notable difference. In ancient times, thieves were only interested in mummies that had valuable jewellery; modern thieves are interested in anything that can be sold for money. This is why the ancient thieves usually only made a small hole in the sarcophagus so that they could pull the mummy out and look it

over more easily. Two years later we managed to find the almost complete grave goods of another dignitary named Pepyankh Inti. His burial chamber was also plundered during ancient times, which meant that only the actual buried body was destroyed. To the east and north of the sarcophagus, however, the grave goods were almost untouched, left just as they had been originally placed. Among other things the grave goods contained twelve boxes of food for the funeral feast, over two hundred miniature stone bowls, stone vessels, dozens of copper items (chisels, knives, razors and blades), copper vessels for libations and purification rituals, a copper altar with numerous vessels, alabaster containers with cosmetic preparations, writing tools and several other items. The boxes for the funeral feast contained actual sacrifices, consisting of five kinds of poultry (geese, ducks and pigeons), while in a further five boxes there were beef bones. Two round boxes were designed for round unleavened bread. Everything was ready for the immediate needs of the dead person during his residence in the other world. To our great surprise, the stored offerings of fowl, the cuts of beef and bread corresponded precisely to the inscription on the false door in Inti's burial chamber, a custom for which there was until then no archaeological evidence. Could there be any clearer evidence of the thorough, but also very pragmatic thinking of the ancient Egyptians?

Priests enter the scene

Although family members played a certain role in the cult of the deceased person, the main tasks were entrusted to professional priests. During his lifetime, the tomb owner established "funeral estates," known as *per-djet*, for the priests. These were farms, including dependent farm workers, which provided for the operation of the cult and covered the costs connected with the payment of the priests. The cult in the chapel took place at regular intervals such as during the phases of the moon, during the holidays of the main gods in the ancient Egyptian pantheon, and at celebrations of the end of the year and the first day of the New Year.

The priests who took part in the funerary cult usually performed several such activities. Their career is well illustrated by the priest Fetekti of Abusir, who lived at the close of the Fifth Dynasty. We know about his life from several written sources, mostly from tombs in the Saqqara necropolis and from the papyrus archive from the funerary chapel of king Neferikara in Abusir. On the basis of dating and consistent titles something about his life can be reconstructed. In the papyrus archives Fetekti appears twice, each time appearing as a lower-ranking priest (Egyptian *hem netjer*, "divine servant") who took part in the procession around the pyramid and was in charge of part of the temple inventory. This service in the funerary cult of the king was, however, limited to a period of one month, and so he also found employment in the cults of several highly placed dignitaries buried not far from his own tomb.

The funerary cult was organised in different ways and on different levels. The simplest way was to entrust the eldest son with the administration of the estate, and earmark part of it for the needs of the funerary cult. This method was used by Khenti at Giza, for example. At the entrance to his tomb he had an inscription carved that



Nikaankh's tomb in Tehna comprises one of the most detailed accounts about arranging for a funerary cult on the part of the tomb owner..

indicates he had entrusted his eldest son, Ptah-juteni, with the maintenance of his funerary cult:

It is his eldest son, the overseer of the funerary priests and scribe, Ptah-juteni, who did this (i.e. the burial and the corresponding funerary cult – author's note) for him (i.e. his father – author's note) when he was buried in the beautiful west, on the basis of what he declared when he was still alive on his two feet.

However, there were also much more complicated funerary arrangements, some of which have been preserved on the walls of tombs. An outstanding example is that of Nikaankh in Tehna in Middle Egypt, close to modern-day Minya. He entered into an agreement with his children that in detail states what they are to do with the property earmarked for his funerary cult. It is found on the wall of his rock tomb, close to the offering list with offerings and sacrificial scenes depicting the owner of the tomb.

A decree which the royal acquaintance Nykaianekh made in his house, from his own mouth while he was alive:

With regard to all my children, I have set things up for them from that from which they benefit. I do not permit that any one of them be empowered to give away what I have done on his behalf through a will or by gift to any relative, with the exception of where he has a son – he may give (it) to him. They should operate under the charge of my eldest son with respect to the way they carry out the rites for me.

I am one who has set up my heir for the day on which I travel to the West – may that be a long way off!



Priests offering to the soul of the vizier Qar in his tomb at Abusir South (MF).

That soul priest who carries out cult activity on my behalf under his supervision – be it is who shall organize them in relation to my invocation offerings daily, at the beginning of the months, at the half-months, and in (every) festival throughout the year.

I do not empower them to take away (anything or anyone) for any work other than that of the daily invocation offerings.

If he does take (them) away for any work which is not (related to) my invocation offerings, then I do not give him control over these soul priests with respect to any work apart from my invocation offerings.

(Strudwick 2005, 195–96, No. 110)

The agreement describes in clear terms the limitations placed on what the heirs could do with the property. At the same time, Nikaankh's anxieties regarding his funerary cult after he departs for the other world penetrate each sentence of the agreement. He is chiefly concerned that the priests he has paid for should not be used by anyone else for other work. The funerary cult was, however, performed at different levels, and what you could afford depended on your position. A classic example is the tomb of Niankhkhnum and Khnumhotep, the manicurist brothers who served at the royal court at the end of the Fifth Dynasty. On the walls of their joint tomb is a list of 97 people in total, of whom 54 are ordinary priests. There are also six inspectors and nine overseers (of priests). In all, therefore, approximately a hundred dignitaries were involved in maintaining the cult of these not overly high-ranking officials.

This knowledge is complemented by recent excavations of the tombs of nomarchs in the burial ground at Qubbet el-Hawa, close to modern-day Aswan by Karl-Joachim Seyfried. He found that most of the people who took part in the funerary cult of these local governors from the end of the Old Kingdom had one thing in common: they came from the officials' households, where they undertook ordinary secular activities essential to the functioning of the household, or supervised them. Seyfried noted that the most common title among funerary priests was "controller of the dining room", *keherep seb*. This title was borne by 37 out of 126 priests. Their main task, both in the house of the official and in his tomb, was to supervise the proper supply of the rich table on the altar in the tomb by the members of the dignitary's

family. A further seven priests had the title of “overseer of the wardrobe,” four were called “controllers of the house” and two “elders of the house.” These were administrators of the dignitary’s household in the wider sense of the word, including workshops, fields and other facilities. The priests also included a barber, an overseer of the granary, a supervisor of *lebenet* chests, a supervisor of *mekbetemet* chests (in which fine clothing was stored, essential for life in the other world) and administrator of the grain measurers, and so on. From this it can be clearly seen that the funerary cult was some sort of parallel to the household of the dignitary during his life. Royal cults in funerary complexes were organised along similar lines.

However, the funerary cult also consisted of the manual tasks involved in preparing the offering chapel and cleaning it. This work was given to lower priests, known as *bemu ka*, “servants of the ka (spirit),” who were helpers in the funerary cult. The actual cult was carried out by lector priests, known as *beriu-beb*, entrusted with reciting magical texts from papyrus scrolls. They are easy to recognise in scenes on tomb walls: while the auxiliary priests are dressed in short, clinging kilts and have short wigs on their heads, the actual priests have longer kilts with a point at the front, wigs that flow to their shoulders, and a strip of white fabric diagonally across their chests.

The tasks involved in the funerary cult took place in two stages. An example is provided by the Saqqara tomb of the vizier Kagemni, who lived during the rule of Teti. His tomb has the best-preserved depictions of this activity. A total of sixteen priests can be distinguished, depicted carrying out various tasks. In the first stage, a pair of low-ranking priests can be seen at the beginning. The first of them is kneeling, while the second is pouring water from a *besi* vessel over his head. This is the opening of the ritual in which the chapel, the libation basin and the altar were purified using clean, cold water, a symbol of purity.

Behind them follow two lector priests. One has his arms bent in an accommodating gesture, while the other reads a text from an unrolled papyrus scroll. The accompanying inscription indicates that they are “counting the offerings” and “reading ritual texts.” These offerings were listed not only in the texts on papyri, but also on the walls of the chapel of the tomb owner. They usually contained dozens of items, including various kinds of bread, other baked goods, sweets, beer, wine, meats, domestic poultry, oil and fruit. When they were read out, they were “activated” and the prescribed task was fulfilled. In practice, it was impossible to bring all these offerings into the chapel physically. In this regard, too, the ancient Egyptians were thoroughly practical. Earlier, an extensive funerary cult might have been practised, but at the beginning of the Fourth Dynasty economies were made. The greatest builders of the third millennium, king Sneferu and his son Khufu, commenced projects started to consume considerable resources. The strain on the economy and the new requirements lead to the economisation of funerary cults. Offering formulas appear on tomb walls, and miniature bowls and cups start to appear. The bowls were used for offering symbolic amounts of food, while the cups performed the same function for liquids.

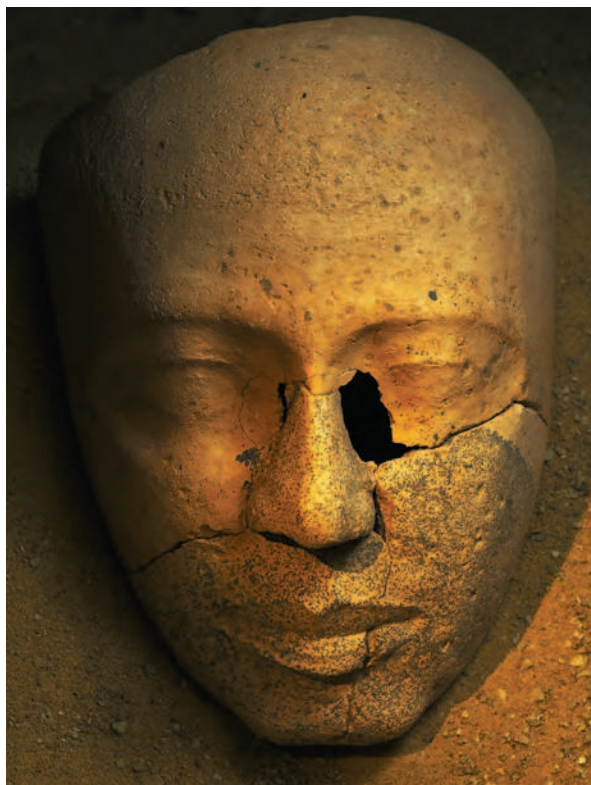
The ritual is continued by three kneeling priests, each of whom has one arm bent against his chest and the other raised. Once again, these priests have a strip of fabric across their chest. The accompanying inscription states that here we have “many blessings from the lector priests.” The aim of the three priests was to read out the lists

of offerings in unison. The departing priest concluded this ritual by sweeping away the traces left by the priests in the chapel.

The second stage is started by a priest kneeling in front of the altar. His activity was a symbolic expression of the bringing of offerings to the altar. Behind him two further priests pour water into a vessel, while the fourth and fifth priests once again purify the chapel. The penultimate task involved fumigating the area of the chapel with incense – a priest carries a lidded incense-holder, followed by the last pair of lector priests with unrolled papyrus scrolls. Their task was to “bless” the spirit of the dead person.

How are we to understand this ritual? According to the most widespread concept there were two related stages: the first symbolic, consisting of the purification of the place and the reading of magical texts; and the second more specific, involving the actual bringing of offerings to the dead person.

One day, however, these priests did not come back. The economic resources designated for the maintenance of the cult were spent, the chapel then grew quiet and the whole tomb slowly began to be filled with the sand of Egypt’s Western Desert. All that was left were the empty beer jugs and the miniature pottery strewn about near the entrance to the chapel. For the archaeologist of today these remains are a bridge to the past.



Face mask of a high official from the end of the Old Kingdom found in one of the tombs in Abusir South (MF).

The dry message of the beer jars



Miniature bowls and plates are two of the most ubiquitous funerary symbols of the development of the Old Kingdom economy (MF).

What was essential to the functioning of the ancient Egyptian economy? Was it founded merely on simple barter trade and a redistribution system centrally managed from the capital? Or did other principles exist, allowing more sophisticated transactions? I began to search for an answer to this question shortly after first arriving in Egypt in autumn 1991. My thesis work concerned ceramics from ongoing excavations in the southern part of the Abusir concession, and ceramics discovered in the 1980s during excavations of the pyramid complex of king Raneferef from the second half of the Fifth Dynasty. During my study of the pottery, new pathways gradually opened up that in the end led to a more detailed study of the ancient Egyptian economy and the whole society.

Shortly after arriving in Abusir I was deployed close to Neferirkara's pyramid, and given a task that appeared to be relatively simple: to process dozens of baskets containing ceramic fragments, and with here and there a preserved vessel. After several weeks of careful classification of ceramic shapes, I had achieved a certain amount of progress, and it was clear that the various areas inside the king's temple could be characterised according to the frequency of finds of the ceramic vessels, or more precisely by their shapes. At the same time it appeared that the production of the pottery had been governed not only by the technological limitations, aesthetics and functional requirements of the period, but that it also contained a much more complicated message.



Tomb of Kaaper in Abusir, illustrating uniform beer jars from the beginning of the Fifth Dynasty.

One of the continuing problems concerned three distinct groups of preserved vessels that in Egyptology are known as beer jars – although they look nothing like jars and have no handles – and which originally contained beer. These vessels possess an elongated egg shape with a pointed base that allows them to be placed in the sand. The three groups differed in size, but were otherwise homogenous. The question remained as to why. An answer was provided by the beer jars that came from Kaaper's mastaba, which we were also exploring. In this tomb there were dozens of well-preserved, completely identical beer jars that could be dated to a single and relatively short time period. We thus had three homogenous groups of jars that differed considerably from one other. The various groups of vessels differed greatly in this respect, but that within the group their volumes were practically the same. This unusual feature opened up a new opportunity for gaining knowledge of the ancient Egyptian economy.

Writing: the beginnings of the Egyptian administration

First, however, something should be said about the birth and early years of the ancient Egyptian administration. What led to the creation of such a sophisticated and effective system of state administration, easily the equal of the powerful monarchies of medieval Europe? Despite the efforts of archaeologists and Egyptologists, our picture of Egypt around 3000 BCE is a murky one. We know for sure that it was united under the rule of chieftains from the south who came from the then capital city of Upper Egypt, Thinis. The reasons for this process of unification, which lasted several centuries, are not entirely clear. The most likely cause was the need of the local power elites of the time in Upper Egypt to obtain luxury items and raw materials with which to make public displays of their power, and to strengthen their ideological and symbolic bases. This was to be achieved by long-distance trade, which was not a cause but a consequence of the growing diversification of society on the basis of territorial expansion by the most powerful chieftains. This is shown by the numerous imports of containers originally containing precious oils, wine and resin that have been discovered in the tombs of Upper Egyptian rulers in the burial ground in Abydos.

These containers came from the Near East. If the rulers of Upper Egypt wished for direct control of these trade routes, then they had to do whatever it took to control the area of northern (Lower) Egypt, above all the Eastern Delta, with towns such as Buto and Minshat Abu Omar. These were the centres of long-distance trade at the time. From the available sources we know that long-distance trade was not organised only by the Egyptians, but partly by traders from the Near East who lived on Egyptian territory. These merchants resided in Maadi, for example, several centuries before the unification of Egypt. This situation changes rapidly during the unification process.

The long-term and halting process of creating a centralised state also brought with it the creation of one of the oldest writing systems in the world, an essential tool of government that had a significance similar to that of mass information tools today. As today, these tools were controlled and formed by the elites.

Lower Egypt, which was culturally more advanced, succumbed in this conflict to its rivals from the south of the country. A centralised state arose, and the foreign merchants' colonies disappeared. The first ruler to reign the new state was Hor Aha, who immediately built a fortress and the capital city of the newly-founded state close to present-day Abusir and Saqqara cemeteries, calling it *Inebu Hedju* (White Walls). The city's location was not chosen by chance, but was close to the point of transition between the closed-in Nile valley and the wide Nile Delta, which at that time was mostly swamp, but gradually became one of the main goals of ancient Egypt's



One of the earliest examples of the hieroglyphic script in Egypt – Abydos tomb U-j.

internal colonisation. It was in the Eastern Delta that “Ways of Horus” started, a commercial and military artery that ran along the northern edge of the Sinai peninsula. Many raw materials came from here, above all copper which was of strategic importance for the ancient Egyptian state. The road also connected Egypt with the Gaza strip, and it was the only important dry-land connection that ran between Egypt and the Near East. Over the course of several decades, Egyptians founded their own merchants’ colonies in southern Palestine, the task of which was to satisfy the Egyptian ruling elite’s continuous need for luxury items.

The first rulers of the united state soon managed to create the roots of a system that allowed the economic resources of the whole country to be controlled, efficiently collected and redistributed. From Den’s period comes a mention of a population census in the Eastern Delta, and from the Second Dynasty we have the first evidence of a cattle census in the country, which usually happened every two years. One of the key factors in the creation and development of the administrative apparatus was the development and elaboration of the writing system. This not only allowed information to be transferred in a fixed form over a long distance, but also permitted relevant data to be shared and preserved for a long time. Such information included data of an economic nature: the number of inhabitants, the number of cattle and the height of the Nile floods, since from the height of the floods it was possible to calculate the yield of a certain agricultural area, and thus to establish the precise level of tax to be paid in kind.

From Den’s reign around 2900 BCE we also have the oldest known papyrus scroll. It was discovered in the mastaba of a dignitary called Hemaka in northern Saqqara. By chance, the scroll has not been written on, but as part of Hemaka’s grave goods it was undoubtedly meant to indicate his high position and the privilege of being able to use the medium.

The mystery of tomb U-j in Abydos

The revised excavation of tomb U-j carried out in recent years by the German Archaeological Institute in sector U of the burial ground of the late predynastic Upper Egyptian rulers in Abydos shows that this area provides definitive evidence not only regarding the creation of writing, but of the ancient Egyptian state itself. The new finds significantly change the established ideas regarding the creation of writing, and overturn the older belief that writing was created in the Near East and was merely taken over and adapted by the Egyptians.

The U-j tomb belonged to the predynastic king Scorpion. During its new excavation, archaeologist and former director of German excavations in Egypt Günther Dreyer discovered over two hundred small ivory, bone and stone tags (labels measuring approximately 1.5×4 cm) containing hieroglyphic symbols and numeric data. These short texts were created with the aid of individual symbols that are very well known from the later system of ancient Egyptian writing. They contained symbols for human figures or their parts, wild animals, birds, reptiles, plants, heaven, earth, buildings, boats, furniture and clothing. Indeed, there is evidence for over fifty

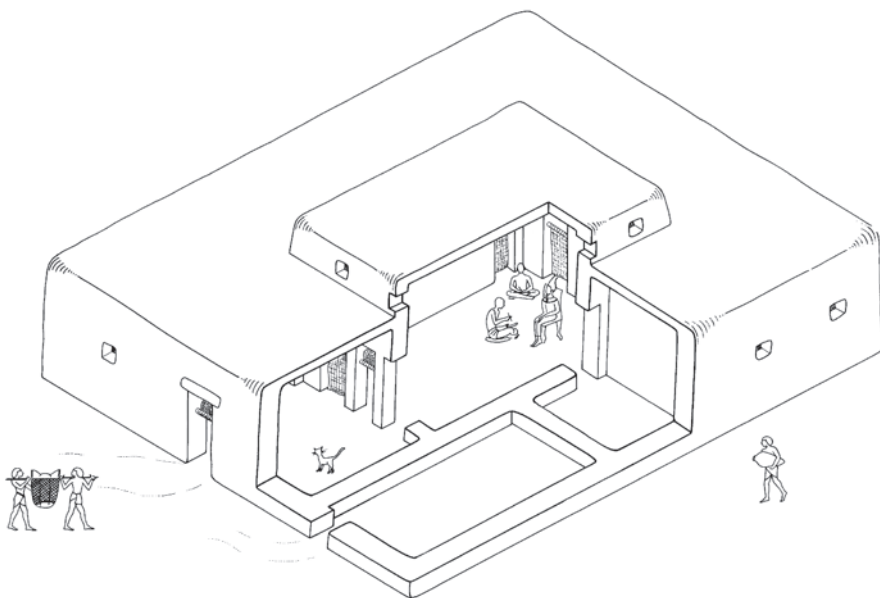
different symbols, occurring either in isolation or in combinations of up to three. From their interpretation it seems clear that the tags, affixed to individual items in the grave goods, indicated their place of origin: either various cities in Egypt (including Lower Egyptian ones, which clearly must have been already subject to the ruler of the time in some way) or estates (a combination of two symbols representing a tree and an animal). However, the tags come from a period 150 years before the assumed unification of Egypt. Rooms 7 and 10 in the underground tomb of king Scorpion also contained over 200 imported wine containers from the area of present-day southern Palestine. During this period wine was without doubt a highly valuable commodity that could only be obtained beyond Egypt's borders, since Egypt did not begin to cultivate vines until shortly after it was united. However, the route to it led across Lower Egypt and its local rulers. Obtaining wine was therefore relatively complicated during this period, and as a luxury item it was a privilege afforded only to a narrow circle of the ruling elite.

Therefore, Abydos tomb U-j of king Scorpion provides vivid evidence why and how the ancient Egyptian administrative apparatus gradually took shape. The driving force was the need to obtain valuable and hard-to-get commodities that would legitimise the privileged position of the ruler and his associates. In the case of Scorpion's tomb, it was shown in the careful labelling of all the valuable commodities stored in the tomb to provide for the afterlife.

The structure of the ancient Egyptian state

At the pinnacle of the emerging administrative system stood the ruler, a god incarnate as well as a leader and formal owner of all raw materials and land that was entrusted to his administration by the Egyptian gods. For practical reasons, the ruler delegated a considerable number of his competences to individual officials. At the outset, most of them were members of his own family. The king's executive representative was the vizier, who governed the administration of the whole country. Until the end of the Fourth Dynasty this office was held by members of the royal family, as we know from both written and iconographic sources, although the first reliably-documented vizier comes from the period of the Third Dynasty. His name, Kaimen (My ka is firm), is known from the total of twenty one stone vessels that the dignitary dedicated to his king and possibly also father, Netjerikhet, as part of his burial equipment. Although Kaimen undoubtedly existed, and his tomb must have been one of the most splendid of its time, it has yet to be discovered.

At the outset of the Fifth Dynasty, loyal officials of non-royal origin worked their way to the top of the administrative apparatus, with members of the royal family losing their dominant influence in government. Paradoxically, however, it seems to be at this point, which is sometimes called a period of "democratisation" for lack of other suitable terms, that the ancient Egyptian state embarked on the road of its gradual decline, although this did not come to a head until several centuries later. It is certainly not by chance that the first ruler of the Fifth Dynasty, Userkaf, married his daughter Nimathap to an official of non-royal origin, a priest of the son god Ra in



Palace of the Scorpion king – a reconstruction. The royal palace was erected during the very earliest stages of the state formation and were the focal point of administration (LV).

Heliopolis, Ptahshepses. The latter thus became the first person to enter the royal family in this way. Until then, the royal family had been strictly endogamous, and other marriages did not come into consideration.

The above-mentioned predynastic tomb U-j also indicates which institutions and which officials were the most significant from the very beginnings of the formation of the state. The most important officials were those who could read and write and keep records of various products and goods. The oldest institutions, which arose gradually in accordance with the developing ancient Egyptian state, were in charge of collecting taxes, organising trade and, later, expeditions with the aim of obtaining valuable goods and desired minerals. Alongside them a department was founded that was responsible for keeping records of them and redistributing them. Other institutions focused on the most effective means of collecting taxes in kind, in the form of levies of cattle and grain from various parts of the country. From the First Dynasty at the latest, papyrus was being produced, and among other things this allowed long texts of an administrative nature to be written down.

The first written evidence shows that the one of the basic central institutions was the Treasury, known as the White or Red House – two alternative names featuring colours that clearly reflected the duality of the united Egypt (white was the colour of the Upper Egyptian and red that of the Lower Egyptian crown). The role of the treasury was to keep records of, administer and redistribute taxes paid in kind, and to register booty from military campaigns, as well as the products and minerals brought



Khirbet Hamra Ifdan, settlement from the Early Bronze Age III (Fifth – Sixth Dynasties) in Wadi Faynan – very likely the principal source of copper for the Old Kingdom state.

back from expeditions beyond Egypt's borders. Last but not least, it administered products gained in barter trade, above all with the Near East and Nubia.

Among the most important raw materials from the predynastic period onward were the highly valuable turquoise from Sinai and obsidian vessels and instruments – above all knife blades – of Ethiopian origin. Copper ore, of key importance in the Old Kingdom, came in part from Sinai, but above all from the mines in Wadi Faynan in Jordan, recently rediscovered by Thomas E. Levy and his San Diego expedition. One of the most significant commodities of the Old Kingdom and also subsequent periods was cedar wood, already discovered in the tombs of Upper Egypt's predynastic rulers. The wood was traditionally transported from the Lebanese port of Byblos, which the ancient Egyptians called Kepen. From around the fourth millennium onwards it was an important source of building wood for the whole Near East area. Byblos also played a significant role as a trans-shipment centre for many commodities from inland northern Mesopotamia, which then continued to Egypt.

A further important institution, which operated as part of the Treasury, was the Granary, or *per-shena*. Its main role was to collect the grain harvests from the various estates in the country in the granaries of the royal residence. The dignitaries who presided over it bore the title *imi-ra shenuti* or “overseer of the two granaries.”

The backbone of the ancient Egyptian administration consisted of the scribes who were able to read and write, educated in mathematics, astronomy and related sciences that could be used in practice. The administration had a vertical, five-degree structure,

at the head of which stood the “overseers.” The name for an overseer was *imi-ra*, which in literal translation means “he who is in the mouth.” These people were in charge of the various institutions, had considerable autonomy in exercising their authority over the offices entrusted to them, and were directly subordinate to the vizier. There followed the “supervisors” *sekbhedj*, “controllers” *kberep*, “assistants” *iri-kbet* (“he who belongs to the matter/thing) and helpers, *imi-kbet*.

Also part of the state administration were two categories of priests: *bemu-netjer*, or “priests of god,” who were responsible for the funerary cult of the king and the cult of individual Egyptian gods, and *bemu-ka*, “priests of the (spirit) ka,” who performed the funerary cults of officials of non-royal origin and members of the royal family. A speciality of the ancient Egyptian administrative system was that the priests could hold secular functions in the royal court, while at the same time being responsible for the cult of a dead ruler. They were also able to combine their work in the cemeteries. Thus, for example, *bemu-ka* priests not only tended to the funeral cult of non-royal persons, but also held the function of assistant *nabu* (“clean”) priests in the funerary temples of the kings.

The institution of the Royal House, *per-nesut*, had just one role: to provide for the material needs of the royal palace, the ruler and his family. They lived in a palace called the *akb*, with the “controller of the palace” (*kberep akb*) responsible for its operation and security. Proof of the existence of this title from the First Dynasty comes both from Abydos and Saqqara, and it was without doubt one of the most important functions to have arisen immediately after the foundation of the united state. On the basis of later parallels, it can be assumed that the official with this title supervised the everyday operation of the temple, its supply, the opening of the gates in the morning and their sealing at night, the cycle of goods within the palace and the organisation of hearings in the royal court in front of the “Ten Great Men of Upper Egypt” – judges who, together with the “Six Men of the Great Houses” were in charge of matters of justice in the country. In ancient Egypt there was of course no distinction between the executive and judicial power, so that a judge could have been a priest and at the same time the “overseer of all the royal works,” which means that he was in charge of the king’s construction projects throughout the land.

From the titles of one of the first controllers of the palace, Sabef, who served the last king of the First Dynasty, pharaoh Qa’a, and was buried close to his tomb in Abydos, one interesting conclusion can be drawn. During this period there definitely existed at least two main royal palaces, one in Abydos and the other in *Ineb Hedju*, the recently-founded capital of the state. By all appearances there were more such palaces, however – at a guess, at least seven throughout the country. Although their locations have not been reliably proven, on the basis of later indicators we believe they were situated in the country’s natural and significant economic centres. These centres were located in the Meidum area, at the place where the shortest connecting route between the Nile valley and the Fayum oasis started, and then in the large residential agglomerations close to Zawiyat el-Amwat, Naqada, Hierakonpolis, Edfu, Abydos and Elephantine, in Middle and Upper Egypt. The king stayed in these residences when he was travelling through the country from north to south, at least during the first dynasties. With time, however, this practice fell largely into abeyance,



Stela of an official named Merka, a member of the royal family: this man carried out a number of very different offices, from administrator of the desert provinces to the priest of the goddess Neith.

and the king was represented by his governors, the nomarchs, who administered the various regions. To some extent this mechanism can be compared to the peregrinations of the early mediaeval European kings, during which they performed administrative acts, decided important court cases, monitored the economic and political state of various regions, ensured that taxes were being collected properly and, where necessary, renewed their influence. Under king Sneferu, at the start of the Fourth Dynasty, there was a certain amount of codification in the sense that close to these ancient and traditional centres, small pyramids of several steps were built in easily-visible places, a symbol of the king's material presence and authority.

Together with improvements in the state administrative apparatus, there was a deepening of internal colonisation within Egypt. The country was divided into individual administrative units that were called *sepat* (nomes). Each nome consisted of estates and domains founded by the king, the main function of which was to ensure support for the nascent Egyptian state. Their production was precisely recorded, taxed and redistributed by the Treasury, which controlled the flow of individual commodities throughout the country. The estates grew agricultural crops and bred livestock, while the domains originally focused on producing wine for the royal court.

There were two main types of settlement in ancient Egypt – the city, *nint*, and the farm, *but*. They can be compared to the modern-day Egyptian *balad* (big village) and *eṣba* (a settlement consisting of several houses or homesteads). Weni, in his autobiographical inscription from the middle of the Sixth Dynasty, describes how the conscription of troops took place on Egyptian territory:

There were [in it] nobles (*batia*), royal seal-bearers, sole companions of the great estates, administrators, (local) headmen (*beri-tep*), estate controllers (*beka but*) of Upper and Lower Egypt, companions and overseers of foreigners, overseers of priests of Upper and Lower Egypt, overseers of the workroom (*ges-per*) in charge of the troops of Upper and Lower Egypt from the estates (*but*) and towns (*nint*) which they ruled, and the Nubians of those foreign lands.

During the First Dynasty there was a gradual move towards a formal division of Egypt into nomes, which to a certain extent respected the traditional division of the territory and the existence of natural economic centres. These districts, called *sepat* in Egyptian, and the corresponding hieroglyphic symbol, represent an outline of the country crisscrossed by cultivated fields and irrigation canals. The oldest evidence of nomes appears to come from the period of the government of the reformer Den. They concern the 4th, 5th, 8th, 9th and 16th Upper Egyptian and the 1st (Memphis), 2nd, 3rd, 6th and 16th Lower Egyptian nomes, regions that, perhaps especially in the southern part of the country grew up around the traditional power centres. A major role in the creation of nomes was played by the existence of original political and economic centres, cultural areas and regional characteristics. The number of nomes was, from the start, not finite, and there was a gradual increase in them in line with the development of the country's internal colonisation, above all in certain parts of the Delta.

Almost all the nomes had their own standards with emblems, and from later times we also have data regarding the length of the individual nomes. This information comes from a monument known to Egyptologists as Senusret's Kiosk, which dates to the twentieth century BCE, when Egypt was ruled by Senusret I. A shrine to the boat of Amun, it can still be seen by visitors to Luxor with their own eyes. On the walls of the shrine is a list of the regions of the time. For the Old Kingdom period, however, the main source of our knowledge of the number and titles of the nomes remains the *Weltkammer*, the "Room of the Seasons," in Nyuserra's sun temple in Abu Ghurab, where the twenty-two regions of Upper Egypt and the sixteen regions of Lower Egypt were originally depicted. From their number it appears that the administrative division of the southern part of the country had by this point reached a more or less definitive shape, while the colonisation of the Delta was still far from over.

During the Fourth Dynasty it is possible to observe a tendency that reflects the differing policies implemented in the territorial division of the country. While those responsible for the regions in Upper Egypt were called *beka sepat*, "chief of the region," or *imi-ra uput* ("overseer of the messages", in other words of the king's orders), those responsible for the regions in the Delta were called *beka but aat*, "chief of the great (farming) estate." The Lower Egyptian title indicates that the Delta was at



The boat shrine built by Senusret I in Karnak (Luxor): it contains a list of Egyptian nomes from the twentieth century BCE.

this time used almost exclusively for founding new agricultural estates. Moreover, during this period it was usual for one official to be responsible for several estates.

In connection with the building of Upper Egypt's infrastructure, the titles we have are "representative of the king's people," *nisutiu* (this clearly means the king's subjects), "overseer of the fortress" and "overseer of the new cities." These indicate that fortresses were being founded here and new cities built for new settlers.

An approximate idea of the structure of a settlement in a particular area of the Egypt of the time can be gained from a later text, the Wilbour Papyrus dating from around 1142 BCE, which describes the results of a cadastral survey of about 150 km in Middle Egypt that was carried out in the fifth year of the reign of Ramesses V. In the papyrus the following categories of settlements are used (note the complete absence of cities, termed *niut*):

"...Iat (mound), At (house), Webit (hamlet), Bekben (an official's villa), and Segat (tower). Altogether there are 141 of these places, subdivided as follows: 51 mounds, 37 houses, 29 hamlets, 17 villas and 7 towers."

(Kemp 1989, 312)

Until the Fifth Dynasty, most state officials stayed and lived at the royal court in Memphis. Only with the gradual loosening of the central administration from the second half of the Fifth Dynasty did these officials start to be buried in their home provinces.

In addition to a highly varied collection of officials, a large range of servants worked at the royal court, ensuring the functioning of the palace and providing personal

services to the king. Servants of non-royal origin were at first called *iri-ikhet-nesut*, “he who is tasked with the affairs of the king.” Later, at the beginning of the Fifth Dynasty around 2500 BCE the titles became more varied, relating to already-existing specialisations such as hairdresser, manicurist, innkeeper, administrator of the royal jewels, crowns, kilts and ponds, overseer of the royal singers, keeper of the royal ornaments, doctor, servant in charge of the king’s breakfast and many others. This was connected to the fact that the jobs were passing into the hands of people of non-royal origin, and it now needed to be clear who was responsible for this or that court function.

The dignitary with the lost tomb: Pehernefer

What were the activities of a typical official employed at the royal court sometime at the start of the Fourth Dynasty, when Egypt was ruled by one of its most significant rulers, Sneferu? An example is provided by Pehernefer, about whom we first learned in the nineteenth century when his tomb was discovered in the dunes of the Saqqara necropolis by the French researcher Nestor Lhôte. The tomb was typical of those of its day: it was relatively large, with a ground plan of just under 1 000 square metres, and the ground plan of the chapel, which was situated in the southeastern corner of the superstructure, was cruciform. Its walls were lined with limestone blocks, decorated with inscriptions and scenes executed in low relief. Unfortunately, shortly after the tomb was discovered in a burial ground about which not yet was much known, knowledge of the tomb’s location was lost.

Practically the only thing that was preserved was the list of Pehernefer’s titles. These titles provide a clear indication of his career at court. However, our attempts to understand them are complicated by the highly complex way in which the various ancient Egyptian titles are written, and also by the fact that the ancient Egyptians did not inscribe in their tombs just the titles that they held at the time when the tomb was built, but actually all the titles that the official in question had ever held over the course of his career. As a result, it is not uncommon to find next to each other several titles relating to the operation of a single institution, differing only in degree or level of responsibility. The main information provided by these lists thus concerns the stages through which officials passed in a career at court. We do not need to list here all of Pehernefer’s several dozen titles, but will limit ourselves to those that are at present essential to an understanding of similar positions held by hundreds of officials.

Pehernefer was undoubtedly a relatively high-ranking official, who was close to the king but was not of royal origin. One of his most important functions was connected with the Treasury. He started his career in it as an ordinary employee, gradually working his way up to supervisor, and finally overseer. He also held the function of guard of the Treasury seal.

Among his most important titles were those of administrator of royal affairs, overseer of all the royal works, one of the Ten Great Men of Upper Egypt and the person in charge of the king’s land holdings. Pehernefer appears to have valued this last title the most, because it appears in his chapel everywhere that his name appears. Still, the three penultimate titles also put him among the most significant officials in



In ancient Egypt, the status of a scribe was an indication of a high standing in the community. Basically every official was a scribe and thus qualified for different bonuses and privileges guaranteed by the state.

the country. As these titles suggest, Pehernefer oversaw the king's construction projects through the country, which might have included both the construction of new cities and estates, construction in the capital city, the foundation of temples and the building of the pyramid complex. To be one of the Ten Great Men of Upper Egypt, in other words a member of the king's advisory body, was another privilege.

His other titles are less common: Pehernefer was the overseer of the laundry court, the overseer of the linen court, the overseer of the tallow house, the controller of the dining room, the overseer of the rations house, the controller of the bakers of *retekh* and *fesu* bread, the overseer of the women's court, where grain is ground, the overseer of the women who bake *bia* cakes, the controller of the bakers of sweet meals, the overseer

of the *shemat* fabric court, the overseer of the brewers of the *per-shena* institution (of the central granaries) of Upper Egypt and the overseer of the brewers of the *per-shena* institution of Lower Egypt, in other words the overseer of all the king's granaries.

Further titles of his were connected to the land owned by the nascent state, or to the estates that Pehernefer himself owned or that he held in fief from the king. Note that we can use terminology relating to mediaeval history, because it is well-suited to describing the basic features of the administration of the Egyptian state at this time. Among these titles were the overseer of the "great estate" *Sen* of the prince of Busiris, the overseer of the "great estate" in Heliopolis and the overseer of the "great estate" of *Heka*. Pernefer was also the king's overseer in the Libyan nome (on the western fringe of the then delta), overseer of the "great estate" of queen Meresankh (the wife of king Sneferu), the administrator of the vineyards and the bearer of several further titles. He was thus responsible for administering several regions in totally different corners of the country.

From the above-mentioned titles it is clear that Pehernefer was largely responsible for the operation of institutions with close ties to the everyday functioning of the royal palace. These institutions also produced the basic commodities used both as an expanded form of payment in kind, for the payment in bread and beer of the many officials and employees working in the royal palace and numerous central institutions. He was also involved in institutions that produced selected foodstuffs, including several types of bread, sweetmeats and fats, and was further the overseer of wine production. In addition, Perhernefer was responsible for the operation of several estates in the country. To these executive competences can be added numerous priestly titles indicating that among other things he was the dignitary responsible for burial in the Abusir-Saqqara necropolis (the priest of the frog goddess Heqet) and the priest of several significant Egyptian gods such as the god Kha, the god of wisdom, Thoth, and the god of foreign countries, Sopdu.

After his death, Pehernefer received a site for the construction of his tomb in the heart of the Saqqara necropolis as it then was. His welfare after death was undoubtedly looked after by priests, who were paid from the income gained from a total of 14 estates (including fields, animals and human labour) that he had founded or received directly from the king as a gift for the purpose of maintaining his funerary cult. The great variety of his titles, competences and responsibilities was, based on our knowledge of the period, far from unusual for the time. High-ranking officials of his category usually represented the king in many fields, whether in the central administration connected with the royal palace, priestly functions, the overseeing of building projects, personal services to the king or oversight over the function of individual estates and farms and the monitoring of what they produced in various parts of the country.

The household of prince Kaninisut

One thing we do not know about Pehernefer, however, is what his family and household looked like. We can only guess what the lifestyle of such a dignitary would

have been, above all on the basis of the tombs of dignitaries of a comparable position that have been found. One of them was the official Kaninisut, who lived at the beginning of the Fifth Dynasty. His tomb is situated in the royal necropolis in Giza. Kaninisut, a royal prince, had a wife named Neferkhanisut, who bore him at least two sons.

In Kaninisut's tomb, as with other ancient Egyptian sources, it is fairly difficult to reconstruct the family relationships, since the ancient Egyptians did not have many specialised labels for family ties. They were more likely either to describe the relationships, or, just as frequently, not to give them at all. For marriage, they used the terms *b(a)y* to indicate a husband and *hemet* to refer to a wife. To express origin, there were two pairs of labels: *it*, "father", *mut*, "mother" *sa*, "son" and *sat* "daughter". Finally, to express the sibling relationship, the words *sn* and *snt*, "brother" and "sister", were used. Combinations of these terms were then used to indicate all family relationships.

At the head of Kaninisut's household stood the administrator Uhemka. He was in charge of eleven scribes, who were responsible for keeping the household accounts, its income, paying taxes, correspondence and other tasks. We know the names of all of them. A further six officials were employed as overseers or controllers. They included Perinedju, the administrator of fabrics, Seshemu, the overseer of fragrances, Merinetserukhufu, who was the controller of the scrolls, Tjenti and Niankhathor, the controllers of the halls, and finally Perisen, the keeper of the seal. The household also included three butchers, two bakers, a cook and a total of five (!) servants (their Old Egyptian name was *udepu*) in charge of the drinks of the master of the house and his family. The list is rounded off by fifteen further servants, of whose precise job descriptions we are not informed.

In total, there were forty-three people working under the supervision of Uhemka, all employed to ensure the welfare of his high-ranking family. This does not of course include the "ordinary" farmers who lived on Kaninisut's estates in various parts of the country. From the inscriptions in Kaninisut's chapel it appears that his funerary cult alone was provided for by over thirty estates and villages, eleven of which were founded by other members of his family, in some cases his ancestors. One farm came from the king himself, Sneferu, and three were newly-founded by Kaninisut. His actual funerary cult was tended to by twelve priests, four of whom were also members of his household.

Pehernefer, Kaninisut and hundreds of other dignitaries from the time of the pyramid builders appear to have had considerable holdings of land at their disposal. These were scattered all over the country, in southern and northern Egypt, and were of various sizes. From the sources available, we can put together a clear picture of the family and "household" that was the foundation of the ancient Egyptian economy, and that can still be found in the Egyptian countryside today. At the heart of this organisation was a well-to-do core family of a high official, with land holdings that provided work for members of several other less well-off families. In return, the man at the head of the rich household and its members provided work and protection – "patronage" – to the members of the other families, who were voluntarily subordinate



Prince Kaninisut and his household, as displayed in the wall decoration of his Giza tomb.

to them. A very clear definition of this model of state functioning can be found in David Schloen's thesis on the topic:

"Patrimonialism is the antithesis of rational bureaucracy. In a patrimonial regime the entire social order is viewed as an extension of the ruler's household (and ultimately the god's household) and it consists of a hierarchy of sub-households linked by personal ties at each level between individual "masters" and "slaves" or "fathers" and "sons". There is no distinction between the "private" and "public" sectors of society, because government administration is effected through personal relationships on the household model rather than through an impersonal bureaucracy".

(Lehner 2000, 280)

The greater the master's wealth, the more people were involved in administering it, the more people worked for him and the more dependent he and his family were on these people. This mutually-beneficial relationship can be seen not only in everyday life, but finds its way into the decoration of tombs: the higher-placed the owner of the tomb, the more servants and offering-bearers are depicted on the walls of his tomb with their name and titles.

Each patron was the sovereign guarantor of the welfare of his "extended family," his *oikos* (using the later word referring to households in ancient Greece). This became even clearer at the end of the Old Kingdom, under the rule of Teti – from a period when high-ranking court dignitaries became considerably more independent. The oldest inscription illustrating this comes from the tomb of the vizier Neferseshemra dated to the Fifth Dynasty, which among other things states:

*'...I spoke Maat and I performed Maat...
I judged the two parties so that both of them were satisfied,
Wherever I had the authority,
I have defended the weak one against the strong one,
I gave bread to the hungry and cloth to the naked.
I ferried over the one without a boat,*

*I buried the one without his son,
I made a boat for the one who had no vessel,
I was respectful to my father and kind to my mother.
I brought up their children.*

As Detlef Franke has shown in a recent study, the inscription refers to the position of the owner of the inscription: standing at the head of his “extended family,” a patrimonial household, he guarantees all its members (indeed, he is required to do so, since otherwise his own position and the position of the members of his nuclear family would be threatened) that he was an honest and careful manager, who looked after all the members of his family, made sure that they did not go hungry or thirsty, arranged their funeral ceremonies (involving a trip by boat) and their actual burial.

The frequency of these inscriptions is in line with the decentralisation and regionalisation of Egypt under the Sixth Dynasty: they appear eight times in Memphite burial grounds over the course of the entire Sixth Dynasty, but approximately ten times in the provinces from the reign of Merenra until the end of the Sixth Dynasty.

Ancient Egyptian markets

How is all this connected to the beer jars mentioned at the beginning of the chapter? Bread and beer formed a fundamental component of the Egyptian diet, regardless of the month or time of year. A large number of types of bread, together with pulses, fruit and vegetables, were the mainstay of the Egyptian diet. This is still true today, above all in the countryside.

Bread and beer were also often used as payment for work performed. In the Old Kingdom, money did not yet exist – coinage started to develop in the seventh century BCE – but physical items that might be called “value equivalents” undoubtedly did. We have numerous inscriptions from the Old Kingdom from the tombs of officials, who mention that they built their afterlife residences from honestly obtained assets and that the workers who took part in their construction had been properly paid with bread and beer. In the mortuary temples of the kings, things were the same, and priests were also paid in kind – in bread and beer, and sometimes also in meat, which was generally considered a rare food.

The essence of the ancient Egyptian economy is best described by Barry Kemp:

‘Money does, indeed, provide a wonderfully easy way of doing business at every kind of scale... But non-money systems have, in the past, managed remarkably well. They exemplify a general characteristics of cultures: that systems tend to be adequate for the demands placed upon them. People cope... The Egyptians managed large economic operations over long periods of time with a moneyless system that was adequate. They were able to do this partly because in the ancient world in general people remained in far closer handling contact with real material wealth – commodities – than we do, and partly because they had developed an accounting system that was half-way towards the abstraction of “money”. It was half-way in the sense that its language

was that of commodities – loaves of bread, jugs of beer, hekats wheat, and so on – but its procedures allowed for the manipulation of quantities which was not necessarily matched by the movement, or even existence, of the substances themselves. It was a typical ancient compromise: abstraction disguised by concrete terminology... It is also another lost world of the mind...
(Kemp 2006, 171)

Imagine that you were a priest working in the funerary temple of a dead king, let us say Nyuserra, in Abusir. Your work should take only a month or two in the year. How are you going to live for the rest of the year? Fortunately, in ancient Egypt there were a number of other possibilities. Each priest could be employed in the temple cult of other kings, and last but not least, be involved in private cults in the tombs of high-ranking dignitaries. There are even cases of priests who worked in the funerary cults of kings in Saqqara and Abusir and also in Giza, twenty kilometres away. In addition, they could also hold various socially significant positions in the state administration or in the royal palace. As has already been mentioned, in ancient Egypt there was no barrier between the priestly and administrative spheres, not to mention the executive sphere. The highest officials in the country usually held several dozen of various functions, each of which brought economic advantage. During the rule of king Nyuserra, moreover, most offices in the country gradually started to become inherited, and the previously heavily-centralised state slowly began to disintegrate and fall into hands of some of the wealthiest families.

The problem for such an official came, however, when he wanted to utilise his payment in kind (mostly bread and beer). One possibility in the surroundings of Memphis was to set off for an ancient Egyptian market. We know a relatively large amount about how such markets functioned in the capital and its surroundings, since around a dozen scenes have been preserved on tomb walls in the Memphis burial grounds in Abusir, Saqqara and Giza. The picture is completed by a group of scenes from Unas's causeway in Saqqara. These sources come exclusively from the second half of the Fifth and the Sixth Dynasty.

The best scenes are those from the tomb belonging to the brothers Nyankhkhnum and Khnumhotep, who were employed as manicurists at the royal court. They lived approximately during the rule of Nyuserra, and built themselves one of the most beautifully decorated tombs that has ever been found in the Saqqara burial ground. However, their unique tomb was discovered purely by chance, during archaeological work on the causeway of king Unas. During the construction of this causeway, which connected the king's valley temple and his pyramid temple, the already standing tomb was entirely taken apart and the individual blocks used as convenient building material. Thus the whole tomb disappeared in the foundation built for the causeway. The blocks were first discovered by Ahmed Moussa, who in the 1970's, together with Hartwig Altenmüller, reassembled the blocks and reconstructed the tomb.

Immediately behind the monumental entrance to the tomb of two brothers, which takes the form of a mastaba, was the entrance hall, on the northern wall of which there were a total of five horizontal registers. While the first (top) register is devoted to hygienic procedures, including a manicure and pedicure, and the last to sailing of

boats into the west (in other words to the burial ground), the second to fourth registers show scenes of an ancient Egyptian market. The different parts of the relief contain detailed information as to what usually went on in such a market. It is possible to make out buyers and sellers, and even the inspector, whose task it was to ensure that order was maintained in the market, to prevent theft and to monitor prices, so that buyers were not cheated.

The first of these registers contains a total of four scenes. On the far left we see a standing male figure, a seller. In front of him on the ground is a huge basket of vegetables. To the right of him a boy is walking along, with a baboon on a lead who is stealing out of the basket. The seller has his hand cupped to his mouth and is shouting at the boy, in what is clearly a reaction to the cheeky animal: “You, boy, playing the overseer (i.e. the market inspector), do you want me to call your master?” Another pair consists of a kneeling fishmonger with a strip of fabric over his left shoulder, gesticulating in lively fashion and offering his fish, and a customer, who holds a sealed beer jar in one hand and a fan in his left arm. The seller calls to him: “Give (me) your food (in exchange) for my fish as the purchase price!” A short label above the basket adds that this is a mullet, one of the most widespread types of fish caught in ancient Egypt (genus *Mugilidae*).

To the right of them is another pair. In the middle stands a basket, full to the brim with sycamore figs. On the left, once again kneeling, is the seller, approached by a woman with a small child. The woman holds a bowl of food in her outstretched arm. The seller tries to sell her his goods, saying: “Give me your food (in exchange) for these very sweet sycamore figs!” However, the woman seems to be having less trouble agreeing on a price than on calming her child, who cannot wait for the sweet figs and keeps pestering his mother. “Do you want my part to go all the way home?” This can be interpreted to mean that the mother is intending not to give the child any figs until they get home.



Market scenes from the tomb of Niankhkhnum and Khnumhotep in Saqqara.

On the far right we see a man with a monkey on a lead. The man differs from the other people in that he is dressed not in a clinging kilt, but in a pointed one, which symbolises his higher rank. This is the market inspector. He is calling to his guard animal: “Hold on, hold on!” The monkey is pinching a naked boy who, clearly deliberately, is standing next to four sealed beer jars and appears to have been trying to steal them. The boy is shouting out in self-defence to the market inspector: “Oh, official, don’t set (it) on me! Leave it on the ground! Keep it away...!”

The next register begins on the left with a scene depicting two sitting men. The seller is holding in his outstretched left arm a round loaf of bread that he has just pulled out of a basket, where other loaves are lying together with spring onions. To the right of him sits a customer with a shopping bag over his right shoulder. He is trying a spring onion (which he may have been given by the seller). Judging by his rounded stomach, he is a fisherman. They often suffered from bilharzia, of which one of the symptoms was a swollen stomach or a hypertrophied scrotum. Naturally, the ancient Egyptian artist who created these and similar scenes did not forget such details. The seller is offering him loaves of bread with these words: “Look, *shemedu* bread. Six of these (loaves) are equal to two grain measures (ie. hekat) of *sut* (grain)!” The customer is asking to try a drink made of *shemedu* bread: “Give me something to drink from, so that I have a present!”

It is also worth noticing the couple at the end of the register. The customer is once again a sitting man with a shopping bag, whose interest is caught by a drink offered by a woman who stands at the far right. In the middle is a vessel, probably containing beer, propped between two stones. The woman is holding a small bowl in her left hand and a measuring cup in her right, with which she is filling the bowl that she gives to the man. The inscription relating to the woman states that she is a servant in charge of pouring drinks. The man reacts thus: “Fill it (the vessel) up, although I am already round. This grain is excellent!” The expression “to be round” clearly means that the man is full, but he appears to like the drink made of grain – the text refers to the drink metonymically as “grain”. Here, we also have evidence of beer being sold at markets.

From the last register with market-related subject matter, the final scene is worth a mention for its depiction of trade in cloth, of which we have no evidence from elsewhere. This scene is unique above all because the manufacture of high-quality fabrics was a royal monopoly, and excess cloth from the royal court could only be obtained by selected royal officials. On the far right sits a corpulent man, who is clearly overseeing the transaction. The two men standing in front of him are measuring a strip of fabric. The man on the left is a customer, the man on the right is the seller. The label over him reads: “1 (?) cubit of cloth for the price of 6 *shat* (units).” The man on the right comments on the offer thus: “I’m telling you honestly, this *netjeru* cloth (is a work) of fine craftsmanship.” We know the expression *shat* only from a few documents from the period of the Old and Middle Kingdoms, and it clearly represents one of several mediums of exchange. According to Altenmüller, who published these texts, the determinative behind the word *shat* (the determinative is a symbol that in ancient Egyptian script determined or specified the meaning of the

given word more closely) is reminiscent of an upside-down snail shell. The means of payment could thus have been snail shells, a variation on the cowrie shells used as currency in ancient times and, until recently, in the Near and Far East.

Ancient Egyptian value universals

All the above-mentioned scenes come from the burial grounds in Saqqara and Abusir (there is also a single example from the burial ground in Giza, situated some twenty kilometres to the north). This is an area directly adjoining the capital of the time. It and its surroundings were home to all the layers of society depicted in the market scenes: craftsmen, farmers, priests and state officials. We should remember that these classes were paid for their services in kind; ensuring their due reward was one of the significant tasks of the redistributive economy of the time. It is also important that, without exception, all the scenes come from the second half of the Fifth and the beginning of the Sixth Dynasty (24th-23rd centuries BCE), a period that saw a notable amount of individualisation and growing independence among officials. It was when powerful families were establishing themselves firmly in leading positions in the administration of the state.

Let us first look at the goods that are sold and the frequency with which they are found. The most frequently represented transaction items are fish and agricultural products such as wheat, fruit and vegetables. Also very frequent are specific products such as bread and beer, and products made by craftsmen, such as baskets, sandals, beads, pots and fans.

Going by the various types of goods that were sold and used as payment for the commodities offered, it seems that several ancient Egyptian social groups took part in markets. The first were traders, especially farmers, who offered their own products for sale; in addition, fishermen also appeared as sellers. The partners of the farmers and fishermen were customers, who can be divided into two groups: craftsmen bringing simple products from local workshops that were not under full state control (such as baskets, various kinds of fans, oil, sandals, mirrors, dancing poles and so on) and hired craftsmen who worked on building sites. To this category also belonged lower-ranking priests from the funerary temples of the kings, who brought to the market as payment the bread and beer jars that they had received as salary but which were excess to their family's requirements.

There is even evidence that selected and particularly suitable items, such as small alabaster vessels and large beer jars, were used as some sort of medium of exchange (commodities with a generally understood, firmly fixed and recognised value). Evidence that alabaster vessels were used as a value equivalent comes from three well-known tombs from the Fifth Dynasty (Ti, Ptahshepses and Qar), in which the vessels are used for the purchase of cattle. In all the examples of payment that we know of, the vessels are those for oil, called in Old Egyptian *djevet*. In Ti's mastaba, for example, an inscription states that a fattened cow, designed for sacrifice, was worth fifty of these vessels. In Qar's tomb the value of a similar cow was two hundred vessels of oil. In the case of Ptahshepses' mastaba in Abusir we have four fragments relating to



A unique market scene showing the sale of meat - Mastaba of Ptahshepses, Abusir.

similar transactions, in two of which the accompanying inscriptions have been preserved. From them we learn that the price of one sacrificial cow was 104 or 105 *djevet* vessels.

In the case of the beer jars, it is striking that these vessels containing beer were very often used for the payment of workers on construction sites and as payment in markets. They are always noticeably sealed, in other words full, with intact contents.

We thus, by a roundabout way, find ourselves once again at the measuring of the jar volumes in 1991. This measuring was more the result of my puzzlement regarding the heap of fragments than the result of systematic analysis. That year, as two years later, I analysed the volumes of the beer jars that had been found and preserved undamaged. These came mostly from three find contexts – from the tomb of the official Kaaper from the early Fifth Dynasty, the tomb of the priest Fetekti from the end of the Fifth Dynasty and from the pyramid complex of king Raneferef from the second half of the Fifth Dynasty.

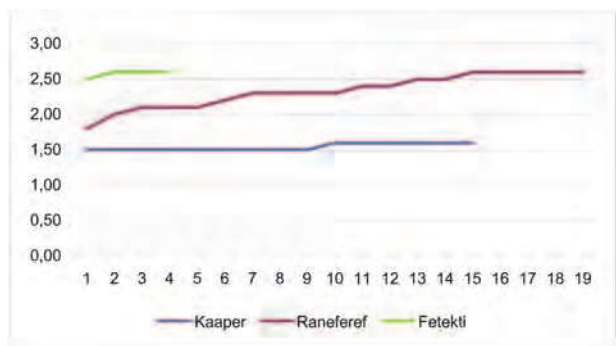


Chart documenting hypothetical growth of beer jar volumes during the Fifth Dynasty.

It turned out that the volumes of these vessels was always standardised and corresponded to their size. These volumes could always be simply converted into the ancient Egyptian abstract unit of volume. This was called a *bekat* and was equal to 4.8 litres. Measurement shows that the volume of a beer jar was about 1.6 l at the beginning of the Fifth Dynasty (i.e. a third of a *bekat*) and in the second half of the Fifth Dynasty increased to about 2.4 l (i.e. half a *bekat*). It was clearly one of the commodities that functioned as a medium of exchange, which Egyptians used in transactions at the market. Since beer jars had a standardised volume, each participant in the exchange process knew, or ought to know, how much beer as payment for work he was receiving or offering.

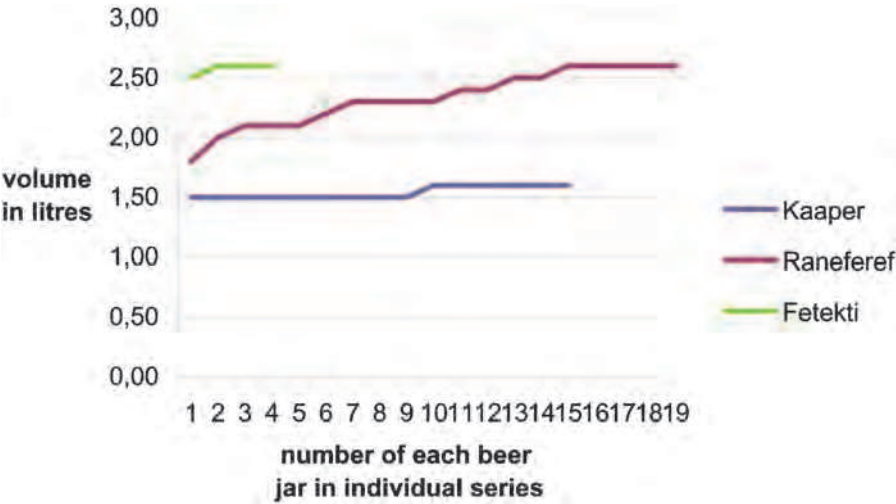
This interpretation is also supported by the fact that customers at these markets were mostly men offering bread and beer jars as payment. On the basis of the goods they offered, it can be assumed that the great majority of them were workers coming with their remuneration for work on state construction projects, and priests from the temples. The sellers, meanwhile, are mostly farmers and craftsmen. These two groups are most frequently joined by fishermen who offered river fish for sale. This is because fish were a normal part of the ancient Egyptian diet across all social classes. With the aid of the various goods and the frequency of their appearance, it is possible to identify at the market the basic social classes or groups of the time in the capital city and its immediate surroundings: priests and officials, workers, farmers, craftsmen and fishermen.

Over the course of the Fifth Dynasty the volume of beer jars became quite noticeably bigger. This means that if a craftsman was supposed to receive payment for ten days of work in the form of this or that many beer jars, at the beginning of the Fifth Dynasty he would be receiving substantially less beer in the same number of jars. Is this the first evidence we have of currency “inflation” in history? It is, however, interesting that the price of beef as expressed in alabaster vessels also went up. This all corresponds to the political and social development of the society of the time, in which a clear trend towards the gradual loosening and decline of the centrally-managed ancient Egyptian state can be observed, and as a result, an increase in prices.

A notable exception as far as the mechanisms of the ancient Egyptian market are concerned comes from decoration in the tomb of the vizier Ptahshepses in Abusir.

Here, in three cases, meat is being sold. This can easily be explained by the exceptional position of the owner of the tomb – the vizier Ptahshepses was the second highest man in the state administration, directly after the king, and thus he had special access to rare commodities such as beef. There are not many sources regarding meat production and trade in the Old Kingdom, but what those that exist do show quite clearly is that meat (and above all beef) was also under the control of the king or of royal institutions. Meat, like the above-mentioned high-quality cloth, must thus be considered an example of a unique method of payment.

However surprising the conclusions put forward may be, it should be realised that long-extinct societies, whether on Egyptian or African territory, were able to achieve a considerably higher degree of economic activity than we might expect on the basis of textbook clichés. Egyptian society, like many other societies at a similar degree of cultural and social development, had a developed economic base that enabled an advanced division of labour and was capable of actively carrying out long-distance trade (essential above all for the ruling elite). This necessarily brought with it the ability to convert certain groups of goods into equivalents that were understandable to all parties involved. The society was able to live, and in all likelihood did live, a rich economic life. Another clear condition for the functioning of markets is a society in which everyone is well aware of the nature of work and the amount of it needed to



Scene showing the payment of the cattle price, on this occasion, the value being exchanged in calcite jars – Mastaba of Ptahshepses, Abusir.

produce or obtain this or that commodity. Only in this way can “values” become a generally understood and acceptable basis. We have evidence of the ancient Egyptian equivalent of a phenomenon that has been demonstrated, for instance, in ethnography by Mary Douglas. She looked at value equivalents among the Lele tribe, the members of which used a certain kind of cloth as a generally accepted value standard in the exchange of goods. The cloth became a means of communication that conveyed to all members of society, in a generally understandable form, the value of these or those goods.

In the case of ancient Egyptian society of the third millennium BCE, is also likely that local markets, as shown on the walls of tombs, could have existed only in the surroundings of the capital city of the time, where there was a sufficiently heterogeneous society. As far as the situation in the provinces was concerned, a greater degree of scepticism is in place. Given the existence of a rigid redistributive system, including not only agricultural products and mineral wealth, but also craft products, the society outside the capital city must have been much more homogeneous – in principle it could only have consisted of a broad class of farmers and a narrow class of representatives of the state administration. It is possible that the craftsmen class, an important component of the Egyptian market, was largely missing. A contributory factor in this is the specific character of the Egyptian cultural topography: cities in the modern-day sense hardly existed, and the economic base was the countryside. Excess production from the countryside was taken by the centre/palace and then merely redistributed. Information on this comes from inscriptions in tombs, which show that craftsmen working on them were properly paid in kind, and that the owner/commissioner of the building financed its construction from properly acquired assets, as Remenuka’s inscription from his tomb in Giza shows:

*With regard to this tomb of mine of eternity,
I made it particularly as a result of my perfect state of imakhu in the sight of men and of the god. I never took anything which was brought by another man to this tomb of mine, as I am mindful of the judgement in the West.
This tomb was made for me specifically in exchange of bread and beer which I gave to the workmen who made this tomb. For indeed I have given to them a large payment of all sorts and linen which they requested and they thanked the god for it.*
(Strudwick 2005, 257, No. 188)

It is thus no wonder, if most of the payment of workmen and craftsmen took place in bread and beer that these people must have sometimes had to seek out the local market in order to spend their “beer,” if they were unable to consume it in any other way...

Last but not least, given the place of origin of these market scenes (tombs in the burial grounds of Giza, Abusir and Saqqara) the original secular interpretation of their significance may be broadened to include a further, wholly ancient Egyptian aspect. If we look more closely at the range of goods on offer at the market, we find that market scenes appear to capture a fundamental aspect of ancient Egyptian beliefs

about life after death: obtaining items for burial equipment. During the Old Kingdom, but also in later periods, the aim of tomb decoration was above all to ensure a peaceful afterlife existence in the Netherworld. But in what extinct society can we draw a clear boundary between the secular and sacred spheres of life?

The economy and pyramid-building

Just as the ancient Egyptian state developed its ability to accumulate on one hand and on the other to redistribute the country’s economic surplus, the technical resources of the ancient Egyptian builders also developed. The arrival of a new king on the throne always represented a great challenge: the construction of a worthy pyramid complex for the incarnated god Horus. This development undoubtedly culminated at the beginning of the Fourth Dynasty, when during the rule of two generations of one ruling dynasty – the pharaohs Sneferu and his son Khufu – the most imposing projects of the third millennium BCE arose. The character and quality of their works are clearly apparent from a visit to the pyramid fields in Meidum, Dahshur and Giza.

It is just as interesting to consider what preceded these imposing monuments, and what was closely connected with their creation. An example is the burial ground in Giza, about which we know a relatively large amount. With the arrival of a new king on the throne the official machinery swung into action, its aim being to ensure that

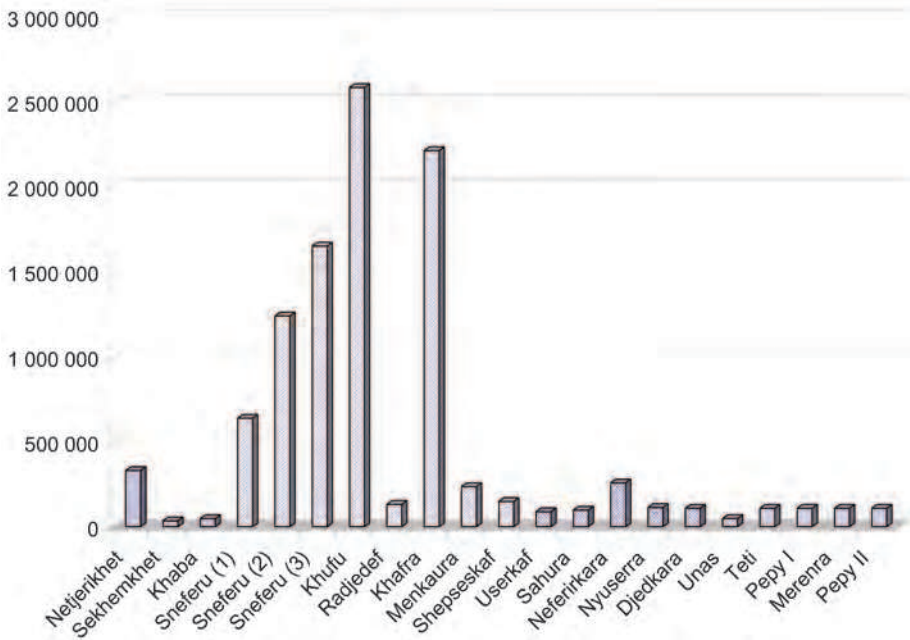


Chart showing the decrease in the volume of the Old Kingdom pyramids over the decades.

a tomb was built for the ruler. A considerable amount of the country's potential was used in its construction, "just" so that respect could be paid to the royal ideology anchored in religion. During the course of the third millennium BCE alone, Egypt saw several significant shifts in the basic characteristics of these projects, which were undoubtedly connected with the overall social and economic situation in the country.

King Netjerikhet Djoser carried out the first of these, in moving to stone architecture; he replaced the original unfired bricks with limestone blocks, although at first these imitated clay bricks in their form and shape. During the Fourth Dynasty the first classically shaped pyramids were built. By this point, they mostly used huge blocks of various kinds of stone, some of which weighed many tonnes. The complexes are also very precisely astronomically oriented. During the Fifth Dynasty we witness another significant shift: rulers move away from the monumental nature of pyramids as their tombs and put a considerable amount of labour and economic resources into the decoration of the internal cult areas of the pyramid complexes, and economic provision for the everyday functioning of the funerary cult. The attention paid to the astronomical orientation of the buildings also declined significantly. Finally, at the end of the Fifth and Sixth Dynasties the actual burial areas of the kings change in that their walls become covered with religious texts, the *Pyramid Texts*, designed to ensure the ruler's rebirth and life in the company of the ancient Egyptian gods in the other world.

Today we can only guess which came first, the chicken or the egg. Were the pyramid complexes created under the influence of a huge economic surplus produced by the Egyptian state, and amassed as the result of its sophisticated administrative system? Or did the state ideology force the creation of this kind of administrative system, so that these gigantic projects could be realised? It is hard to say, and quite possibly there is no correct answer. This would not be the first or last time this has happened in archaeology.

Nevertheless, there is much that we do know. No one now believes Herodotus, the "father of history," when he says the pyramids were built by a hundred thousand people. According to our current knowledge, based on archaeological sources and in part also on written ones, we believe that no more than ten thousand Egyptians worked year round on Khufu's pyramid in Giza, including masons, members of working groups bringing stones to the construction site and construction workers who worked on the actual site. A similar number of people formed the "support team" – craftsmen, farmers and fishermen who supplied the construction site with products and food necessary to its functioning (water, bread, beer, vegetables, clothing and tools). When we consider that each adult man was providing for a wife and at least three children (plus maybe their parents), we may conclude that up to a fifth or a quarter of the country's inhabitants could have been economically dependent on or concerned by the pyramid projects since it has been estimated that Egypt had about 1 000 000 inhabitants during the Old Kingdom.

The research undertaken by Mark Lehner in an area about 800 m to the southeast of the Great Pyramid has been very instructive in this respect. Here, on the site of a former sportsground, and on the border between the modern village of Nazlet el-

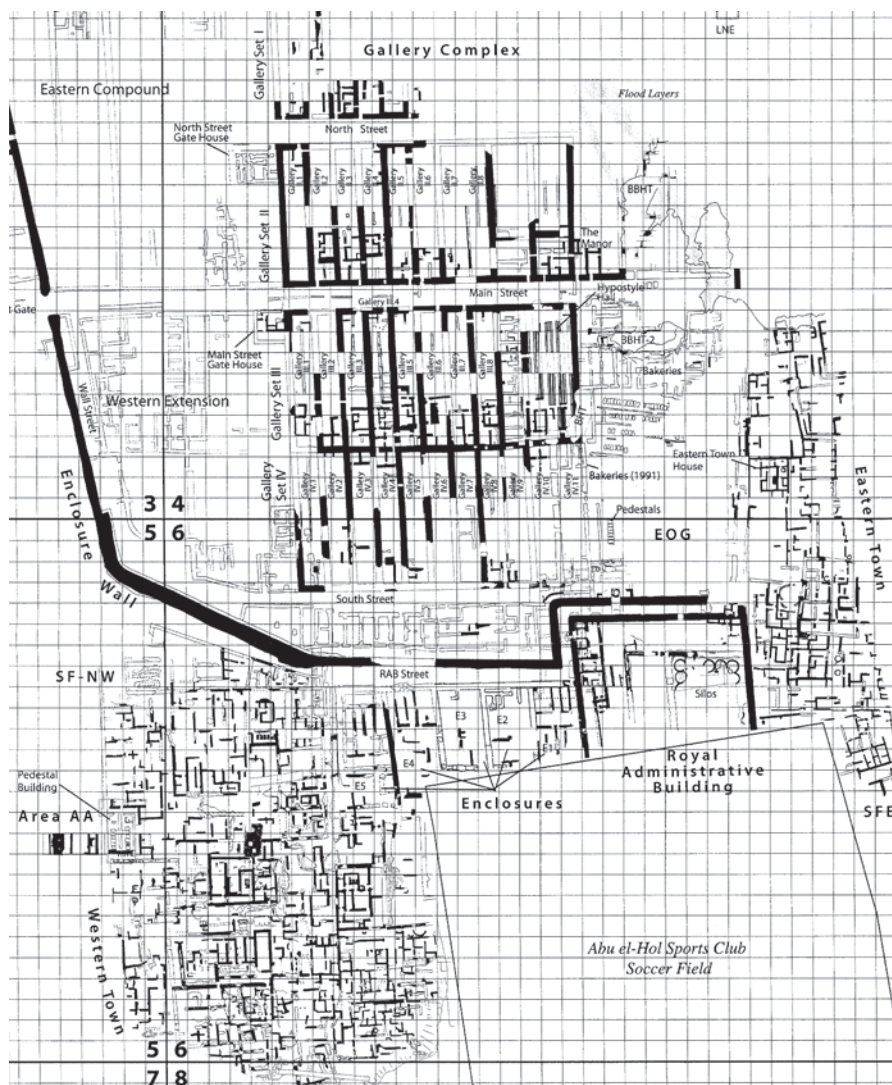


Burial chamber of Pepy II decorated with Pyramid Texts.

Saman on the eastern side and Egypt's Western Desert, with the tombs of the priests of the Giza rulers dating to the late Fifth and the Sixth Dynasty, is one of the most interesting areas being researched in Giza, a settlement from the period of the pyramid-builders.

Among the first discoveries by Lehner's team were bakeries for bread and areas where beer was made. Next to them were rooms in which vast quantities of Nile fish had been dried. These production areas supplied food and beer to thousands of men working on the pyramid complex construction. Over the following years, the expedition gradually found further integral parts of the pyramid "town," built of unfired bricks and extending over an area of several hectares. They included the residence of the master-builder and the quarter inhabited by the administrators and scribes working on the project (this could be recognised by the many imprints found of the seals used by the officials). There were also above-ground, cylindrical grain hoppers that were originally several metres high, and dormitories where up to 2 000 men could sleep comfortably. There was also one of the oldest-known hypostyle halls, which probably served as a dining room, providing shade and rest to the workmen. That those who ate there were ordinary workers is shown by the bones of numerous types of fish found there. In the quarter that Lehner ascribed to the officials and the master builder who resided in a "palace" (this was really just a collection of several large rooms, reminiscent in style of the residences of high officials) there is a predominance of beef bones left over from the consumption of meat, a rare commodity and the privilege of the upper classes.

The large number of men hired to work on the construction of the pyramid complex meant that work needed to be organised on a solid basis. They were divided into work gangs, each of which had around a hundred members. The names of the



The pyramid builders settlement in Giza.

different groups (of which the general title in Old Egyptian was *aper* or “working team”) have been preserved on the walls of the inside of Khufu’s pyramid. Typical names were “Friends of Khufu,” “Followers of the powerful white crown of Khufu,” “Purifiers of both the lands of Khufu” and so on.

These teams were led by priests, who were organised into smaller groups that we now called phylai. In Egyptian, these groups were generally called *ꜥa*, however, and in hieroglyphic script they were ascribed a symbol depicting a rope with symmetrically

arranged loops at the sides and at each end. These were put round the necks of cattle so that they did not run away. Today, it is generally thought that the arrangement of these phylai corresponded to the arrangement of the crew on board a ship – some men belonged on the port side, some on the starboard, some in the bow and some in the stern.

In a similar way was also organised funerary service in the mortuary complex of the king. Altogether there existed five phylai – we have evidence of phylai named “large”, “hidden”, “green”, “small” and “beautiful.” According to the Abusir papyri, each phyla was composed of two divisions of ten people each. In addition to organising the construction of the royal funerary complex, the primary task of these groups was to provide both organisation and staffing for the everyday functioning of the royal cult in the funerary temple. The members of the various divisions took turns in this activity, a month at a time, so that after ten months all the members of the “brotherhood” of priests had taken their turn, and the whole mechanism was repeated.

This was far from being a homogenous social class, however. It is possible to distinguish two basic groups, called *hemu-netjer*, “the priests of god” and *kbentiu-she*, “those in front of the altar.” While the first were responsible for the actual funerary cult of the ruler, the second were more of a support team that provided regular supplies of all the essential commodities (food, drinks and objects) for the temple.

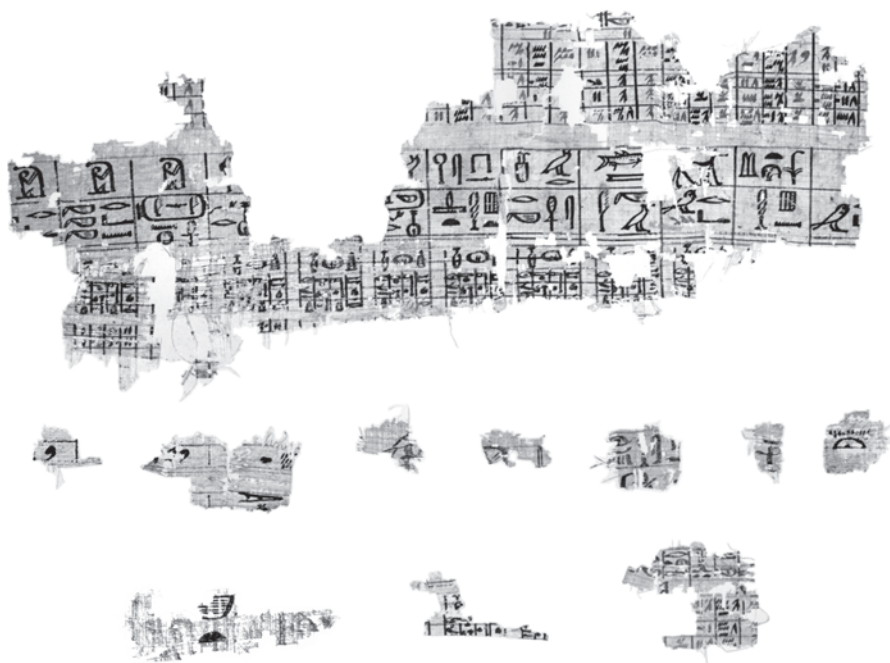
In the everyday funerary cult, all imaginable types of food and beverages were sacrificed on a large scale, being symbolically placed on the altar in homage to the king’s spirit. Naturally, the altars were not the offerings’ final resting places. Only a few of them ended up as burnt offerings; most were gathered up after the ceremony and carefully divided between the individual priests, according to their positions and titles. The commodities thus came full circle, and this redistribution principle in Egyptian society took on the nature of an iron law – as long, of course, as the economic resources were there to ensure the existence of the crowds of priests, and as long as priests were willing to work under these conditions, in other words to propagate the royal ideology and to ensure it became eternal. Can it be any surprise that at some time during the twenty-second century BCE the system exhausted its possibilities and gradually began to collapse?

How much did a sarcophagus cost during the period of the pyramid-builders?

At the close of this chapter I would like to put forward some data that has only recently become available to Egyptology, through the use of experimental archaeology. In 2003 Denys Stocks’ study, *Experiments in Egyptian Archaeology*, was published in London. It looked at the technology of the production of various items in ancient Egypt, above all stone objects. Few of us, and this is often true of even of Egyptologists who are archaeologists, are aware of how much in terms of work, energy, experience and cost lies behind the objects that the ancient Egyptians left behind. The example I shall use concerns the production of one specific item: the

sarcophagus, an artefact in which the members of the ancient Egyptian elite were buried. A sarcophagus consisted of the actual chest, the lower part in which the body of the dead person was laid, and the lid, which closed the sarcophagus at the end of the burial ceremonies in the burial chamber. This product became a vital part of the ancient Egyptian tomb of every ruler and high official. This much is clear. What is amazing are the parts of Stocks' book that describe in detail the background of their manufacture. Their main significance is that they provide clear evidence of the functionality of the ancient Egyptian copper and stone implements. Stocks carried out many experiments with modern-day copies – comparable in shape, technology and chemical makeup – of such instruments, imitating ancient Egyptian processes. At the same time, his study provides an idea of how long it took to produce a sarcophagus like this, and how much was expended on it in terms of material and tools.

Stone sarcophagi developed from wooden coffins, which were their immediate and sole precursors. The side walls of the sarcophagus were often decorated with a relief decoration with a “palace façade” design that depicted the façade of a house built of light building materials (unfired bricks, wood, reeds and mats), and gave the impression of the after-death residence of the dead person. Sarcophagi of soft white limestone appear during the Third Dynasty – for example, the sarcophagi of king Netjerikhet and Sekhemkhet. Khufu was the first king to have a sarcophagus made of red Aswan red granite (the oldest altogether is found in mastaba M 17 in Meidum).



A papyrus document from the mortuary temple of Raneferef in Abusir, featuring a list of priests and their payments in kind (KV).

This was a technologically highly demanding raw material that was relatively complicated to work and transport. Gradually, the range of materials widened to include limestone and alabaster.

According to Stocks, there were three degrees of difficulty in producing sarcophagi according to the types of stone used: limestone – calcite (alabaster) – granite. Limestone sarcophagi could be produced using copper tools (chisels, adzes and scrapers), although stone ones, made of flint, served just as well. Very frequently the lid of the sarcophagus was cut from the same block from which the chest was made, using a copper saw, which was only a very little longer than the width of the sarcophagus.

Stocks found that using stone hammers and instruments to hollow out the inside of the chest would have been both a lengthy process and one that might have disturbed the structure of the sides. The ancient Egyptians (and Stocks, too, in his experiment) therefore used a drilling method. The marks left on the walls of the sarcophagi by the tools used permit a credible reconstruction to be made of this technological approach, which was analysed by Stocks on the sarcophagus chest of king Khufu, the builder of the Great Pyramid at Giza.

William Flinders Petrie, the founder of Egyptian archaeology, who worked in the Great Pyramid in the late nineteenth century, measured Khufu's chest very precisely: its outer dimensions are 227.6 cm (length), 97.8 cm (height) and 105 cm (width). The corresponding internal measurements were 198.3 cm, 68.1 and 87.4 cm. The weight of the block before the inside was drilled out was 6 310 kg (granite has a density of 2.7 g/cm³). The volume of drilled-out stone was 3 186 kg, making the resulting weight of the chest a “mere” 3 124 kg. For drilling, copper pipes with an outer



For the entire Old Kingdom period, stone vessels were considered to be a symbol of the prestige and high status of their owner in Egyptian society.



Burial chamber of Khufu in Giza: this room is built entirely of red granite from Aswan, as is the sarcophagus chest (the lid is missing).

dimension of 11 cm were used. Around the planned internal perimeter of the chest, 44 holes were drilled very close to each other, while the inner “core” was removed with the aid of approximately 18 further holes (these were not as close together). Naturally, the whole internal depth of the chest could not, for practical reasons, be drilled out at once, and so the whole process had to be repeated approximately every 20 cm. In all, six horizontal layers had to be removed by drilling. Experiments showed that it took three men to drill one hole – two to hold the bow, the string of which was looped around the drilling tube, and a third to create the necessary pressure on the top end of the tube using a specially designed stone. The tube had sand sprinkled under it to increase the effect of the drilling. The waste material, in the form of fine sand and granite and copper dust, was carefully kept for later use in smoothing uneven walls. The final polishing appears to have been carried out using leather and Nile mud.

Finally, Stocks’ experiments looked at the economic aspects of sarcophagus production. From two different experiments, it appears that in an hour of work, some 12–30 cubic centimetres of a granite sarcophagus could be drilled out, or 180–450 cubic centimetres in the case of softer materials. In the case of Khufu’s sarcophagus, it may be assumed that three groups, each consisting of three men, the “drillers,” took part in the drilling, and that they needed approximately ten months to drill out the inside of the chest and several more to smooth and polish it, and to make the lid. Making the granite sarcophagus of king Khufu would thus have required around 28 000 hours of work. This number of hours would be much higher if only

one team had been cutting and drilling. This is not all, however. The copper consumed using drilling would have amounted to about 430 kg, the weight of sand used during drilling is estimated at 22.5 tonnes, the amount of granite material directly drilled out would have been about 240 kg, while the total amount of granite removed would have been some 3 200 kg (a ratio of 1:13). This means that for each kg of copper used, 12 kg of granite would have been removed.

If we think of just the number of just the sarcophagi, tombs, stone vessels, false doors, statues and altars that we know about...

The Gift of the Nile



Field activities and irrigation were the essence, the life blood of the ancient Egyptian economy (MF).

“Egypt is the gift of the Nile.” With these words the Greek historian Herodotus opened his treatise on ancient Egypt. He was not far from the truth. In ancient Egypt, life and death were divided by a single metre – the difference between the flood height that meant prosperity, and the flood height that was so low that the harvest in the coming year was threatened.

Numerous agricultural fields at both higher and lower levels were closely connected to the system of ancient Egyptian irrigation. Agriculture and its adaptation to the Nile floods played an important role in the creation and existence of a centralised state at the turn of the fourth and third millennia BCE. The success of agriculture also depended directly on the state of the Nile’s waters. And naturally, the levels of tax that could be paid on agricultural produce were then closely related to the stability of the ancient Egyptian state.

Floods – the merciful and destructive

In ancient Egypt, the Nile flowed through an area that was over a thousand kilometres long, and which to the east and west was closed off by the foothills that divided the fertile Nile valley from the inhospitable plateaus of Egypt’s Western and Eastern deserts. In the Aswan area, in the south of the country (the southern border was protected at this point against the Nubians by the fortress on the island of Elephantine), the Nile valley was a mere two kilometres wide, while in the Minya area, in modern-day Middle Egypt (some 350 km south of Cairo), its width reached a respectable eighteen kilometres. From the end of the sixth millennium BCE living in



The River Nile at Aswan, the southern frontier of the Old Kingdom state.

the Nile valley became at first an unavoidable solution to the subsistence difficulties of the nomads, who started to move here from the Sahara as it began to dry out. Later the Nile became the alpha and omega of the ancient Egyptian economy. It was also the main north-south transport artery, connecting all the parts of Egypt.

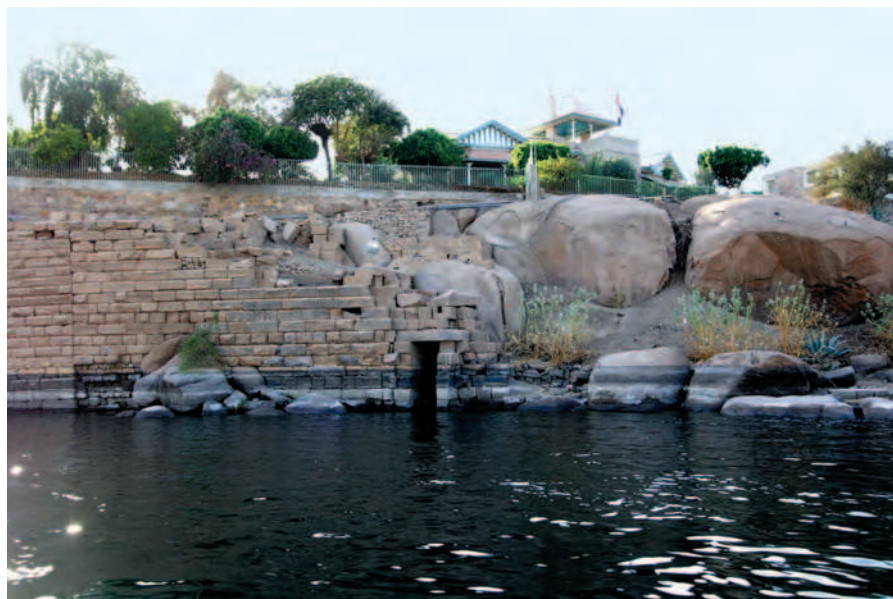
The main means of transport were boats, built of papyrus or wood. Larger vessels were made of cedar wood, imported from far-off Byblos on the modern-day northern Lebanese coast. Not only people and cattle were transported down the Nile, but also large loads, such as blocks of stone weighing many tonnes from the far south of the country. From Aswan, where red granite was quarried, to the pyramid fields in the Cairo area, where the royal pyramid complexes were built, was a river journey of approximately 900 km. Other forms of transport were not widespread, and were not even considered over such a long distance.

Donkeys were used for dry-land transport. Bearing with a full load (about 60 kg) the donkeys could cover 20 km a day. The ancient Egyptians already knew the wheel at this point, as is shown by the only depiction we have of it, from the tomb of the Saqqara official Kaiemheset, where wheels are used as the carriage for a ladder that was mounted to capture an Asian town. Still, the wheel was rarely employed until the middle of the second millennium BCE. The landscape at the time was considerably wilder, full of papyrus thickets and swamps, while close to human settlements there were extensive areas of fields and palm groves, criss-crossed by canals that brought water from the Nile during the flood season. During the floods, most of the land was under water for many weeks, with the surface of the water reaching up to one and a half metres. The swampy Delta, meanwhile, was an extensive waterlogged area, which was mostly only colonised over the course of the Old Kingdom.

The gradient of the Nile in Egypt is approximately 1:10,000 to 15,000, which means that over 10-15 km the river falls a metre. With the right level of flooding, it would be possible to travel the distance from the southern end of the country, the fortress on the island of Elephantine, to the area of modern-day Cairo in two weeks. The Nile could only be navigated during daylight hours, since the river was full of islets and shallows into which it was easy to run. With a high enough flood it was possible to travel downstream at a speed of about four knots (7.4 km per hour). When the water was lower, however, the journey might take twice as long.

The annual Nile floods rose gradually from July to the middle of September, as the river gradually moved down the Nile valley from south to north. If they were too low, there was famine, while if they were too high, everything was destroyed and people went hungry. Under normal circumstances the Nile reached the level of the upper edges of the river bank sometime in the middle of August. This was in the areas in the south of the country, around modern-day Aswan. In the northernmost part of the Nile valley this occurred around six weeks later. After the Nile had burst its banks into the whole area of the Nile valley, the water was further carried by canals into the lower flood basins. In October the fruits and grain were sown that had been harvested in spring.

The Nile also had a fundamental influence on the types of settlement structure found in Upper and Lower Egypt. In Upper Egypt settlement was concentrated in the higher



The nilometer at Elephantine Island, in Aswan.

areas above the Nile valley, where the floods did not reach. In the Nile Delta, however, settlement occurred mostly in the higher flood areas on little islands called *geziras*, which were left by the intensive erosion activity of the Nile in the Later Pleistocene era. During the flood season the Delta became strewn with hundreds of islands, which was maybe one of the factors that limited the amount of settlement in the area.

Over thousands of years, the Nile also created deposits that were several metres thick. In the case of the pyramid fields, in the area of the valley temples of the pyramid complexes of the Old Kingdom rulers, German archaeologist and architect Ludwig Borchardt estimated that during the last five thousand years deposits 5 metres thick were created here. In the Nile Delta the great majority of Old Kingdom sites are located under deposits of 4-6 metres of fertile Nile mud. In places from the period around the start of the A.D. era, there are still around 1-2 metres of silt, which in practice means that not even these sites are distinguishable on the level of the modern terrain. Places from the period of the pyramid-builders can only be archaeologically excavated in rare cases. Kom el-Hisn, for example – which we will discuss further below – is one of the few sites that we know of in the Delta that grew up on a *gezira*, a raised area in what is otherwise a totally flat landscape. Most of the others have disappeared or are under the level of the ground water, so that limited research in them can be carried out only with the use of expensive water pumps.

The Nile is fed by two tributaries that have their source in central Africa and in Ethiopian mountains – the Blue and the White Nile. It always flooded in summer as the result of the summer monsoon rains in Ethiopia. The torrent brought with it silt rich with minerals, which, during the period when the Nile valley was flooded,

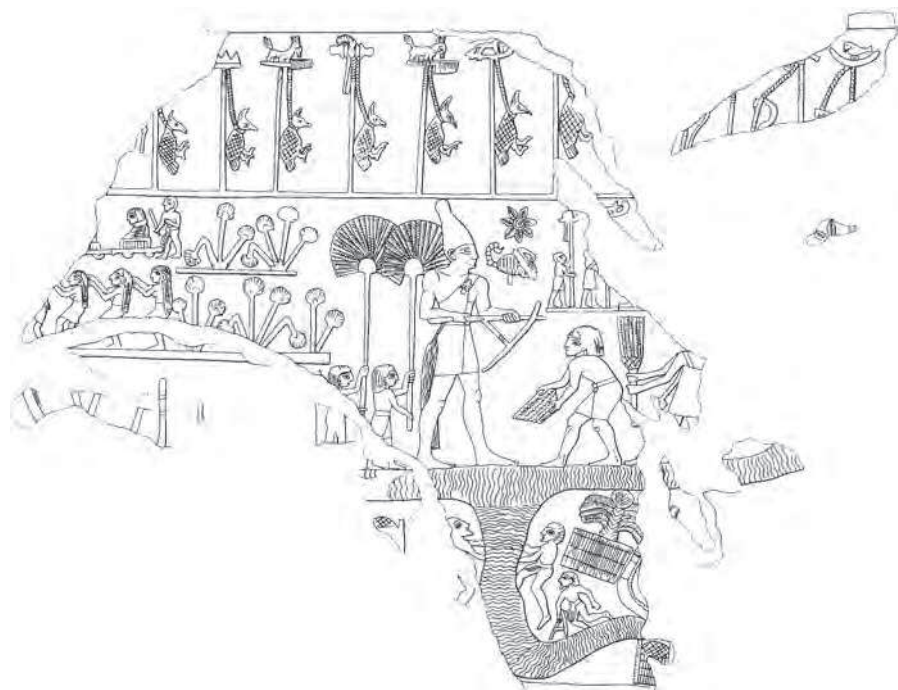
changed into fertile deposits that enriched the Egyptian soil. One of the oldest historical sources, the Palermo Stone, records the height of the Nile floods from the beginning of Egyptian history for each year of the reign of this or that king down to the Fifth Dynasty. Precise records of the level of the floods were the basis on which tax was calculated for individual fields of different fertility. For this purpose the ancient Egyptians constructed what are called nilometers. Only later nilometers have been preserved, but there is every reason to believe that they also existed in earlier periods. They consisted of an artificially-constructed staircase or shaft, the bottom of which was connected to the Nile. On the walls were carefully calibrated scales which allowed to measure the movement of the current water table, especially any departures from the norm, to be recorded. The scales used the ancient Egyptian cubit as the unit of measurement (one cubit was equalled 52 centimetres).

Rivers and theories of state creation

Egypt of the third millennium BCE is estimated to have had around one million inhabitants, while a thousand years later it had only 2.1 million, an annual increase of 0.13 per cent. It is only logical to suppose that it would have been very difficult for so many people to coexist, cooperate and create major works purely on a tribal basis. Unlike the Greek philosopher Aristotle, we no longer consider the state (community) to be the natural and only form of arrangement in human society, and thus the causes that led to the creation of the Egyptian state are still being sought by modern-day scholars. Until recently it was assumed that the centralised ancient Egyptian state was created above all by the geomorphology of the Nile valley and the specific characteristics of the Nile. In his publication *Oriental Despotism* (1957) Karl Wittfogel defended the thesis that the early state systems in China, Mexico, Mesopotamia and Egypt were mainly created as the result of the need to organise the population into large working units. Only in this way, Wittfogel believed, was it possible to build the irrigation canals that were essential to survival. The organisation of such large projects undoubtedly required a state, one with an executive and administrative apparatus that was capable of channelling the country's economic potential in particular directions.

However, in 1970 Robert L. Carneiro suggested that the basic factor behind the creation of the ancient Egyptian state was population pressure, above all in the area of the traditional Upper Egyptian political centres of Hierakonpolis and Abydos. This pressure was caused by the relatively narrow fertile area on each bank of the Nile, delimited both by the river itself and by the high ridges of the Eastern and Western deserts. Carneiro's main argument was the fact that in all the places where early state systems were created – in the basins of the Euphrates and Tigris rivers and the valleys of the Nile, Mexico and India, as well as the coastal areas of Peru, there was a limited amount of agricultural land that could only provide subsistence to a certain number of people. With population growth in power centres, it naturally happened that there was not enough land, and so further territory had to be conquered.

Both examples show how environmental facts can be used to “construct” theories of state creation. Today, however, we know that in explaining the beginnings of state



King Scorpion's macehead, featuring the king with his hoe, opening up an irrigation channel for the flooding the fields during the Nile flood (LV).

systems, like human evolution, there is little hope for success in looking for the single cause. In any case, it was a process in which many factors played a part. The main ones include the growing material demands of the ruling elites, the demand for luxury items and materials to confirm their positions of power, and also the necessity to provide the economic resources for the basic needs of other classes of the population which directly or indirectly depended on them. There was also the need to create tools for the building of a loyal class of administrators. A certain degree of support for such a view is provided by the behaviour of most of these early states shortly after their appearance. American anthropologist Guillermo Algaze, a professor at the University of California in San Diego, has shown that all these states pursued at an early stage of their development a policy of founding colonies outside their own territory, the aim of which was to ensure access to raw materials that were not available locally, and thus to satisfy the needs of the ruling elites. Summing up the argument, we may still describe the ancient Egyptian civilisation as the "gift of the Nile," although this cannot be considered to be the only factor behind the creation of a united ancient Egyptian state. It is certain that social and political dynamics of the late predynastic cultures in the Nile valley had significant impact on the emergence of the early Egyptian state.

The Egyptian calendar

The agricultural cycle of the ancient Egyptians took place within firmly demarcated borders, predetermined by the practically unchanging natural environment of the Nile valley and the annual Nile floods. The calendar played an important role in Egypt, since it was a significant tool for the organisation of the economy of the ancient Egyptian state, its religious life, periods of work and rest. And above all, ancient Egyptian calendar was deeply permeated by religion.

At the beginning was the lunar division of the year, based on observation of the monthly lunar cycles that last either 29 or 30 days. Twelve such months add up to about 354 days, while a solar year lasts approximately 365 and a quarter days. The lunar calendar was the oldest one used by the ancient Egyptians, and it was the basis for the regular organisation of various religious holidays, which during the Third Dynasty were incorporated into the later “civil” calendar scheme.

The “civil” calendar was created later, probably under king Djoser Dynasty. It was designed above all for the needs of the state administration and the organisation of the economy, tax collection and so on. It consisted of twelve months, with the year being divided into three seasons of four months each (a month was called *abed*) lasting for thirty days (*beru*). There was a total of 360 days, to which were added five more, known as epagomenal days. This was a period of holiday and extensive celebrations at the end of the year. The seasons of the year were called *akbet* – flood or inundation, *peret* – emergence or coming out (when the land and crops emerged from the flood waters) and *shemu* – harvest. The months were always numbered from 1 to 4 and their names were derived from the main religious holidays that were connected with them. As far as individual years were concerned, the years of the reigns of kings were



Personifications of the three seasons of the year, from the tomb of Mereruka, Saqqara.

counted. In the earliest period, each year was designated by the most significant event that had taken place. From the Second Dynasty onwards, the years of a king's reign were counted by reference to the censuses of small and large livestock that took place throughout the country every one or two years. During the Sixth Dynasty this system was abandoned, and the years of a ruler's reign were numbered in a normal sequential way, logical and bureaucratic. According to tradition, the ancient Egyptian calendar was invented by the sage and builder of the oldest pyramid in the world, Imhotep. Today's Coptic calendar largely preserves the features of the original calendar of the ancient Egyptians, including the names of individual months.

In ancient Egypt each calendar month was mainly connected with an agricultural rite or event. Subsequently and by a lengthy period of time, this tradition was partially replaced by certain festival of deities or by the names of a few Egyptian gods. The current Coptic names are very similar to their original ancient Egyptian precursors. In addition, the names of the individual months retain the characteristics corresponding to the nature of the specific climatic conditions. Each month's name is thus a kind of icon, providing a reference or sign how intimately the ancient Egyptians were acquainted with their environment.

The first month of the Coptic year originally corresponded approximately to our September, and is called, as in ancient Egypt, *tut*. It was once called *tekebi* but later *djebuti*, the name of the god of the moon, Thoth. Thus it became sacred to the ancient Egyptian god of wisdom, the discoverer of writing and protector of scribes, who is depicted as a male figure with an ibis head. This was a very significant time of year, marking the start of the Nile floods that guaranteed the fertility of fields throughout the country. The Copts called the first day of the first month in Arabic *ayid el-naruz*, the holiday of regeneration. This is the month in which the main harvest of dates, figs and mangoes takes place. *Tut* also means the end of the hot days and the beginning of autumn.

Coptic *Baba* (Old Egyptian *paopi*), the second month of the calendar, was connected with the Nile and its personification, the god Hapi. It meant the time when most of the country was under water, and agricultural activity died down. The third month, *Hathor*, was connected with the cow goddess Hathor, the patron of love and beauty. An Arab proverb says that the month of *Hathor* is the father of scattered gold – the seed of sown wheat. It was also known as the month of cooler, pleasant weather. *Kabaka* (Old Egyptian *kebojak*), the fourth month, originally was the start of the real winter period in Egypt, but later displaced one month forward. It was connected with the god Apis. This month was also considered the time when the souls of the dead met.

The fifth month, *tuba* (*tobi*), was usually very cold and was associated with one of the highest gods, Amun-Ra. The sixth month, *mebir* or *mesir*, in Arabic *amshir*, was considered a period of winds and desert storms. It also meant the definitive end of winter. According to an old proverb, in this month there were always ten cold and ten warm days. The seventh month, *paenimbotep*, in Coptic *famenot* and in Arabic *barambat*, was seen as the start of spring. It was originally sacred to the Amunhotep I, patron saint of Western Thebes, The month saw rising temperatures and the



Field ploughing, unpublished relief of the late Fifth Dynasty, found during the course of Czech excavations in Abusir.

beginning of the harvest of all kinds of vegetables. The eighth month, *paenrenenutet*, in Coptic *farmúti* or *parmute*, in Arabic *baramuda*, was a period of cruel winds and was connected with death. Its name hides the name of the ancient Egyptian goddess of the harvest, Renenutet, and this month was when the grain harvest was at its peak. In terms of climate, the month corresponded to the *khamsin* period, fifty days for which fierce, dry winds blow from the Western Desert, drying out the whole Nile valley.

Pakhonsu, in Arabic *bashans*, was associated with the Theban ram god Khonsu. This ninth month marked the end of the harvest. In later Coptic tradition, the 24th of *bashans* was the day on which the holy family entered Egyptian soil. The tenth month, *paoni*, in Arabic *baona*, marked the arrival of the cruel heat. The eleventh month, *ipi*, in Arabic *abib*, was named after the snake god, the mythical snake Apop, who was defeated in battle by the god Hor (or by his assistant, Seth). Hor was the inheritor of the earthly kingdom from his father, the ruler of the Egyptian kingdom of the dead, Osiris. This was the second month known for its high temperatures. Finally, the



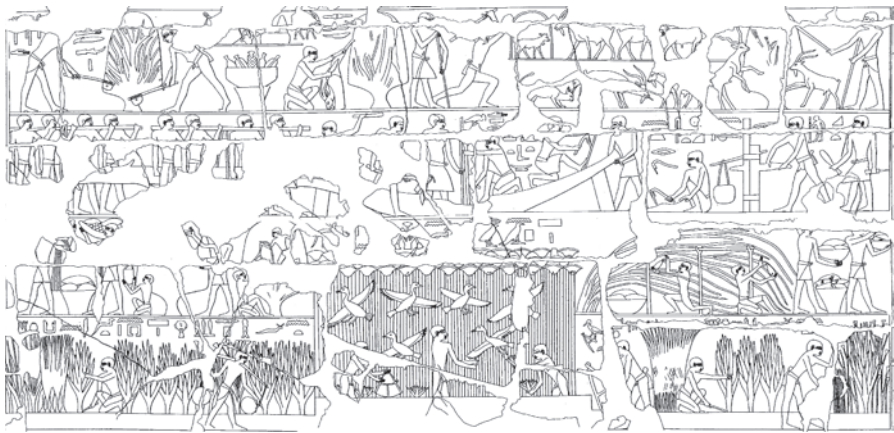
Harvest scene, from the tomb of Mereruka, Saqqara (MF).

twelfth month, *mesure*, in Arabic *mesrai*, contains in its title the rebirth of the sun god, Ra. After it there came twelve epagomenal days, known in Old Egyptian as *mesut netjeru* (the birth of the gods). According to legend a total of five gods were born during this period: the first day was the birthday of Osiris, followed by Hor, his uncle Seth and the goddesses Eset and Nebthet.

Bread and beer

The Nile was the foundation of the existence of the ancient Egyptian state and its economy, founded on grain-growing and the breeding of small and large animals, fishing in the Nile and the keeping of fowl (geese and ducks; the domestic hen appeared in Africa some two thousand years later). There was also the popular hunting of wild animals in the areas where the fertile Nile valley met the fringes of the desert. Yet the desert animals became rather rare in the course of the Old Kingdom despite the fact that the desert was at that time not so barren and resembled a savannah-like environment. This zone was home, among others, to antelopes, gazelles and wild beasts such as lions.

The mainstay of the ancient Egyptians' diet was bread and beer, combined with vegetables and cheeses, and this is still true of the Egyptian countryside today. Bread was usually made from a coarse-ground mixture of wheat, barley and millet. The flour was mixed with water and kneaded into a dough to which a leavening agent was added. Bread in ancient Egypt was baked in two basic ceramic moulds. The most common were bell-shaped moulds, (which at the end of the Old Kingdom developed into a kind of long cylindrical form with a rounded bottom) called *bedja*. These were first heated in the fireplace, after which bread dough was poured into them. The bread

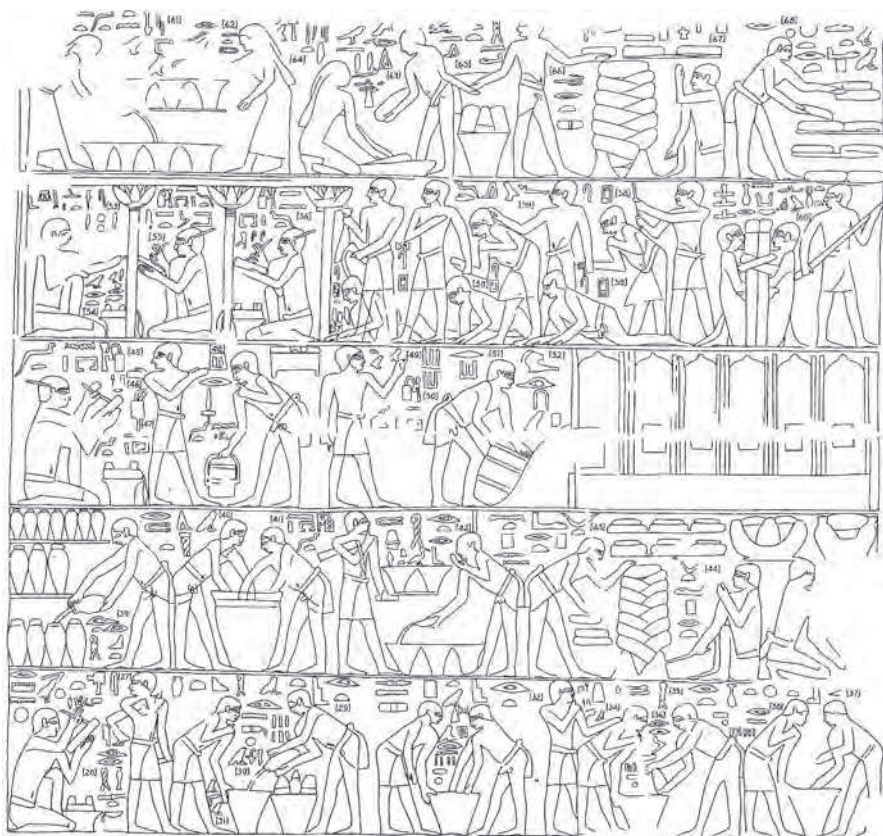


Ancient Egyptian layering of the landscape, from the tomb of Niankhkhnum and Khnumhotep in Saqqara. The bottommost register shows a swampy, papyrus thicket environment adjacent to the River Nile, accompanied by scenes of gardening and bird catching. The central register features a landscape higher up the Nile, with fruit trees and grapes. The top register shows the desert environment, featuring the cutting of trees, pasture lands and Egyptians hunting wild gazelles.

was baked by the heat that had accumulated in the walls of the mould, which were several centimetres thick. Bread was also baked on plates called *aperet* in a similar way. The process appears to be relatively simple, and in recent years has been successfully imitated. However, if we look at the list of names used in Old Egyptian for various kinds of bread, usually called *ta*, we find dozens of terms – every expression refers to a different kind of bread. They differed in the dough used (sweet breads were also common), shapes, occasions for which they were baked, and last but not least, by geographical area.

The basis for making beer, which was called *benket*, was also bread dough. It was baked in such a way that the enzymes and leaven did not stop working. The bread was then broken into small pieces and put into vessels with water. Moistened wheat was also added. The vessels, thus filled, were then left alone while the fermentation process took place, hastened by the pieces of fermented wheat dough. The resulting product was sieved, but it still seems to have been necessary, as some pictures show, to drink beer through a straw. Similar drink is still made this way in the Egyptian countryside, and has the local name *bouza*. It is not very similar to Czech beer, however, being pale, almost yoghurt-white in colour. It also has a curious taste: imagine foaming, beer-flavoured yoghurt. Like ancient Egyptian beer, it contains around seven percent alcohol.

We have unique pictorial material regarding the production of bread and beer from the tomb of Ti in Saqqara. The tomb, one of Egypt's best-known and most-visited, contains a whole decorated wall devoted to the various stages of making bread and beer, which were very closely related to each other in the technology used,



Bread and beer manufacturing, from the tomb of Khentika Ikhekhi in Saqqara. The grain released for this purpose from central granaries was carefully registered by the scribes. Any stealing was punished without hesitation.

and were made in the same production complex. The grain allotted for beer and bread making was first taken out of the central granaries. In these scenes, the granaries are smallish towers with a rounded top, through which the grain was poured in, and with a hole at the bottom near the floor, out of which the grain was collected. A sitting scribe made careful records of the amount of grain taken. The grain was then ground in large mortars, and the chaff was removed by rubbing with stone pestles. This heavy, energy-intensive work was reserved for women, as Ti's tomb shows. The resulting flour also had to be sieved through a large round sieve. Not even then, as anthropological analyses of the teeth of the ancient Egyptian population show, was the flour free of small grains of sand, which caused teeth to become significantly worn. In the next register, the bread moulds can be seen being warmed over an open fire: the forms are piled up like a bonfire in order to speed up the process. In the meantime the bread dough is kneaded, mixed with water and then

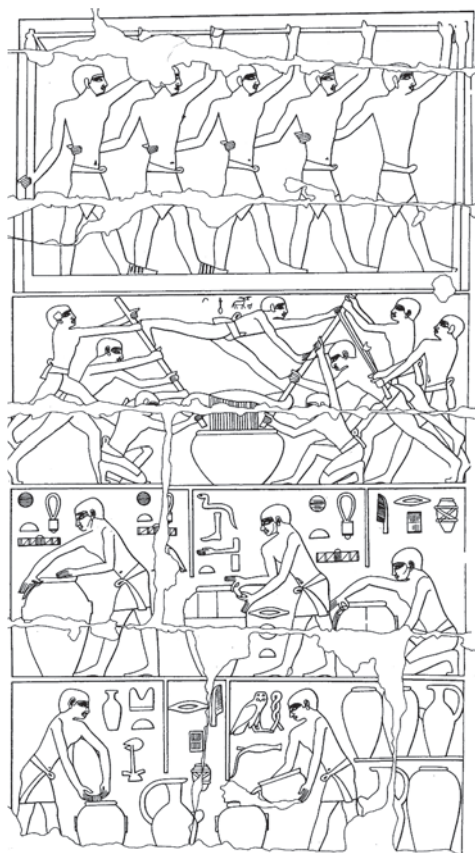
poured into the heated moulds. Above the registers showing bread production is a depiction of the beer-making process. Right at the top we can see beer jugs being made. They are fired in a two-chamber kiln, at which there sits a man, protecting his eyes from the glare and regulating the burn. In kilns like this the temperatures reached had to be around 800 to 900 °C, but it is also known that this technology was able to reach temperatures of as high as 1 200 °C. In the closing stages the fermented dough is passed through a sieve into vessels full of water and then poured into jugs, which are then sealed.

The two series of pictures are rounded off by the bottom register, in which a scribe can be seen carefully recording the resulting quantities of several kinds of bread, and the number of jugs filled with beer. The scribes also had to calculate an index called *pesefu*, which corresponded to the amount of bread or beer that was produced from one *hekat* of grain. The aim of this was to set the “market” value of the beer and bread, since these were then mostly exchanged on local markets and represented some sort of value “universals,” as we have already mentioned in the previous chapter.

Beer drinking was complemented among the social elite by wine, known as *irep* in Old Egyptian. Wine grapes (*Vitis vinifera*) began to be grown on Egyptian territory during the Old Kingdom. The oldest evidence of wine grapes in Egypt comes from the neolithic site of El-Omari, but these are considered to be a variety of wild wine grapes, and it is generally thought that wine as a drink was imported from the Near East until the period of the unification of the Egyptian state. It was considered to be a highly precious commodity and as such reserved only for the upper class. From the First Dynasty the evidence of wine-growing multiplies significantly. It comes from tombs in Abydos and Naqada, while raisins have been found among grave goods under the Step Pyramid of king Djoser in Saqqara. Tomb decoration of the Fifth and Sixth dynasties also provides considerable evidence of wine production. Estates were founded for the purpose, and grapes were grown 1–1.5 m above the ground, so that they were not overheated by the reflection of the sun’s rays from the ground (an approach also familiar to us from other Mediterranean countries; it is currently used in Portugal, for example).

After the grapes had been harvested, they were put into low-edged basins, where several men trod the juice out of them. On the basis of the parallels that we know of, it may be estimated that two thousand kilogrammes of grapes would have produced up to two hundred litres of juice. This phase is often depicted on tomb walls: the men usually hold each other around the waist, or hold on to a horizontal bar hung above their heads in order to keep their balance better. In the next stage, the squeezed grapes were gathered up and wrapped in cloth. The mesh was squeezed so that the remains of the juice could be obtained. There are pictures showing the twisted piece of fabric stretched between two poles, each of which is worked by a pair of men. Often a further man (sometimes replaced by a baboon) can be seen between the poles.

After this stage was over, it was time for the actual fermentation. The liquid obtained was left in containers for two to four weeks, during which fermentation took place as a result of the wild yeasts living on the grape skins. Since this process was



Wine production, from the tomb of Niakhkhnum and Khnumhotep in Saqqara.

fast, and the main part of it lasted for only a few days, shortly before it was finished the liquid was poured into new vessels. The vessels were then closed using clay stoppers and seals that bore the name of the producing estate and the name of the reigning king, with a date. Small holes were left in the stoppers. These holes were needed for carbon dioxide to escape and were filled with straw or wax at the end of the fermentation process.

During the third millennium BCE, the most common grain in Egypt was barley, which had been grown in the area of northeastern Africa since at least the eighth millennium BCE. From there it had clearly reached Egypt, where it soon became naturalised. The first evidence of grain, specifically barley,

being grown on Egyptian territory comes from the Fayum Oasis area. Research in this area carried out in 1924 and 1928 by Caton-Thompson and Gardner mostly took place on the northern bank of the Fayum lake. They excavated two *koms* (raised settled areas that provided protection when the surface of the lake rose during the Nile flood season) labelled W and K. Many archaeological objects were found on the desert surface alone. These included flint and quartzite tools, a hammer made of dolerite and fossilised wood, ceramics and various types of shell. Between the *koms* there were numerous grain silos – a total of 168 silos and 18 hollows for ceramic containers. Fifty seven of them were lined with matting and chaff. The average diameter of the silos was 30-150 cm, and their depth ranged from 30 to 90 cm. In addition to wheat (*Triticum dicoccum*), they were mostly found to contain six-row (*Hordeum hexastichum*), four-row (*Hordeum vulgare*) and two-row barley (*Hordeum distichum*). Flax (*Linum usitatissimum*) was also evidenced. Carbon-14 dating showed that the site dated from approximately 5145 ± 155 BCE. The remains of crocodile, hippopotamus and elephant bones found show that the inhabitants were very proficient hunters. In addition to hunting, which doubtless provided only a supplement to their diet, they caught fish and collected shells. Last but not least,



Pressing grapes for wine, from the tomb of Nefer, in Saqqara.

goats, sheep, cattle and pigs were already being kept by that time (the dog was not domesticated until some time later).

During palaeobotanical research in Abusir, evidence of the presence of both main types of grain of the Old Kingdom was found – common barley, known as *id* in Old Egyptian (*Hordeum vulgare*) and emmer wheat, which the Egyptians called *bedet* (*Triticum dicoccum*). For the first time ever, the presence of naked barley, which was very suitable for making bread in particular, was confirmed from our excavation in Abusir dating to the third millennium BCE. Hulled barley, the evidence for which comes mostly from paleobotanical research carried out by other expeditions, was used more for making beer. Since prehistoric times, the relationship between the quantity of barley and wheat grown had been 2:1, although wheat was generally more popular. Barley, in the eyes of the ancient Egyptians, had the advantage of being more resistant to salt content and varying levels of water in the soil. Barley ripened in the field approximately six weeks earlier than wheat, and thus their harvests followed one from another. The harvest took place in several stages. First of all the harvesters cut off the ears of barley with stone-bladed sickles at around two thirds the height of the straw. The grain was taken on donkeys to the threshing floor in large baskets. Cattle were used for the threshing process, the animal being driven from one side of the threshing floor to the other. The grain was separated from the chaff by winnowing, for which a wooden tool similar to a pitchfork was used. Finally the grain – after its amount had been recorded by the omnipresent scribes – was taken off to the granaries, where it awaited redistribution and further processing.



A mobile flotation station has been successfully used by the Czech mission in Abusir for collecting botanical samples. These samples are essential for the reconstruction of the climate and climate change in the past.

Books in the water

Just as grain was of major importance to the ancient Egyptian economy, so papyrus (*Cyperus papyrus*) was vital to the ancient Egyptian state and its administrative system. It was the medium in which the vast majority of written records relating to the administration of the state were preserved in ancient Egypt – correspondence, economic archives, contracts, agreements, orders from the king and officials, not to mention literature and many other matters connected with writing. Papyrus production was thus a highly significant part of the ancient Egyptian economy; it was a very rare product, to which access had to be limited. The oldest find of papyrus, although not written on, comes from Hemaka's tomb from the middle of the First Dynasty. The finds of inscribed papyri date from several centuries later – the first such find was made in Gebelein, close to modern-day Luxor. Italian archaeologist Giulio Farina discovered it in 1935 in the burial chamber of an anonymous tomb built in the Fourth Dynasty, and it is now in the Turin museum; it was not published until 2003, however.

The second large group of unique papyrus archives (several groups, discovered gradually) comes from Abusir. The first find took place at the end of the 19th century

(papyri from the rule of king Neferirkare and the Fifth Dynasty rulers who came after him), when they turned up on an antiquities dealers' market. German architect Ludwig Borchardt correctly guessed that they came from Abusir, and as a result started to excavate there in the hope of finding further fragments of papyrus archives. The last finds of these unique items are connected with the work on the Czech archaeological concession in the 1980s. Today, together with many other finds made by the Czech expedition, they are on display in the Egyptian Museum in Cairo.

No description of papyrus production in ancient Egypt has been preserved. One of the first comes from the historian Pliny the Elder, and has been confirmed many times by modern-day experiments. Only the part of the stem that grew above water level was suitable for making papyrus. After the whole plant had been pulled up, the outer skin of the stem was removed and the pith cut into strips around 3–10 mm wide. These were then placed next to each other on a hard surface. Another layer was added with the strips at right angles to the first layer. The layers were then hammered and the strips meshed together. The last stage was to dry the sheets. Finally the papyri were smoothed, using a stone, for example, and trimmed so that they were of the required length and width. It may have been, however, that papyrus was also placed between two moistened wooden tablets and pressed instead of being hammered. Today papyrus does not grow wild in Egypt; the last record of its appearance in the Nile valley was in 1820. It has, however, been preserved in places in the Siwa oasis and in Wadi Natrun. To see it grow in its natural environment, in other words the swamps, you would have to go as far as Sudan.



Palm trees and irrigation channels have always been the most important elements of the Egyptian agricultural system.

Among the most important plants grown was undoubtedly flax, from which luxurious fabrics were made. Production was strictly controlled by the king, and like winemaking, it was a royal monopoly. The favourite and most widespread trees were palms – the doum palm, and above all date palms – together with sycamore figs and other types of fig tree. The date palm (*Phoenix dactylifera*) was favoured not only because of its sweet fruit, of which dozens of kinds exist, but for its other parts: its leaves provided material for making baskets, mats and knotted items, its trunk was used as building material, while rope was made from the fibrous bark. Today it is still said that the palm has 360 uses. The date harvest peaked in September. In ancient Egypt the date was a very important fruit, providing a plentiful source of energy – a ripe fruit contains 70–80% glucose and fructose, and one kilogramme of dates provides up to 2 900 calories. Ripe dates with milk are still a favourite breakfast food in Egypt. The palm also featured significantly in Egyptian religious beliefs. Furthermore, it provided shade in which to rest and drink cool water. A palm branch stripped of its leaves became a symbol of counting and the passing of time – in hieroglyphic script, the symbol of a bent branch meant one year.

Recent discoveries by the Czech expedition in Abusir also throw light on dates as a “cultivated” plant. Until then it was believed that the oldest discovered “cultivated” dates came from the area of the Euphrates from a layer that dated to approximately 2400 BCE. In order to produce enough dates of a sufficient quality, date plants had to be artificially pollinated (this relates only to the female flowers). The results of analyses by Czech palaeobotanists show that the “cultivated” date found in Abusir comes from the same period as the Euphrates find. This is the oldest find of such a date on Egyptian territory from the historical period, and it shifts the evidence for artificial pollination of date palms several centuries back into the past.

Other important components of the ancient Egyptian diet were, naturally, vegetables, fruit and pulses, such as lentils, beans, chickpeas, dried peas, garlic, onions, lettuce, melons, apples and pomegranates.

African cattle

Livestock breeding, a fundamental part of the ancient Egyptian economy, was so important that the regular livestock census, which took place at least once every one or two years, became the basis for counting the numbers of years of a king's reign. In the written sources, data appear such as “... (year of the rule of king X, in which it took place) the third census of small and large livestock throughout the country,” from which the length of the various reigns can be calculated. Cattle herders were considered a lower class, however. They are usually depicted in reliefs as burly, often shaven-headed men, who sometimes had crippled legs as the result of being kicked by cattle.

The ancient Egyptians distinguished between “large” and “small” livestock. The first group included cattle (bulls, cows and oxen), while the second included sheep, goats and pigs. Until recently it was thought that livestock entered Egypt from the Near East area, from where we have the oldest evidence relating to livestock breeding,

from the eighth millennium BCE. New finds by Fred Wendorf's in Bir Kiseiba and Nabta Playa in Egyptian Western Desert, have been dated to a period more than nine thousand years ago, from which it can be deduced that livestock domestication in northeastern Africa took place independently of, and possibly a little earlier than, that in the Near East. This hypothesis was recently also confirmed by genetic research, analyses of mitochondrial DNA, carried out by Daniel G. Bradley from Trinity College, Dublin in Ireland (published in 1996). Analyses confirmed that the Near East and the northeastern tip of Africa represent two independent centres of livestock domestication. In the case of Africa, the forerunner of the domesticated cattle was *Bos primigenius*, which a few thousand years later was bred with the genetically different species *Bos indicus* from the Near East.

On the basis of a comparison of the many known forms of mixed farming (crop growing combined with livestock breeding) with livestock breeding alone, it has been found that societies living in an environment where soil fertility reaches 90 per cent (nine out of ten years are fertile) devote themselves to agriculture. In the case of soils that are only fertile 3-5 years out of ten, crop growing was thought to be too risky an undertaking, but such soils represented an ideal environment for breeding livestock. Areas with an index of soil fertility of around 10 per cent were used exclusively for livestock breeding. The Nile valley and Delta had always been an area in which all three types of soil were found, and the ancient Egyptians were clearly well aware of this. As a result, they never completely gave up the breeding of livestock, the domestication of which had clearly saved their predecessors' lives during a period when the Sahara began to dry out.



Herdsmen and the plucking of papyrus stalks, from the tomb of Nefer, in Saqqara.

The ancient Egyptians also kept large herds, a practice based on the traditions of many African livestock-breeding societies, such as the Nuer in Sudan. According to this tradition, only a large herd can survive climatically unfavourable periods, and a large herd is also less susceptible to biological hazards (disease and predators). If half a herd of sixty cattle is killed by disease, it is considerably better than half a herd of ten cattle. Another measure that had a positive influence was the holding of mixed herds, in which sheep and goat were kept alongside cattle. Each type of animal has a different type of resistance to climatic changes. Goats can survive long periods of drought, sheep only need a small amount of pasture and cattle are dependent not only on good-quality pasturage, but on water, since the water gained from pasture is not enough for them. Sheep and goats also reproduce faster than cattle.

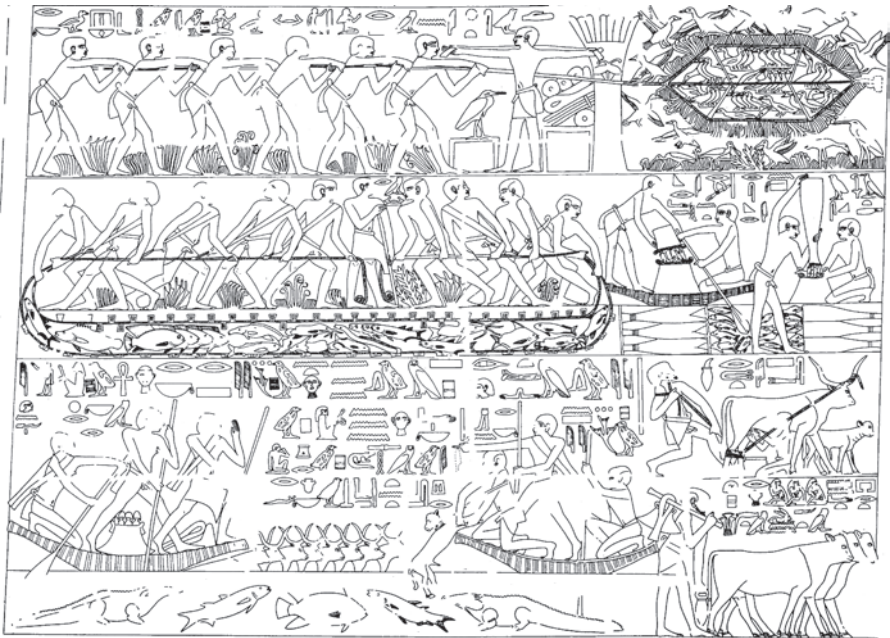
Livestock was used for many purposes in ancient Egypt, from work in the fields to sacrifices in the temples on religious holidays. Beef, indeed meat in general, was reserved only for the upper classes, and this is partly why it does not appear as a commodity in depictions of ancient Egyptian markets. Beef also played a vital role in funerary cults. The decoration of the walls of pyramid complexes, like those of non-royal tombs belonging to high-ranking dignitaries, leaves one in no doubt that the sacrifice of livestock played an important role here, since on the walls we frequently come across depictions of butchers slaughtering animals.

One of the most famous scenes of this type is in the tomb of the vizier Ankhmahor in Saqqara. The butchers are slaughtering livestock bound together and cutting into pieces, while other people are running to the altar with bowls of fresh blood. The first step in this process was the ritual cutting of the animal with a stone knife. The cut was usually made in the throat in the area of the carotid artery so that the blood could all drain out. The front haunch was especially valuable, being considered one of the most select offerings. As can frequently be seen on tomb walls, it was brought to the tomb owner as an offering by the eldest son or other sons.

The role played by beef in grave goods was similar to that in the cult. In 2002 our expedition made a rare find in one of the burial shafts in Inti's complex in southern Abusir. At the bottom of it was the entrance to the burial chamber of a dignitary named Pepyankh-Inti. In front of his white limestone sarcophagus were unique burial goods, which among other things contained twenty two-part limestone containers in the shape of the offerings that they were designed to hold. In the containers we found offerings of meat and fowl exactly as they are known from the written offerings lists. Two of them were round, and originally contained bread. In two others were ducks, in two geese and in one a pigeon. In the last five were some long beef bones and ribs. Our zoologist, Salima Ikram, determined that, by all appearances, the beef bones had been boiled in water before being put into the stone containers. At any rate, they did not have any meat on them at the time of sacrifice. This means that the meat may have been consumed by the mourners, possibly during the burial ceremonies. It appeared that all those present, including family members, considered it sufficient to provide the dead person in the other world with a merely symbolic offering. The proof of this unusual custom may also indicate that meat in ancient Egypt, as today, was a very rare commodity.

Livestock was also significant to some extent for milk production, although this aspect should not be overestimated. From the parallels known to us, it can be assumed that the milk produced by one heifer could not have exceeded one litre a day at best. If it was dry and there was little pasture, milk production could fall to a mere fifth of ordinary levels.

There are many question marks in contemporary Egyptology concerning the keeping of pigs (*Sus scrofa*) and the consumption of pork. This is because in ancient Egypt the pig was thought of as the embodiment of evil, and was connected with the god Seth, who represented the forces of chaos. In the minds of the ancient Egyptians these forces were continuously threatening to upset the stability of Egyptian society and overthrow the earthly order. This ancient Egyptian attitude may have been fostered in part by the actual behaviour of pigs, who lived on rubbish dumps and waste sites close to human settlements. This was no doubt partly why the pig was considered an unclean animal. On the other hand, however, it is unlikely that the ancient Egyptians would have realised that pork could create health problems. If not properly cooked, it can hide the parasite *Trichinella spiralis*, the larvae of which create calcareous cysts in the muscles of the tongue, heart, diaphragm and between the ribs, causing breathing pain or even heart failure. A similarly dangerous parasite is the flatworm *Taenia solium*, which lives in the gut and directly or indirectly attacks the muscles, eyes, brain, liver and lungs. Evidence of these parasites has actually been found in some ancient Egyptian mummies. However, the ancient Egyptians would



The Nile Delta had a profound economic importance for the ancient Egyptians: it was a major location for a fishing industry and for bird catching.

only have been aware of them to a certain extent, for example if they had found flatworms in the gut during mummification.

Despite all the myths, evidence of pig breeding comes from several prehistoric sites in ancient Egypt, such as the burial ground of Minshat Abu Omar in the northeastern Delta, where many of the tombs of poorer members of the community had pig bones as part of the grave goods for the netherworld, while rich graves contained beef bones. We know of similar finds from the Upper Egyptian predynastic capital of Hierakonpolis and from Tell el-Amarna from the second half of the second millennium BCE, where pigs were kept by the poorer members of society in special areas for which there is archaeological evidence.

What we are interested in at this point, however, and not just because of the pigs, is the Old Kingdom settlement at Kom el-Hisn in the northeastern Delta, which provides vivid evidence of the foundation of new agricultural estates during the time of the pyramid-builders. During the third millennium BCE this part of the Delta was gradually colonised, and numerous state (royal) and also private estates were founded. Analysis of the archaeological data indicates that pigs were kept in Kom el-Hisn in places inhabited by the poorer classes, while goats and sheep were kept by the richer ones.

Farmers from Kom el-Hisn

This site, situated in the eastern Delta, is important for our understanding of the ancient Egyptian economy during the period of the pyramid-builders for several further reasons. Until 1984, when archaeological and natural science research started here, not much was known about the settling of the Delta. Egyptologists have a large number of written sources that specifically mention the founding of estates in the Delta, but for a long time there were no archaeological sources to confirm this practice. During the Old Kingdom, colonisation of the originally swampy Delta was far from finished, and we can only guess the way in which the process happened. A role was undoubtedly played by prospectors and engineers who aided the settlement of some areas.

The state policies of the ancient Egyptian administrators of the time were indirectly shown in the names of the six districts of the Delta, which were connected with livestock. One district had a haunch of beef in its standard, another a bull with the epithet “mountain” or “desert,” another a bull, after which the region was called “Large black (i.e. bull)”. The standard of another district was a bull whose name was read as “The slaughtered one” (i.e. at the slaughterhouse). Finally, the last district had a cow and a calf in its symbol. These were thus mostly areas in which the estates bred cattle, which were later, at least in part, taken to the temples, pyramid complexes and burial grounds in the vicinity of the capital in order to be sacrificed in the funerary cult. Egyptians drew a strict distinction between *inwa* and *negau* cattle. *Inwa* cattle were kept in sheds and fattened so that they could be sacrificed. More luck was enjoyed by *negau* cattle, which were used for agricultural work and were allowed to graze freely.

The excavated area of Kom el-Hisn covered 15 hectares, and was composed mostly of the usual village buildings – houses, storage places and grain hoppers. The whole complex was at least partly surrounded by a brick wall. An analysis of the plant



Cattle herding has not changed much over the millennia.

macro-remains showed that almost half the samples consisted of grain chaff and the seeds of field weeds. The authors of the analysis, Wilma Wetterstrom and Marie-Francine Moens, interpreted them as the remains of grain-processing activity. To this may be added a further quarter that consisted of plants used as food for cattle. The total share of weeds, grass and reeds found on the site was more than 76 per cent. This high frequency follows from another of the remarkable findings of palaeobotanical analysis. Almost no wooden charcoal was found on the site: the inhabitants had to burn dried animal dung to provide heat, and it was from this that the seeds analysed come. This conclusion is also confirmed by similar practices in the present-day Egyptian countryside, where village women and girls mix dung with straw, form it into flat cakes and store them on the roofs of their houses to be used later as fuel. Once our inspector even explained that in poor villages, the economic status of the owner of a house was judged by the amount of dried dung on the roof.

All this shows that livestock breeding was widespread on the site. There is also further evidence of this. From the written sources of the Old Kingdom and the early Middle Kingdom we learn that in this district (the third one in Lower Egypt) there was a settlement called the “Cattle Estate.” Its precise location is not known, but it must have been a settlement close to Kom el-Hisn, which is, moreover, one of the oldest of the First Dynasty. The high frequency of clover in the analysed samples and the absence of grass, moreover, indicate that cattle were kept in sheds for at least part of the year, and fed on harvested clover. Even today, clover is the third most widespread crop in Egyptian farming and can be harvested several times a year. For all the evidence of cattle-breeding on this site, only a very few beef bones have been found here. This suggests that most of the cattle were taken to the capital and from



The Ancient Egyptian hoe – a basic tool in agriculture for the present, as well as the past.

there to the altars of the temples, pyramid complexes and dignitaries' tombs. The local farmers satisfied themselves with goats, sheep and pigs besides plant food.

Who carried it all?

In connection with the formation of the Nile valley we have already mentioned that the great majority of transport here was by boat. For transport on dry land, the main pack animal – and for many years the only one – was the donkey (*Equus asinus*), whose domestication originally also took place on Egyptian soil. The donkey is well known for being able to travel considerable distances with smaller loads. We have enough written sources from ancient Egypt showing the donkey as a favourite caravan animal, and for many centuries the only one available. Harkhuf, for example, in the autobiographical inscription preserved on the façade of his rock tomb on the island of Elephantine says that during the reign of Merenra he returned from an expedition to the land of Yam with 300 donkeys laden with ivory, grain and incense. A fully laden donkey in this case meant a load of about 60 kilogrammes, with which it is capable of covering 20 kilometres a day. Half this distance (half a day of walking) was known as an *iteru* in Old Egyptian, and was used as a unit of distance. Donkeys are also known for being capable of transporting loads of 200-300 kilogrammes over a short distance. Unlike donkeys, horses did not become native to Egypt until the mid-18th century BCE and the camel much later; the latter did not become widespread until the first Persian occupation in the 6th century BCE.

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Journey to the West

The world of the Old Kingdom tombs in Ancient Egypt

Prof. Mgr. Miroslav Bárta, Ph.D.

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