## Ancient

Egyptian Kingship

Edited by

David O'Connor \& David P.Silverman


This volume is the collaborative effort of several Egyptological scholars from the United States, Canada, Egypt, and England; each contribution is a comprehensive investigation of a specific aspect of kingship in ancient Egypt and represents a particular area of expertise of that author. The first part of the book examines the nature of kingship and the role of the ruler. The second part of the book focuses on the role of kingship and its characterization in particular periods. The last section of the volume consists of two studies on the concretization of royalty in architectural contexts. Ancient Egyptian Kingship is the most comprehensive work in English on the subject since Henri Frankfort published Kingship and the Gods in 1948. Richly illustrated with photographs, plans, and diagrams, it is a new, extensively researched analysis of the topic.

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Authors John Baines, Zahi Hawass, William J. Murnane, David O'Connor, Donald B. Redford, David P. Silverman.

# ANCIENT <br> EOYPTIN KINGSHIT 

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ANCIENT
EGYPTIAN KINGSHIP

# PROBLEME DER ÄGYPTOLOGIE 

HERAUSGEGEBEN VON

## WOLFGANG HELCK

NEUNTER BAND

DAVID O'CONNOR and DAVID P. SILVERMAN (eds.)
ANCIENT
EGYPTIAN KINGSHIP

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EDITED BY

DAVID O'CONNOR<br>AND<br>DAVID P. SILVERMAN



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## PREFACE

This collaborative effort of several Egyptologists from the United States, Canada, Egypt, and England began, not as a publication project, but as an international symposium, sponsored by the Denver Museum of Natural History. That institution had invited several scholars to speak at the museum during the time that it was hosting the exhibition, Ramesses II: The Great Pharaoh and His Times. Barbara Stone, the Curator of Collections in Denver, organized the conference with a focus on kingship in ancient Egypt, since this topic was particularly relevant to the accompanying exhibition. In addition it represented an area of interest to the public and was a subject that was clearly in need of new investigation.

The symposium took place in Denver from October 30-November 1,1987 , and at its conclusion, all of those who attended the sessions agreed that the lecturers, whose areas of expertise included amongst others archaeology, language, ancient history, religion, anthropology, and art, had provided significant coverage of the fundamental aspects of kingship, within the confines of the conference. Ms. Stone, therefore, strongly urged the participants to consider the possibility of using their original oral contributions as the basis for a new publication on the subject of kingship. Each of the scholars, John Baines of Oxford University, Zahi Hawass of the Egyptian Antiquities Organization, William J. Murnane of Memphis State University, Donald B. Redford of the University of Toronto, and David O'Connor and David P. Silverman, both of the University Museum and the University of Pennsylvania, agreed to reexamine the area for which he was responsible and to write a chapter for this new study. John Baines offered to contribute an additional chapter on the origin of kingship, and David O'Connor and David Silverman accepted the position of editors of the proposed volume.

The outcome of this collaboration is a publication that has a multi-level approach to the subject of kingship, a result which may have been influenced by the wide variety of interests and disciplines of the authors involved in the project. Some of the chapters represent general surveys of broad topics interspersed with some new and innovative ideas and concepts; other chapters approach particular aspects of kingship through interpretive analyses that
result in new insights and conclusions; and a few chapters concentrate on specific time periods of Egyptian history, revealing fascinating new details. The authors have examined the origin of kingship, how royal architecture relates to it, how the king and his office are referred to in the texts and art, and what the nature of the Ramesside rulers was. They have documented the changes in kingship that occurred in the volatile Eighteenth Dynasty, examined it in terms of the culture and the legitimation of rule, studied the extent of the divinity of the king, and have dealt with the pharaohs who built the pyramids in the Fourth Dynasty. The resulting study-Ancient Egypt Kingship-is a broad analysis of the subject that takes into consideration the nature not only of the office of kingship, but also of the individual in it and the society that created it.

The editors would like to take this opportunity to acknowledge the participation of the many individuals who contributed in some way to the publication of this volume. Barbara Stone was the organizing force behind the project and was responsible for its inception. Without her interest and support, this publication would never have come into being. Stephen Phillips, Ellen Morris, Kellee Barnard, and Melissa Robinson, all Research Assistants in the Egyptian Section of the University Museum of the University of Pennsylvania provided valuable technical assistance in the preparation of the varying stages of the manuscripts. Jennifer Houser prepared several illustrations and was in charge of the word processing of all of the manuscripts. In addition, Ms. Houser worked tirelessly on the copy editing of the final version of the text, and the editors are extremely grateful to her for the exemplary quality of her work and her dedication to the project.

The editors would also like to express their thanks to each of the contributing authors for his participation and also for his patience in seeing the project through to completion. We are fortunate to have had the benefit of critical commentary of Professor Dr. Wolfgang Schenkel on a prepublication draft, and we appreciate his efforts. Dr. F.Th. Dijkema of E.J. Brill has been extremely helpful in all of the publishing details. In the initial manuscript, we have used a special word processing font, DyPalatino, with special characters designed by Dr. Peter der Manuelian, Museum of Fine Arts, and we appreciate his generosity in granting us permission to make use of the font. The final text has been set in Baskerville.

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## CHAPTER SIX

## THE PROGRAMS OF THE ROYAL FUNERARY COMPLEXES OF THE FOURTH DYNASTY

Zahi Hawass

The royal cemetery at Giza is one of the best excavated, documented, and studied of all the royal pyramid sites (Figure 6.1). Nevertheless, there is no clear consensus about the actual function of the pyramid complexes at Giza. In fact, the same could be said about the function of pyramid complexes throughout the Old Kingdom (Figure 6.2).

Ricke, Schott, and many other scholars have suggested that the pyramid complex was used for the burial procession of the king and that the lower temple was used for the mummification ritual and process (Ricke 1950, 60-109; Schott 1950, 149-214; Hawass 1987). These theories have been brought into question because their evidence is based on parallels with scenes from private tombs, whose architectural layouts differ from those of royal tombs, and from an analysis of pyramid texts, which record religious beliefs and do not contain any information about actual function.

Moreover, there are architectural features in the temples of the Giza necropolis that do not agree with the theory that the pyramid complex was used for the king's funeral procession. For example, the doors of the upper temples that led to the pyramid court are too narrow to have allowed the king's coffin and the funeral procession to pass through to the burial chamber inside the pyramid. In Khafre's lower temple, the corridor and the door that led to the causeway are not wide enough to have accommodated the procession of the king. In addition, the layout of the Old Kingdom causeway does not indicate that it was necessarily a ceremonial way for the procession of the king.

Further, the lower temples do not appear to have been designed for either the rituals or the process of mummification. The holes on the roof of the lower temple of Khafre were not for the poles of the washing tent, as some have suggested (Grdseloff

1941, 22-49; Drioton 1940, 1013-1014), but, rather, were associated with the construction of the temple. The ground plan, wall reliefs, cult objects, and statuary programs found in the lower temple do not indicate any association with the process, or ritual, of mummification either.

If previous theories regarding the function of the pyramid complexes at Giza are called into doubt, what then might be a more logical explanation of their function? This is what I hope to answer in this chapter by revealing the organization of the kingship of Khufu, Khafre, and Menkaure through a study of the textual, architectural, and archaeological remains of the three pyramid complexes at Giza.

Arnold had rejected Ricke and Schott's theory that the pyramid complex of the Old Kingdom had a ritual function, suggesting instead that pyramid temples served to promote the corporeal afterlife of the deceased king through the mortuary cult, as well as the continuance of his kingship, his victories over his enemies, and his deification (Arnold 1977b, 1-14). Arnold's functional analysis, which was based on the study of wall reliefs, architecture, statuary and relevant inscriptions, dealt with the pyramid temples of Dynasties V and VI. In this chapter I will use the same approach and apply it to the pyramid complexes of the Giza Plateau.

I will first examine six discrete elements of the Giza necropolis: (1) the architectural features of the Giza pyramid complexes, such as the upper and lower temples, the causeways, and the pyramids themselves in comparison with other Old Kingdom complexes; (2) the program of the wall reliefs in Dynasties $V$ and VI and how it relates to the reliefs of Khufu's temples; (3) the statuary program of the upper and lower temples of Menkaure; (4) the program of cult objects in the Giza temples; (5) the personnel of the cults of Khufu, Khafre, and Menkaure; and finally, (6) the additional archaeological remains attached to the pyramid complexes of the Giza Plateau. Following this, I will attempt to synthesize these individual elements to understand their interrelation and explain what I see as the purpose and function of the pyramid complexes at Giza.

## Architectural Elements of the Pyramid Complexes at Giza

While the exact function of the three main architectural elements of the pyramid complex at Giza is a matter of debate among scholars, the layout of the elements is well established. The three
elements are: the upper temple (mortuary temple), the lower temple (valley temple), and the causeway.

## The Upper Temples

Although the upper temples of the three pyramids at the Giza necropolis share similarities, they are not identical. The main feature common to these three temples is the existence of the open court. Textual evidence confirmed that Khufu's upper temple had five statue niches; four niches for the four names of Khufu, and one niche for a statue of Hathor. Each of these statues was served by a priest (Urk. I, 154; PM III ${ }^{1}$, 177; Hassan 1936, 46-64; Hawass 1987, 646-756) (Figure 6.3). In Khafre's upper temple, five statue niches were also found. However, as only three of his names had priests associated with them, it is probable that only three niches would have contained statues for these names (Baer 1960, 96-97; Hawass 1987, 680, Table 13 B). The other two niches may have contained statues of Khufu and of Hathor (Figure 6.4). The presence of Hathor is suggested through the existence of priests and priestesses of Hathor, at least as early as Khufu's reign. The name of Hathor is also written on the southern door of Khafre's lower temple. In addition, statues found in the lower temple of Menkaure represent the goddess, together with Menkaure and a nome goddess. Menkaure's upper temple, in contrast, has a completely different layout. Instead of including five niches, it contained only one long niche (Reisner 1931, 25; Maragioglio and Rinaldi 1967, 50-52), which, I believe, contained a statue or a cult object of Re (Figure 6.5).

There were rooms in each of the three temples that contained cult objects as well as other rooms that were utilized as treasuries. The temples of Khufu and Khafre were decorated with scenes, but Menkaure's temple was not (Goedicke 1971, 1; Hayes 1953, 63; Reisner 1931). This may have been because Menkaure died before the completion of his monuments, and his pyramid complex was then completed by his son, Shepseskaf. Menkaure's temple was the only one in which many of the original statues and possible cult objects, such as flint instruments, offering pottery, stone vessels, and other items, were found (Reisner 1931, 42).

A cult offering place existed between the base of each pyramid at Giza and the rear walls of the upper temples (Stadelmann 1982, 82-87; Ricke 1950, 49, 65). Khufu and Khafre's offering places each contained an altar and two limestone stelae while Menkaure's contained a false door.

## The Lower Temples

The lower temple of Khufu was recently discovered. In 1989, the Sphinx Emergency Sewage Project was inaugurated at the request of the Egyptian Antiquities Organization as an inevitable necessity to drain the water away from the monuments of the Giza Plateau by equipping the nearby village of Nazlet el-Samman with a modern sewage system (Figure 6. 6. (See also Figure 6.1)).

During March 1990, a black-green basalt pavement was discovered during the construction of the sewage system of the village located at the foot of Khufu's pyramid. This area has been identified as the lower temple of Khufu. The excavation trenches opened for this drainage project in the streets of Nazlet elSamman provided an unprecedented opportunity to examine the remains of monuments belonging to the lower level of Khufu's pyramid complex at a number of points comprising parts of the causeway, as well as the remains of a building that may be identified as his lower temple.

The location of the lower temple of the Great Pyramid of Khufu has been a matter of speculation ever since serious interest in the Giza pyramids began. The early maps produced of this area from the Eighteenth and Nineteenth centuries show traces of the lower part of the causeway still clearly visible on the contemporary ground surface, with a conspicuous change in direction towards its eastern end. The site of the Valley Temple, however, was never indicated, and it may be assumed that already by that period anything surviving from it had been buried and its location lost. In more recent times, the expansion of Nazlet el-Samman and surrounding villages from small hamlets at the edge of the Nile valley to the suburbs of Cairo has made it increasingly apparent that whatever remained of these monuments was irretrievably lost beneath the urban sprawl (Norden 1757, plate XLIII; Perring 1839; Vyse 1842, plate opposite p. I; Jacotin 1822, plate 6; Lepsius 1849-1859, figure I, plate 14).

The levels of the black-green basalt blocks that were discovered ranged between $14.20-14.00 \mathrm{~m}$. above sea level and 4.5 m . below the present ground level. The basalt pavement was neither continuous, nor complete. Removal of blocks in antiquity had reduced the original layout, although some of the apparent gaps in the pavement may represent the positions of dividing walls, either of mudbrick or stone, which were themselves either destroyed or intentionally dismantled. The overlying strata of pure

Nile alluvial silt sealed the basalt blocks in their current condition and extended as far as the foundation of the modern Mansuriyh Street (Figure 6.7).

There were no cultural inclusions noted in this material, only very rare flecks of limestone (natural) and no indication that pits or trenches had been cut through the silt to extract blocks. Therefore, it seems safe to assume that the destruction was ancient. Further evidence of this was present in the form of one typically Roman amphora sherd (ridged surface, Nile silt, redbrown fabric) found among a group of basalt flakes.

At the south edge of the basalt blocks archaeological excavation revealed part of a mudbrick wall possibly as much as 8.0 meters wide (although its south side is not definitely defined). Five additional test trenches dug on the west side of the original trench gave further valuable details about the configuration of the basalt blocks.

Additional confirmation of the mudbrick work at the south end of the site was supplied by careful excavation in the southern test trench. The monumental building discovered here is certainly to be interpreted as the lower temple of Khufu's pyramid. This identification is confirmed by the discovery of a wall inside the village. Unfortunately, it is impossible to complete the plan of the temple because the extension width of the temple is located under a modern house in the village. At least, however, the temple length has been recorded, as well as its location (Hawass and Jones, forthcoming).

Khafre's lower temple is the most complete temple from the Old Kingdom. Of the two entrance doorways. that of the north was inscribed with the king's titles and the name of the northern Lioness goddess, Bastet (Otto 1973, 628-630)while that of the south was inscribed with the king's titles and the name of the southern goddess, Hathor, Lady of the Sycamore (Hassan 1960, 17; Maragioglio and Rinaldi 1966, 78). The presence of the two goddesses representative of the North and South is indicative ofthe power of the king as ruler of the Two Lands (Figure 6.8).

The temple had a T-shaped hall with pillars and statues of the king. The latter were found broken into small pieces, suggesting deliberate damage, perhaps for reasons of revenge. The lower temple of Menkaure is interesting because of the intact cult objects found within it. The presence of these objects proves that
the cult of the king was maintained inside the temple as late as the end of the Old Kingdom.

## The Causeways

Both Khufu and Khafre's causeways were decorated with scenes and covered with roofs. The causeway of Khufu was also discovered during the recent construction of the sewage system in Nazlet el-Samman. At six points along the streets of the village, excavations revealed elements of monumental limestone architecture on axis with the extended direction of the causeway of the Khufu pyramid. Previous excavation by Goyon in 1968 in AbdelHamid el-Wastani Street successfully identified another part of the causeway in an area in a direct straight line on the eastward projection of the causeway from the upper temple and Sinn-elAguz (the desert edge) (Figure 6.9). Goyon postulated the end of the causeway and the location of the lower temple at this spot. The work of 1990 enlarged upon Goyon's discoveries and connected his location to the lower temple. The major discovery regarding the causeway is that at the point of the excavation in Abdel-Hamid el-Wastani Street, the causeway turns 32 degrees to the North of its original direction and continues from there an additional 125 meters to the lower temple. The overall length of Khufu's causeway from the upper temple was approximately 825 meters. During the work, a fragment of the south wall of the massive limestone revetment constructed to support the causeway east of the desert edge (Sinn-el-Aguz) was revealed in Khaled Ibn el-Walied Street. This is the first time that a clear view of the south side of the embankment had been drawn and photographed although a considerable part of the north side remains exposed at the Sinn-elAguz (See Figures 6.6, 6.10, and 6.11).

Menkaure's causeway was uninscribed. The entrance to his causeway followed the plan of the Dynasty V causeway, and is different from that of Khufu and Khafre.

The only complete causeways that exist from the Old Kingdom are those of Khafre, Sahure, and Pepi II. All the causeways are similar in plan (Goyon 1971, 11-41; Hassan 1955, 136-144; Raslan 1973, 151-169; Drioton 1942-3, 45-54; Goyon 1969, 51 ff.; Goyon 1977, 140-142). The plan indicates that it was simply a corridor linking the upper temple to the lower one. The entrance on the lower end of each temple is narrow and therefore scholars have suggested that it would have been unsuitable for the passage of
the funeral procession of the king. It's shape and architecture confirm this idea. Furthermore, the temple of Neferirkare has no causeway, and this implies that the pyramid complex continued to function after the procession and the burial of the king took place.

## The Sphinx

The statue of the Sphinx at Giza is unique; nothing comparable has been found at any other Old Kingdom site. I believe that the Sphinx represents Khafre, as Horus, giving offerings with his two paws to Khufu, as the sun-god. The latter is in the form of Re who rises and sets through the two temple niches over the temple in front of the Sphinx. The presence of Khufu (as Re) in the Sphinx Temple has been explained by Stadelmann. He suggested that the cult of the king changed and Khufu became Re himself, since the name of Khufu's pyramid, sht Hzww, "the horizon of Khufu," indicated that Khufu was to be equated with Re, whose natural location was on the horizon. Furthermore, he noted that Djedefre and Khafre, the sons and immediate successors of Khufu, were the first kings to bear the title $s 3 R^{c}$, "son of Re," suggesting that their father, Khufu, was Re (Stadelmann 1982, 126 ff.) (See Figure 6.8).

Further support for this idea, in my opinion, is indicated by the enlargement of the upper temple of Khufu. When Khufu became Re in year 5 of his reign, changes occurred to accommodate his new cult. Moreover, the kings of the Old Kingdom who had a pyramid were buried beneath it, with the exceptions of Khufu and Sneferu, who were buried within it (Hawass 1993a; 1993b; 1990; Lehner 1985, 72-74). The pyramid shape is clearly related to the ben-ben, the symbol of the sun-god. This ben-ben was thought to be the true pyramid. From the Third Dynasty, the normal burial chamber was placed under the ben-ben (except for those of Khufu and Khafre). A burial chamber within the ben-ben would identify the king with Re because both the god and the king would be on the horizon (Fakhry 1969, 8; Edwards 1961, 290-293; Hawass, 1990).

Furthermore, Khufu (Figure 6.12) and Khafre (Figures 6.13) were the only two kings of the Old Kingdom who had five boat pits around their pyramids. At Khufu's pyramid, the two boats on the South were solar boats for Khufu, as Re , and the eastern boat pits were for boats connected with the king, as Horus. Their axes were directed North to South, because the king, as Horus, had power that extended from North to South (Maragioglio and Rinaldi

1965, 70). The location of these pits near the upper temple of Khufu suggests that they were connected with the living king whose activities are recorded in the reliefs of the upper temple which, perhaps, to some degree, corresponded to his palace as the living or, "Horus" king. The fifth boat pit flanking the causeway may have belonged to the cult of Hathor at Giza. Thus, the above points indicate that the monuments of Dynasty IV represent a transitional stage between earlier temples and the later Fifth and Sixth Dynasty temples.

## The Architectural Program

The study of the architecture of the monuments at Giza can reveal the following: Khufu and Menkaure's upper temples introduced the portico, or recess, located on the west side of the court. This portico does not occur in the Fifth and Sixth Dynasties. The pr-wrw was introduced in Khafre's temple and continued in use throughout the Old Kingdom. The pr-wrw was a vestibule with twelve pillars found in all of the Old Kingdom upper temples. The word was found in the Abu Sir papyri in association with the upper temple of Neferirkare. Khafre's pr-wrw had pillars, similar to those in the temple of Neferirkare (Von Bissing and Kees 1922, plate 18; Jéquier 1936, plate 22; Altenmüller 1972, 173). Khafre's temple had five doors leading to the five niches, a feature different from all other temples. Menkaure was the only king at Giza to have had one niche instead of five, and the remains of the temple walls south of this long niche cannot be used to reconstruct five niches (See Figure 6.3, 6.4, and 6.5). The $z h$, "booth" or "shrine" (a term also known from the Abu Sir papyri) was an offering hall in the temple containing statues of the king and the god. In Dynasty IV, the $z h$ was located between the pyramid base and the temple wall, except for that of Khafre, which had two different locations (Pos-ener-Kriéger 1976, 503).

There are seven lower temples that have been excavated from the Old Kingdom. These temples belonged to: (1) Sneferu; (2) Khufu; (3) Khafre; (4) Menkaure (of Dynasty IV); (5) Sahure; (6) Niussere (of Dynasty V) and (7) Pepi II (of Dynasty VI). Arnold noted that the lower temples of Sahure, Niussere and Pepi II differ in their plans and permit little generalization (PosenerKriéger 1976, 503). The same situation occurs in the three temples of Dynasty IV. There is no archival information from any lower temple to explain the function of this temple. The complex of

Neferirkare does not have a lower temple, a divergence from the Old Kingdom pyramid plan.

In the Abu Sir Papyri, the entrance to the upper temple of Neferirkare was called the rwt-h $3 t$. It had four pillars in front of the temple (Posener-Kriéger 1976, 496). Posener-Kriéger suggested that this unique structure could be the designation of the lower temple of Neferirkare (Posener-Kriéger 1976, 496). Therefore, possibly rwt-h3t is the general name for the lower temple in the Old Kingdom.

In all the Old Kingdom temples that have one entrance, the entrance, in general, is almost identical. The temple of Khafre, in contrast, had two entrances, and Sneferu's temple had a different plan altogether. The portico, however, was the same in all the temples, except in that of Khafre, where the shape was different. There was no portico in Sneferu's temple. Additional rooms existed in the temples of Sahure and Niussere. A portico was located in the temple of Menkaure. However, in Khafre's temple there existed a long hall with pillars located at the temple forepart.

Magazines were numerous in the temples of Menkaure and Pepi II. The other temples did not have as many magazines. Khafre's rooms, located behind the five niches, had a different layout from the others and cannot be identified as magazines. Magazines in Dynasty IV were not as numerous as in Dynasties V and VI and they had a different location.

Menkaure's lower temple was similar in plan to the later Old Kingdom temples, except for the presence of the court and magazines. Its unique court was similar to the Sphinx Temple. The significance of this courtyard in Menkaure's temple doubly emphasized the worship of Re, rather than Osiris, who did not appear in the monuments of the Old Kingdom until the end of Dynasty V (Baer 1960, 297; Griffiths 1966).

The lower temple served no function either in the mummification processes or rituals (Hawass 1987, 431-486; Arnold 1977b, 12), nor did it have a connection with Anubis, as suggested by Altenmüller (1971-1972, 307). In addition, it should not be identified with the so-called $m r$ t-building of Hathor, as proposed by Helck (1965, 2207-2208).

## The Program of the Wall Reliefs of the Old Kingdom

The general pattern of the wall reliefs from the royal temples of the Old Kingdom can be divided into a number of categories:

1. Scenes involving foreigners.
2. Scenes involving Egyptian officials and courtiers in front of the king.
3. Scenes showing the king hunting and fishing in the marsh.
4. Scenes of the royal estates of Upper and Lower Egypt.
5. Ritual scenes.
6. Scenes relating to the gods.
7. Scenes of ships under sail visiting foreign countries.
8. Sed-festival scenes.

These are the main themes of Old Kingdom wall reliefs. They were repeated from one royal temple in the pyramid complex to another, as well as within each temple itself. The scenes, therefore, must have followed a program, as did other aspects of the funerary establishment. By program, I mean a systematic organization of the relevant elements (scenes in wall reliefs, statuary, objects, architecture and personnel) organized in such a way as to fulfill a set of specific functions. The overall purpose of every program was to confirm the perfect nature of each king's governance, and to emphasize his special relationship with the divine world which thus created the idea of the program.

The wall reliefs of Khufu's temples (the only ones of Dynasty IV for which there is detailed evidence) have never been studied as a program. The recent study of the Fifth and Sixth Dynasty scenes concerning subject matter did not analyze the pattern of these scenes, nor how they related to their location within the temple. To clarify this pattern, and to better understand the rather incomplete remains of Dynasty IV at Giza, I will concentrate on the scenes of Sneferu of Dynasty IV, Sahure of Dynasty V and Pepi II of Dynasty VI. The scenes in Khufu's temples will be studied separately in comparison with these reliefs because his reliefs were not found in situ.

The program of Sneferu's wall reliefs from Dahshur included scenes depicting royal estates to ensure offerings from Upper and Lower Egypt for the king's cult. In the same location, the reliefs depict the king in front of the gods showing his relationship to the
divinities. The royal estate scenes were repeated in the same building in the portico. Following these scenes, the king was shown celebrating the sed-festival illustrating his victory over enemies, establishing offerings, and asserting his divinity. In the same area of the sed-festival scenes, the king was shown with depictions of himself and the gods who also attended the sed-festival. Finally, the king was shown together with his titles and names on the final register (Fahkry 1961, 19-58; Fahkry 1969, 80; Fahkry 1954, 563-594).

The most remarkable aspect of the program of Sahure's wall reliefs is that the same scenes were repeated in different areas of the pyramid complex. For example, the scene of the king and the gods capturing Libyans and Asiatics is found on the lower end of the causeways as well as in the lower temple (Borchardt 1913, pls. $15,45,64,69)$.

The scenes from Pepi II's wall reliefs were set in a program that illustrated different subjects that asserted the king's divinity. The repeated scene of Libyan captives in both Sahure and Pepi II's wall reliefs indicate that the artisans had a preconceived notion of this program before beginning the decoration of the pyramid complex. Therefore, it can be seen that the scenes did not necessarily record historical events from the king's life, but simply followed a well-defined program (Jéquier 1938; Jéquier 1940, 4).

The program of the royal reliefs seems to have been fixed at the time of Khufu and was used in other monuments during the Old Kingdom (Goedicke 1971, 151-157; 9, 13-17, 18-20, 22, 29-30). Most of the fragments from Khufu's pyramid complex were found reused at Lisht. The fragments that were found beside the upper temple at Giza indicate that this temple may have housed scenes of the sed-festival and scenes of the king accompanied by his officials. In the reconstructed plan of the lower temple of Khufu, based on the reliefs of Sneferu, Sahure and Pepi, there were scenes of the representatives of the royal estates bringing offerings. Khufu's titles would have been depicted on the walls in the first hall of the hypothetical plan of the lower temple. The scenes in the second hall would have included scenes of royal activities, such as: the king sporting and hunting in the marshes, ships under sail, and scenes of the members of the royal suite.

The causeway of Khufu should have had, in its lower end, the king's titles, and a scene repeated from the lower temple. In addition, one would expect a scene of representing Libyan captives, illustrating the king's victory over foreigners. In the
middle of the causeway there was a scene of a procession of oxen, representing foreign offerings as an indication of the extent of the king's power. The royal estates of the lower temple and the foreign representations would have been depicted in the lower end of the causeway.

## The Program of Statuary in the Menkaure Pyramid Complex

Few Old Kingdom pyramid complexes contained intact statuary comparable to that of Menkaure. The upper and lower temples of Menkaure contained statues and statuettes in different areas within the temples. Seven statues and statuettes made of slate and alabaster were found in the upper temple (Reisner 1931, 108-114). Only two of these should be considered statues because of their large size. These statues may have been made for the original program of Menkaure's cult.

The first statue, a seated image of the king, is larger than lifesize and made of alabaster. It is inscribed with the name of Menkaure and was found broken in many pieces. It is now restored and exhibited at the Museum of Fine Arts in Boston (Smith 1981, 44). There is no doubt that this large statue was originally made by the king for his program, because such a statue would not have been produced after the death of the king. Moreover, the workshops in the Old Kingdom would have provided the cult of the king with cult objects and statuettes, not with large statues.

The statue was found in an unlikely location in the northern magazine. It must have been placed in the temple and subsequently damaged, the pieces then being collected and stored in the rooms of the northern magazine. Smith felt that this statue would have been placed in the upper temple in a niche (1981, $116 ; 1946,35$ ), a feature that Reisner suggested was in the granite casing of this room (Reisner 1931, 29; Maragioglio and Rinaldi 1967,52 ). I do not feel that this room would have contained this huge statue because the proportions of the statue are too big for the proposed architectural setting. Rather, this niche would have contained a smaller statue, or a cult object of Re and Hathor. The statue is better suited to the temple portico, in the offering room entrance. It is also possible that there was another statue of the same size.

The other statue that must be considered is another seated
image of the king. On the basis of on Ricke's restoration of the statues around Khafre's upper temple court I suggested that this seated statue was part of a similar program in Menkaure's court (Hawass 1987, chapter 5).

The statuary program of Menkaure's lower temple, whether initiated by him or executed by his successor, Shepseskaf, is clearer. However, there has been no systematic study of the statuary program in the Old Kingdom due perhaps to the lack of a complete set of statuary in the Egyptian temples of the Old Kingdom. Since there was a clear program for the wall reliefs, there undoubtedly would have been one for the statuary.

It is uncertain how many of the statues and statuettes that were found in the lower temple were part of the original temple program. The small statuettes are not discussed here because they could have been made later in the Old Kingdom.

Five complete statues and many fragments were found in the lower temple of Menkaure. The most important of these are the triads, representing Menkaure, Hathor and one of the Upper Egyptian nome goddesses. Except for five triads, most of these statues were found in fragmentary condition. These five triads are the best preserved and show a high artistic style typical of the Old Kingdom (Wilson 1947, 231) (Figure 6.14).

These triads from the lower temple were found in the corridor of the southern magazine, in the so-called "thieves hole." Another triad was found in the court of the temple; and fragments of three more triads were also found (Reisner 1931, 35-42). The third, made of alabaster, was found in small pieces, and Reisner listed them as belonging to a nome triad. However, the pieces could have been from small ka statuettes. Thus, I cannot take this information into account. Therefore, there are seven triads that are securely allotted.

The characteristic style of the four well-preserved triads represents the king always wearing the crown of Upper Egypt. None have been found with the king wearing the crown of Lower Egypt, accompanied by a Lower Egyptian nome representative.

Another important iconographic aspect of the characteristic style of the triads is that they consistently depict the king on the left side of Hathor. In one triad, Hathor is shown holding the king's shoulder with her left hand; in another, she is embracing him. In the third triad, Hathor is touching his hand. Finally, the fourth one depicts the hands of the king and the goddesses away
from each other. These different attitudes indicate a relationship among the triads.

In these triads, the king is shown equal in size to Hathor. The inscriptions on the triads identify the king: "He is beloved of Hathor, Mistress of the Sycamore shrine in all her secrets" (Reisner 1931, 109). Fischer noted that Hathor, as Mistress of Dendera, is different from Hathor, Mistress of the Sycamore shrine (Fischer, 1968, 26). However, Allam indicated that the two are the same, since he found inscriptions at Giza giving Hathor both epithets (Allam 1963, 21-22). During the Old Kingdom at Giza, therefore, Hathor may have held both of these epithets. Smith and Edwards suggested that Menkaure may have intended to have forty-two triads, each one showing the king with a different nome goddess or god (Smith 1981, 44; Edwards 1961, 138). Wood offered two objections to this theory. First, she noted that all the triads show the king wearing the crown of Upper Egypt and questioned why none of the Lower Egyptian triads survive in the temple. She pointed out that, if the Lower Egyptian nome statues existed, then they should have been made of limestone, not alabaster, referring to the alabaster fragments Reisner found. The second point that Wood makes is that the suggested number of life-sized triads is unlikely to have existed in the court (Wood 1974, 82-83).

Wood also believed that the eight chapels placed at the beginning of the temple would have been the likely place for the four complete triads, as well as the fragmentary ones (Wood 1974, 82-83; Terrace 1961, 40-49). She based this reconstruction on the existence of the representatives of the estates in the entrance corridor of Sneferu's lower temple (Wood 1974, 87). There is no doubt that either the northern corridor, the portico, or the long hall could have been a place for the triads. Wood has suggested that the most likely place for the triads would have been either in the eight chapels or the court. I feel that the eight chapels would have been an unlikely setting because it is difficult to imagine that the triads represented only Upper Egyptian nomes. The inscription on one of them reads: "I have given to you all things which are in the South, all food, all offerings, since thou art appeared as king of Upper and Lower Egypt forever" (Reisner 1931, 109). This inscription indicates that these depictions of nome representatives have the same function as the representation of estates on wall reliefs. Their purpose was to provide
the king with offerings for the continuation of his cult and the cult of the gods. The estates applied not only to the lower temple but also to the upper temple as well.

In general, I believe that throughout the Old Kingdom reliefs and statues formed part of a consistent program; however, due to historical accident, there are no reliefs in Menkaure's temples. It seems that in Menkaure's complex, the triads are related to the royal estates and show the relationship between the king and the gods, since both nome representatives and the goddess Hathor appear.

Therefore, I suggest that there was a fixed program for the Lower Egyptian nomes as well, and all were placed in the court of the lower temple. This hypothesis is likely because of the size of the court: 19 meters east-west, and 41 meters north-south (which could accommodate any number of statues). The number of triads should not be restricted to forty-two because a complete set of forty-two royal estates of Upper and Lower Egyptians nomes is never seen in the wall reliefs of the temples. The number of the estate representatives of Upper and Lower Egypt differs. It is impossible to know for certain how many triads were originally in the court. Undoubtedly, there were at least sixteen, judging from the eight remaining Lower Egyptian triads and the eight proposed Upper Egyptian parallels. The fragments of the triads that were found in the court would seem to support the assumption that the triads were originally located there. Shepseskaf decorated Menkaure's pyramid complex with statues instead of reliefs presumably because it would have been less time consuming artistically, and the statues would have conveyed the same ideas that reliefs did.

I argue that Menkaure did not follow his father and grandfather's new cult. Through the influence of the priests of Heliopolis, he returned to the worship of Re. For this reason, Menkaure planned his lower temple to have an open court to emphasize his link with Re. This solar court was not a regular architectural feature of the Old Kingdom lower temples. It is unique to the sungod, and its plan may have influenced Menkaure in the design of the Sphinx Temple which is nearby and also has a solar design. The statues of Hathor with the sun-disc are a further illustration of the link among Re, Hathor, and Menkaure.

The anteroom, located before the sanctuary hall, was intended to house four seated alabaster statues of Menkaure. The bases of
these statues were found in situ (Wood 1974, 85). Wood suggested that the paired statue of Menkaure and his queen should be in the central chamber, or the offering chamber beyond the anteroom. This arrangement is unlikely, since this room is an offering room, and should contain an altar for offerings or a triad of the king, Hathor, and Re. The proper place for the pair statue would have been the vestibule at the temple entrance.

Wood also suggested that the wooden statues that were found in the temple could be part of the original program of the temple dedicated to the goddess Hathor, Mistress of the Sycamore. She based her hypothesis on the opinion that wooden statues were of royal workshop origin rather than private (Wood 1974, 93; Lucas 1962, 121).

I suggest the following program of the statuary: the triads represent the king standing with his queen (identified as Hathor); further, they represent the estates and the divinity of the king as Horus, together with Hathor and Re. The standing and seated statues, as a whole, represent the king in his palace. The seated statues in the temple anteroom and the offering room illustrate the king's relationship to the gods. One might expect that there would have been statues showing the king smiting his enemies in parallel with wall reliefs with the same motif. The king's names in the reliefs are among the inscriptions that are found on the triads. There are 15 statuettes of the king left unfinished in the lower temple. As I indicated before, it is difficult to assign them to the original program of the king.

Edwards calculated that the pyramid complex of Khafre alone contained between one and two hundred separate statues (Edwards 1961, 149). In addition, three to four hundred fragments of royal statuary made of alabaster and diorite were also found (Hassan, 1946, 61). The only statuary program that I suggest for Khafre is in the lower temple, which contained 23 seated statues of the king placed in the T-shaped hall of the temple. One of them was found almost intact in a hole at the temple vestibule, which seems to have been cut in a later period. This hole can be compared with the "thieves hole" of Menkaure's lower temple.

No statuary program can be established for Khufu because no statues have yet been found at Giza, except for the alabaster bases found inscribed with the king's name (Smith 1946, 20).

The discovery of the triads of Menkaure and Hathor might
suggest that every pyramid complex was dedicated to the deities of Re, Hathor and Horus. In the triad, the king is Horus, Hathor is the wife of the living king and the mother of the future king. She is also the eyes of Re , who is represented as the sun-disc above the head of the goddess. Schott indicated that there was a special relationship between Neith and Hathor at the Giza necropolis. The two goddesses were considered Re's daughters (Schott 1969, 127). A greater amount of evidence is available for the existence of a Hathor cult at Giza, rather than for Neith, who is associated with the necropolis through only a few titles. (Neith may have had priests because she was the daughter of Re.) Hathor had both priests and a priestess at Giza who maintained her cult. Hathor's name is also inscribed on the entrance of Khafre's temple and the symbol of Hathor is shown in the reliefs of Khufu at Lisht (Goedicke 1971, 38-39). Since the earliest times, there was a relationship between Hathor and Re . She acted as the sun's eye and exercised the function of Re (Bleeker 1973, 53; Buhl 1947, 80; Wente 1969, 83-91). Furthermore, the name of Hathor in Egyptian was $H w t-H r$ which means "the house of Horus." She was called "the royal mother," and was linked with the king's life (Bleeker 1973, $25,51)$. She was the king's guardian and assisted him in the ceremonies of the sed-festival (Bleeker 1973, 52). Re was the universal god of the Old Kingdom, rising and setting every day. Thus, the upper temple faces east towards the sun, further associating it with Re (Winter 1957, 222-223; Kaiser, 1956, 104-116; Hornung 1985, 100-142). The triads of Menkaure are the strongest evidence to support the existence and importance of the gods Re, Hathor, and Horus at Giza.

## The Program of Cult Objects of the Menkaure Pyramid Complex

Two kinds of objects were stored in the pyramid complex of Menkaure. One group was to be used in the cult of the king and the gods; the other was to be used by the king after his death. The pyramid complex of Menkaure is uniquely suited to the study of this particular program because his is the only pyramid complex at Giza in which such objects were found within the temples. Furthermore, one can observe a pattern in the distribution of these objects throughout the magazines in the upper and lower temples. This pattern may be used as a model for the Old Kingdom. As I
indicated above, there was a program assigned for the architecture, wall reliefs and statuary. It follows, then, that there would have been one for the cult objects as well.

Most of the cult objects found in the pyramid temples of Menkaure have been dated to Dynasty IV. Menkaure's lower temple contained the majority of these objects (Reisner 1931, 45). The cult objects that were found in the northern magazines consisted of: stone vessels, pottery, flint wands, flint implements, sets of model stone vessels, and other objects (Reisner 1931, 42). Reisner, who indicated that these objects were broken and were from disturbed contexts, believed that many objects of the same type were missing (Reisner 1931, 42).

Statues were found stored in the southern magazines. However, no cult objects were found there (Reisner 1931, 42). Above, I suggested that these statues were originally set in the court and other areas in the lower temple. Therefore, these statues were not originally placed in the southern magazines or "statue rooms" as suggested by Reisner. These magazines would have contained objects other than statues.

In the court of Menkaure's lower temple, 537 stone vessels and other objects were found (Reisner 1931, 104). Steindorff suggested that some of these stone vessels may actually have come from Khafre's pyramid complex. He based this hypothesis on the fact that very few stone vessels were found in Khafre's temples and that some of these vessels bore the name of Khafre (Hölscher 1912, 104).

Reisner, however, felt that none of these objects bore Khafre's name. He disregarded Steindorff's theory and believed that all these objects belonged to Menkaure's temple and should be dated to Dynasty IV (Reisner 1931, 104). I concur that the objects found scattered in the lower temple of Menkaure are dated to Dynasty IV. The cult objects among them, however, must have come from the southern magazines, as was the case in the upper temple.

The archaeological circumstances of the cult objects in the northern and southern magazines of the upper temple of Menkaure are clearer and may suggest the pattern for the placement of cult objects. The southern magazines of the upper temple contained Old Kingdom jars, bowls with spouts, small model dishes, coarse red jars, fragments of two alabaster offering tables, a thick diorite bowl, fragments of a slate cup, a fragment of an alabaster slab, fragments of alabaster and copper statues,
and numerous fragments of stone vessels (Reisner 1931, 15-16).
In the northern magazines of the upper temple fragments of four flint knives, three flint flakes, a flint scraper, a flaring pot of mud ware, model jars and saucers, a large stone hammer of black granite, a tall stand of red pottery, fragments of two large trays, 50 small model dishes and jars, a few pottery jars, a bowl stand, broad flint knives, and fragments of alabaster statues were found (Reisner 1931, 17-18). Similar artifacts were found scattered in the court and the inner part of the upper temple. Because of their similarity, they may have belonged originally in the northern and southern magazines (Reisner 1931, 19-24). These artifacts of the upper temple were dated by Reisner to the Fourth Dynasty (Reisner 1931, 103-105).

The type of objects in the southern magazines, namely offering tables, suggests that the southern magazines served a function different from that of the northern ones. It also suggests that the objects found in the court of the lower temple were originally in the magazines before the second temple was built. The chronology of the deposits, as Reisner suggested, dated the majority of the upper and lower temples artifacts to the original temple of Dynasty IV.

The interpretation of the cult objects in the royal temples, as discussed by Reisner, is that the objects served to supply the spirit with the daily necessities of life in the other world (Reisner 1931, 98 ). Therefore, such items would have been stored in jars to be ready for the king to use at any time-a type of magical supply. There were also other objects needed in the temples to maintain the daily offerings, such as: flint implements for the opening of the mouth ceremony, stone offering slabs, and stone bowls. Recently, Arnold has agreed with Reisner concerning the necessity of these supplies in the king's afterlife (Arnold 1977b, 11-12).

The results of the excavations of the royal temples of Dynasty V show that similar equipment was found in temple magazines. It can be seen that these objects were not necessary for the ordinary food offerings and magical recitations, but may have been intended for special ceremonies and formulae (Posener-Kriéger 1976, 514-515; Reisner 1931, 101).

The records in the Abu Sir Papyri also indicate the importance of magazines in the upper temple of Neferirkare (Posener-Kriéger $1976,514-515$ ). Objects that were found recorded in the inventories of the temple included: gold cups and plates, an offering
table ( $h t p$ ), and another offering table (called $h r t$ ), a $h 3 t s$-vessel, $h n w t$-cups, and cloths used as offerings in front of the statues (Pos-ener-Kriéger 1976, 171-187). These objects were inspected daily (Posener-Kriéger 1976, 162-187). At the same time, fresh offerings were brought to the temple for use in the sanctuary, namely, beer, bread and freshly slaughtered beef. After their use in the cult, these provisions were served to the personnel of the temple (Pos-ener-Kriéger 1976, 634).

There are no distinctions in the Abu Sir Papyri between objects to be used by the king in his next life and objects used for offerings. The objects mentioned in the Abu Sir Papyri imply, however, that there was a division between those objects destined for use in the palace, and those being used for the offering cult. It is possible that the more expensive items, such as the gold cups and plates, as well as the $h n$-box, were the palace objects. The careful documentation of the these objects indicates that the temple personnel wanted to be sure of the constant existence of these objects for the king's use in the afterlife. In addition, there are numerous objects mentioned in the Abu Sir Papyri that were used for the offering cult, such as: offering tables, ritual knives, offering plates, vessels and basins.

The function of the northern and southern magazines during the Old Kingdom has not been identified by scholars. Unfortunately, the Abu Sir Papyri do not aid in this determination either. However, the plan of Menkaure's magazine and the objects found within may help clarify the program of the cult objects.

The types of objects found in the southern magazines of the upper temple, such as: offering tables, model dishes, and stone vessels, indicate that the magazines in the south of the upper and lower temples stored items that were used for the daily offerings and other rituals performed in the temple sanctuary. The pots in these magazines would have contained fresh offerings such as beef, beer, and bread from the funerary domains. The pots with the offerings were not kept in the magazine, but were used directly for the offerings. The fresh offerings were then used as payment for the personnel of the cult after their use in maintaining the cult. The objects that were stored in the southern magazines were taken to the sanctuary for offering purposes, and were returned and stored in the magazines after being used. The fresh offerings would have been stored in the magazines of the workshop of each pyramid.

The objects that were found in the northern magazines, such as:
objects for magical use, stone vessels, pottery, and flint knives, indicate that they would have been used by the king in his afterlife. These objects were the same as those the king used in the palace during his lifetime. In order to have a prosperous afterlife, the king would have needed all the objects he had possessed during his lifetime. Further, it is possible that these northern magazines would have contained tables, games, boxes, chairs, clothing, writing materials, weapons and beds. Wooden fragments that were found in the upper and lower temples of Menkaure seem to suggest the existence of such objects.

In conclusion, the analysis of the objects of Menkaure's temples indicates that the southern magazines contained material intended for the offering cult of the king and the gods. The northern magazines, in contrast, held objects that were used by the king in the palace and, consequently, were required by him for use after his death.

## The Personnel of the Funerary Cult of Khufu, Khafre and Menkaure

The analysis of the titles of the personnel who were involved with the cult of Khufu, Khafre, and Menkaure can be summarized as follows. The organization of the cult of Khufu, Khafre, and Menkaure in the Fourth Dynasty was very uncomplicated. There were no compounded designations, simply: $h m w-n t t, w^{c} b w$ and ' $\underline{d}-m r$ grgt (which occurred only in Khufu's cult). The titles $h m w-n \underline{t} r$ and $w^{c} b w$ occurred only in the cults of the three kings in Dynasty IV. The $h m w-n t r$ had an elevated place in this period and served only Khufu. This simplified structure may be due in part to the lack of preservation, or the lack of securely dated tombs of the Fourth Dynasty. It would seem, however, that during this period the entire bureaucracy of the country was less complicated, and the cult followed a simplified organization as well. There is a false door panel from Giza (G1727) which has the title: shd w ww H.f$R^{c} w r$. It could be dated either to the Fourth or the beginning of the Fifth Dynasty (Strudwick 1985, 37-52).

By the Fifth Dynasty, the organization of the funerary cult was no longer as simple. Ranked offices appeared for the first time and high level titles were developed. The organization of the $w^{c} b w$ became more complex in Dynasty V. For the first time, the $w^{c} b w$ of the pyramid occurred with all three kings at Giza. The wiwnswt of
the pyramid, however, did not replace the earlier $w^{c} b n s w t$. It is possible that the titles were considered variants of each other. For the first time, the $w^{c} b w$ had a supervisor, the $i m y-r 3 w^{c} b w$, who was assisted by a $h r p$ and a $s \underline{h} \underline{d}$.

No hierarchy appeared, yet, for the $h m w-n t r$. However, the $h m w-$ $n \underline{t r}$ of the other names of the king appeared for the first time, although they are attested only for Khufu. In the case of Khafre, there was the new title of $h m-n t r$ of the statue of Upper Egypt of the pyramid of Khafre. The title $h \not r p$ imyw $z 3$ of the pyramid of Khafre, also appeared for the first time, which suggests the phyle organization was now in operation.

The administrative office, imy-r3 niwt $3 h t-H w f w$, first appeared in Dynasty V. There is no imy- $r^{3}$ of the pyramid city of Khafre and Menkaure known for that time. It is possible that the imy-r3 of Khufu's pyramid city was also in charge of the other two pyramid cities.

Four new titles appeared in Khufu's cult in Dynasty V: "the overseer of the king's workshop," "the director of the Sed-festival palace," "the overseer of the fields," and "the overseer of the milk herd of the pyramid of Khufu." The titles ${ }^{\text {c }} \mathbf{d}-m r$ grgt and imy-r3 niwt in Dynasty V may argue against the theory that the ${ }^{\text {c }} \underline{d}-m r$ grgt was in charge of the pyramid city.

New titles also appeared in Khafre's cult such as: "the overseer of the Sed-festival palace of Khafre's pyramid," "privy counselor" of Khafre's pyramid and the ${ }^{c} \underline{d}-m r \underline{t} n$ rsy $H^{c} . f-R^{c}$ wr. The latter may have been in charge of Khafre's funerary domain. This last title became necessary because the bureaucracy of the country was extending and the number of funerary domains that were needed for each pyramid cult was increasing. The funerary domains of Menkaure were still organized by Shepseskaf's personnel.

The cult of Menkaure remained uncomplicated in Dynasty V. The only change in this period (parallel to that in Dynasty IV) is the presence of the title $w^{6} b$ of the pyramid of Menkaure. The simple structure of his cult may be a matter of preservation, since the archaeological evidence shows the continuation of the cult until of the end of the Old Kingdom.

The organization of the cult in Dynasty V was the same as in Dynasty IV. The priests performed the daily service in the temple and they celebrated the yearly feasts of Re, Hathor, and Horus. The only differences were: an increase of the number of offices,
and an increase in responsibilities given to a greater number of people.

In Dynasty VI, the use of the two older titles from Dynasty IV, $h m w-n t r$. and $w^{c} b$ nswt continued. The organization of the cult, however, became even more complex, paralleling the increasing complexity of the bureaucracy throughout the country. $W^{c} b w$ were still found with the name of nswt and the pyramid. The ranking of the $w^{c} b w$ in Dynasty VI was: $h r p w^{c} b w$, shd, and $w^{c} b w$. There is no imyr3 attested. However, the title may have existed since it is already known in Dynasty V.

In Khufu's reign, the hierarchy of the $w^{c} b w$ was: $h r p$ w' $b w n s w t$, sh́d $w^{c} b w, w^{c} b w$ and $w^{c} b n s w t$, that of the $w^{c} b w$ of the pyramid was: $h r p w^{c} b w n s w t 3 h t-H w f w$ and shd, w'bw 3ht-Hwfw. The hierarchy of the $w^{c} b w$ in Khafre's reign was: shd $w^{c} b w$ and $w^{c} b w$ nswt. For the pyramid the only title was shd $\underline{d} w^{\mathrm{b}}$ bw $H^{c} . f . R^{c}$ wr. However, in Menkaure's reign, the hierarchy of the $w^{c} b w$ was: $s h \underline{d} w^{c} b w M n-k 3 w-R^{c}$ and $w^{c} b$ nswt. No $w^{c} b w$ of the pyramid of Menkaure seems to have existed.
$H m$-ntr of Khufu, Khafre and Menkaure still remained. For the first time, the office of $h m-n \underline{t r}$ of the pyramid appeared. There was a completely new hierarchy of the $h \mathrm{mw}-\mathrm{nt} \mathrm{t}$ in Dynasty VI that was


The title imy-ht hmw-ntr appeared for the first time in Dynasty VI. The complete set of $h m w-n t r$, of the four names of Khufu; and $h m w-n t r$ of the three names of Khafre appeared for the first time.

A new title also appeared and was held by three individuals. This title is $h m$-ntr Hufw hnty $3 h t-H w f w$, "priest of Khufu who presides over Akhet-Khufu." The office of $h m$-ntr of the king was not replaced by that of his pyramid, as has been suggested by other scholars. Indeed, the new office of $h m-n t r$ of the pyramid and the older office of $h m$-ntr of the king, evidently existed side by side.

The complete standard sequence of the titles of $h m w-n \underline{t} r$ in Dynasty VI suggests that by the Sixth Dynasty, every office in the hierarchy had acquired a new and elaborate ranking structure. Whereas in Dynasty IV, only the son of the king or his daughter served the cult, by Dynasty VI, the size and increased complexity of the bureaucracy made it necessary to have a more extensive organization of the cult. For the first time in Dynasty VI, the title hntyw-s $H^{c} f . f \cdot R^{c}$ wr appeared and the sequence of titles of the $h n t y w-\breve{s}$ in Khufu's cult was $i m y-r 3$ and $h n t y w-5$.

The office of the head of the administration of the cult, that is,
"the overseer of the pyramid city," continued. Now, for the first time, there were overseers of the pyramid city of Khufu, Khafre, and Menkaure. In addition, there were the administrative titles of smsw h. $3 i t$ of the pyramid of Khufu and Khafre and $i m y-r 3$ wsht and $h b t$ of the pyramid of Menkaure. These changes not only took place in the king's cult in Dynasty VI, the hierarchy of titles in the queen's cult was also affected. For the first time, for example, the titles imy-r3 hmw-k3 mwt nswt appears.

Menkaure's cult in Dynasty VI was completely different from the cult in Dynasties IV and V. His cult had a hierarchy within the $w^{\mathrm{c}} b w$ and $h m w-n \underline{t}$ titles and new offices were introduced for the first time that are not paralleled in Khufu or Khafre's cult. However, it is clear that as the Old Kingdom progressed, the organization of the cult of all three kings became increasingly complex.

One title connected with Menkaure's cult, imy-r3 $\underline{d} 3 t M n-\kappa 3 w-r^{c}$ $n t r i, ~ " o v e r s e e r ~ o f ~ c o u n c i l ~(j u r y) ~ o f ~ M e n k a u r e ' s ~ p y r a m i d, " ~ i s ~ d a t e d ~$ to Dynasties V and VI (PM III ${ }^{1}$, 294; PM III ${ }^{2} / 3,736$ Title No. 796, $\underline{d} 3 \underline{d} 3$, should read $\underline{d} 3 t$ ). The increasing elaboration witnessed in Menkaure's cult in Dynasty VI, however, suggests that this title also belonged to Dynasty VI.

Khufu also had two titles that are not previously included in the organizational chart, these were: $i m y-r \zeta z s \check{s} 3 h t-H w f w$ and $z s ̌ i m y w-z 3$ 3ht-Hwfw. Both date to Dynasties V and VI. It seems impossible to date these two titles based on the organizational chart because of the increase of offices in Dynasties V and VI in Khufu's cult (Hawass 1987, 558-627, 734-756). It is important to note, however, that these two titles existed in this period and were related to scribal offices; one of them being the scribe of the phyle of Khufu's pyramid.

The service and the function of the cult of Khufu, Khafre and Menkaure can be understood through an examination of the duties of the personnel listed in the Abu Sir Papyri. There were daily and monthly services, as well as yearly feasts. It is important to note that the titles of $w^{c} b$ and $h m-n \underline{t} r$ were not merely honorific titles but were actual functioning designations for people who performed services in the temple. In addition, the Abu Sir Papyri also list laundry men and other servants who were assigned to work in the temple (Posener-Kriéger 1976, 588-601).

The $h m$-ntr of the king in Dynasty V (who was, at the same time, a $h m-n t r$ of a king in Dynasty IV) had to participate in the temple rituals. They took part, at least, in the monthly or the yearly festi-
vals of Re, Hathor and Horus. The previous discussion can suggest that it is possible that there was a program established for the personnel of the cult of Khufu, Khafre and Menkaure, just as there was a program for the wall reliefs, statuary, cult objects and architecture.

## Additional Archaeological Remains on the Giza Necropolis

Several types of building complexes should be discussed in connection with the cult at Giza. One of these, the funerary domain, was an establishment located on the flood plain near Giza that produced agricultural and animal products. However, no archaeological evidence shows its existence. These products and those of more remote estates were delivered to the $r-s$, which allotted them to the funerary establishment or to the palace. The other complexes were: the pyramid city, the rest house and the workshops. These can be expected to appear separately, but in connection with each of the pyramid complexes. One example, namely, the workmen's camp, most likely served the entire plateau. There were also other installations near the Giza plateau, such as a harbor and canals.

The terms grgt and $t n$ were the designations of the funerary domains of Khufu and Khafre, located on the nearby flood plain. In Khufu's time, grgt was established as the main funerary domain of the king. In Khafre's period, this area, grgt, consisted of grgt mhty (north) for Khufu, and $\underline{t} n$ rsy (south) for Khafre. Parts of these funerary domains were given to the royal residence at Memphis and the rest were given to the cult of Khufu and Khafre at Giza. $R-\check{s}$ Khufu was the site of the delivery of the products from the funerary domain (Hawass 1987, 322-336; Helck 1957, 93; JacquetGordon 1962, 457-477; Edel 1956, 67; Kees 1948, 77-81; Stadelmann 1981a, 69; Lehner 1986, 16-17).

One can wonder why scholars do not assign grgt and $\underline{t} n$ as funerary domains, even in instances where there is clear evidence that points to that function. In one of the scenes from the tomb of Nesut-nefer at Giza, the two titles of ${ }^{\text {c }} \underline{d}-m r$ grgt and ${ }^{\text {' }} \underline{d}-m r \underline{t} n$ rsy are listed one under the other. Below the two titles are scenes arranged in registers, showing males and females bringing offerings to the deceased from the funerary domain (Junker 1938, figure 30). Nesut-nefer's tomb shows, through the list of domains,
that he was a person who controlled many of these foundations. Therefore, he had strong connections with the funerary domain. Furthermore, many of the officials who were in charge of grgt or $t n$ transferred their offices to their children, and control of the funerary domains would have been an office that officials would have transferred to their families more frequently than any other office.

There is no known list for Khafre's funerary domains during the Old Kingdom (Jacquet-Gordon, 1952). The funerary domains discussed by Jacquet-Gordon were of two types: a royal hat and niwt. Khufu had one hwt-domain and four niwt. The number of titles that Khufu had can explain the need for this number of domains. I argued, in the previous discussion, in favor of the relationship between Khufu as Re and his son Khafre, as the son of Re. In addition, the grgt, or funerary domain of Khufu, was a single entity of which the southern portion became $t n$ rsy and was assigned to Khafre. This would explain the texts that mention only grgt and the fact that there were seven ${ }^{\text {' }} \underline{d}-m r$ who were in charge of it. One person was ${ }^{\text {c }} \underline{d}-m r$ grgt $m h t y$ and, at the same time, there was a $t n r s y$ of the grgt because Nesut-nefer was in charge of both grgt and $\underline{t} n$ rsy.

From the Abu Sir Papyri it is known that the $R-\check{5}$ Khufu clearly functioned as an economic unit. It was a place to organize the delivery of the products from the funerary domains to the temple and residence. Therefore, it was an area for the delivery of commodities, such as corn, fruit, bread, beer, meat and fowl. All of these items would have come from the funerary domain (Kemp 1983, 90; Helck 1974a, 66; Kaplony 1972, 56-57).

Textual and archaeological evidence indicates that each pyramid complex at Giza had its own pyramid city and that their location would have been at the foot of the lower temple of each pyramid (Figure 6.15). The name of each pyramid city was combined with the name of the pyramid. The determinative of the pyramid city occurred as early as the Fifth Dynasty, not the Sixth Dynasty, as indicated by other Egyptologists.

During the construction of the sewage system for the village of Nazlet el-Samman, a large settlement about 3 kilometers square was found. It is located about 50 meters south of the recently discovered lower temple of Khufu. During the excavation, the sequence of occupation was found to have been as follows: first, there were mudbrick buildings laid out over natural desert sand.

Then there was a destruction of the mudbrick buildings and leveling of their remains (indicated by a layer containing very dense pockets of pottery, bone, charcoal and layers of ash). This destruction layer is between 15 and 80 cm . thick. Thirdly, a second level of mudbrick buildings was built over the previous layer. These were also later destroyed and leveled, as is indicated by a layer of ashy rubbish containing much pottery. Finally, natural desert aeolian sand was deposited over the mudbrick building and completely buried in the Old Kingdom levels (Hawass and Jones, forthcoming). This settlement area contained two distinct elements: the pyramid city of Khufu and the workmen's camp, located south of the wall called Heit-el-Ghorab (Kemp 1977, 185200; Trigger 1983, 71-174; O’Connor, unpublished paper; Petrie 1899).

It is likely that the palace and the administration of the king were at Giza. The ${ }^{c} h$ was important as a ritual palace for the $s e d$-festival because the ${ }^{c} h$ played a significant role at this feast. It served as a resting place and changing room at various points during the ceremony. The ${ }^{c} h$ was strongly associated with Horus, the king. There is evidence that more than one ${ }^{〔} h$ may have existed at Giza. The second may have been a temporary rest house. The existence of two ${ }^{〔} h$ palaces is supported by the existence of two different titles associated with this building. The recent discovery of a settlement at Giza may support the theory that the palace and the administration of the country existed at Giza.

Three workshops were connected with Khufu, Khafre and Menkaure. Textual evidence has revealed the names of Khufu and Menkaure's workshops, and the archaeology proves the existence of three workshops. The function of the workshop was to produce materials, to maintain the cult in the temples of the pyramid complex, to produce food for the personnel who lived in the pyramid city, and finally, to store the items that arrived from the funerary domains. There was only one workmen's camp that served the three pyramids at Giza. There is no textual evidence at Giza recording its name. Archaeological evidence, through Kromer's excavations and other test trenches by Hassan, indicates the existence of the workmen's camp on the far eastern side of the Giza necropolis. The workmen's community at Giza, which was found recently served the three pyramids and consisted of a number of institutions including: the workmen's camp (Figure 6.16 ); the bakeries and storage areas; the tombs of the workmen,
the artisans and their overseers; and finally a large limestone wall known as "Heit el-Ghorab" (Figure 6.17) which separated the aforementioned areas from the royal pyramid.

The camp (Figure 6.18), which was located in the recently discovered settlement, apparently had a permanent section for the artisans and a temporary one for the workmen. This hypothesis is based on the layout of the tombs. (Figures 6.17 and 6.18) Recent excavations have revealed over 600 tombs for the workmen and 30 for their overseers. In addition, about 40 tombs for the artisans were found just west of the institution area and the camp.

A bakery with two rooms was also discovered in this area. It is possible that this bread factory supplied bread for the whole work force. Large containers that could have held thirty pounds of dough were found. These baking pots were apparently covered with coals in large vats, as part of the baking process. A large cache of Old Kingdom bread molds was also discovered. These are identical to those depicted in the daily life scenes in the Fifth Dynasty tomb of Ti at Saqqara. The grains unearthed in the bakery suggest that the bread was made of barley, making the dark loaves heavy and dense. The vats used for the dough and the bread molds were stick-heated on open hearths of the bakery rooms. Bread and beer were the common staples of ancient Egypt. (The protein was available from beef and swine.) Another structure located in this area has been tentatively identified as the storage area for the grain. A seal impression was found which showed the incised term wbt. This word means "to embalm," or refers to metalworking (Lehner 1993, 56-67).

All three structures were separated by a 200 meter long wall with a height of about 10 meters. In the middle of the wall there was a tunnel allowing passage between the camp and institutional area (Hawass, forthcoming). (Figure 6.19) The 1978 excavations and drilling proved the existence of a harbor East of the Sphinx Temple. This harbor may have been connected to the Nile by means of a canal. In ancient times, the Nile was near the pyramid sites and has gradually shifted throughout time to its current position. The theory of the existence of a grand canal, parallel to the Nile on the west side, to serve the pyramid site at the Memphis region is unlikely (Hawass and Lehner, unpublished manuscript; Smith and Jeffereys 1986, 91). The harbor and the canal served for the transportation of stones, laborers and officials from the capital during the pyramid construction. It linked the pyramid site with
the capital and transported products for the maintenance of the cult of the deceased king.

## Correlating the Elements

In conclusion, the function of the pyramid complexes at Giza can be established by looked at the programs of the following elements: architecture, wall reliefs, statuary, and cult objects. These elements were discussed above separately, but here it can be seen how they correlate to give a comprehensive explanation of the function of kingship.

The program of wall reliefs, and its development, can be seen through the study of the reliefs. In the time of Sneferu, the program occurred only in the lower temple. In Khufu's time, it was used throughout the pyramid complex, and it was the first time that the program of the wall reliefs took this direction. In Dynasties V and VI, the program was fully developed in its final form.

The subject matter dealt with in the scenes is as follows: dominating scenes, scenes of the king's identification with the gods, sed-festival scenes, and scenes of offerings. The scenes of domination portray the king victorious over disorderly elements of the universe, such as wild creatures or foreigners. The scenes associated the king with the natural world and the world of foreigners. The same idea can be seen in the hunting scenes, the scenes where offerings are brought from both inside and outside Egypt, and finally, his dedicatory titles. In all of them the king carries out his responsibilities to the gods. The scenes of the king's identification with the gods show the king as Horus. In front of him are the gods and goddesses of Egypt. He is always in their company. He makes offerings to them (a principle duty as ruler); they, in turn, reciprocate with affection.

It can be argued that the most important scenes were the sed-festival scenes. They depict the king in his palace with his officials and courtiers. He is also seated in his chapel wearing the crown of Upper and Lower Egypt. He wears his robe and carries the flail indicating his kingship and his power over Upper and Lower Egypt. Some scholars suggest that the sed-festival included the presentation of royal regalia: the scepter, and the bow and arrow (Brinks 1979, 159). Others see it as an expression of royal power
(Bonnet 1952, 159), or a guarantee of royal power (Hornung and Staehelin, 1974, 20-25). It could also be a renewal rite for the life and strength of the king as well as a guarantee of his royal power (Arnold 1977b, 11). In the Old Kingdom, the sed-festival was apparently celebrated when the king finished building his pyramid and associated temples. During the festival, the king removed his robe, put it in the palace ( ${ }^{c} h$ ) or the ritual (satellite) pyramid. (The ritual pyramid of Khufu was found recently. It is located to the immediate southeast corner of the Great Pyramid.) The burial chamber of this satellite pyramid was the changing room for the sed-festival. (Figure 1) Khafre did not have a ritual pyramid. The pyramid located to the south of his pyramid was a queen's pyramid (See Figure 6.1). The ' $h$ palace of Khafre was used as the changing room for his sed-festival. Menkaure's subsidiary pyramid (GIII-C) has no entrance for burial. The burial chamber was not lined and there is no evidence that a sarcophagus existed there (Vyse 1840-42, 41 ff .; Reisner 1931, 133. I suggest that this pyramid represents the cult pyramid of Menkaure.) The king then performed his dance to celebrate his success, his good government, and to show that he had accomplished what the gods required of him. Finally, there are the offering scenes. They always occur in the offering room, and showed the king receiving offerings and divinity. He was accepted by all the gods and became equal to them. Because he accomplished what they required him to do on earth, he is now a god.

Common to all of these scenes is the fact that they focus primarily on the king. The scenes of the first three categories are also scenes suitable for decorating the walls of the king's palace. The only subject that would not be represented in his palace, however, is that of the gods giving offerings to the king. The king cannot be equal to the gods unless he has completed the first three accomplishments depicted on his palace and his temples. Furthermore, certain scenes are always repeated three times. The repetition emphasized the importance of the activity.

In addition, there is evidence that shows that the wall reliefs had a program that was developed early in the Old Kingdom. One might suggest that this program was continued throughout Egyptian history with some additions. For example, the scene of King Sahure smiting a Libyan chieftain on the head with a mace, while his wife and two sons are in the background, was copied exactly on the temple of Pepi II. Even the name of the wife and
sons are is the same in both temples, although they are separated in time by two hundred years.

There are other scenes found in wall reliefs that have a parallel in New Kingdom scenes at Karnak. Furthermore, the development of the scenes from Sneferu to Pepi II shows the repetition of scenes with some additions in each period. Therefore, care must be given in interpreting historical events from these representative scenes, because they may have been depicted within the pyramid complex to show the ideal life that the king would like to live in the beyond. However, at the same time, some scenes, such as those involving foreigners, may have some validity.

The statuary program indicates a formula for the placement and types of statuary. It also suggests that the statues were related to the other programs. My interpretation of the triads of Menkaure implies that the pyramid complex was dedicated to the gods Re, Hathor, and Horus. The triads were the focus of the cult. The sun-god Re was the creator god who kept the world running. Hathor was the daughter and eye of Re, as well as the wife and mother of the king. She gave birth to him and was also his wife. The king was in the pyramid complex because he was Horus, and the triads were there because they were essential to the kingship. The triads of Menkaure not only suggest that the pyramid complex was dedicated to the king and his deities, but also revealed the king's relationship to the gods, as was the case in the reliefs. The statuary program also showed the power of the king as a ruler through the representation of sm3-t3wy, "the unification of the Twohands," on the base of the statues, paralleling the dominating and ruling motifs in the reliefs.

The correlation of the wall reliefs and the statuary can be seen from the reconstructed court of Khafre's upper temple. The king was seated in the court and above him were his Horus titles and the $s r h$, "palace façade." It also suggests that the king was seated in his palace. The court with its statues, and the five niches in the upper temple, also suggest that the upper temple was built to secure the continued existence of the king in the form of an extensive statue program. In addition, the program for the objects in the magazines parallel the dual functions of the temple and the palace, attested to by the reliefs and the statuary. They also match the programs of the temple and the palace. The program of objects in the magazines in the upper and lower temple of Menkaure was as follows: (1) the southern magazines contained
the objects used in the cult and (2) the northern magazines contained the palace objects that the king would use in the beyond.

The architectural program correlated with all the other programs of the wall reliefs, statuary, and cult objects. It provided the space for wall reliefs, statuary and cult objects, and this fact suggests that the temples were built mainly for the purposes of worship. The later Old Kingdom reliefs indicate that the temples were cult buildings for the king and the gods.

On the basis of the development of the programs, the plan of the architectural elements of the pyramid complex took its shape in Dynasty IV, especially in the time of Khufu, and it continued to develop throughout the Old Kingdom. Small changes or additions occurred according to the demands of each king.

The lower temple, causeway and upper temple were directed to the East to follow the worship of Re. The open court was another feature that indicated that Re was worshipped in the pyramid complex, because the sun rose and set in the open court. Khufu's upper temple was the first to contain the five niches; four were to house his four statues representing him as Re and Horus, and the last niche was for a cult statue for Hathor. The upper temple of Khafre also had five niches for three statues of Khafre representing himself as king of Upper and Lower Egypt and Horus. The other two niches were for statues of Khufu as Re and Hathor. Menkaure's upper temple had only one niche for a cult object of the sun-god.

I noted above that Khufu identified himself with Re. This statement can be justified by the fact that no wall reliefs have been found of Khufu with other gods because he attempted to identify himself as Re, who is united with Horus. Khafre accepted his father Khufu as a god and worshipped him, as Re, in his pyramid complex in the so-called "Sphinx Temple." Menkaure, however, did not follow these directions. He accepted the king as a god, but, only as a manifestation of Re, not as the god himself.

The existence of Hathor as member of the triad of deities at Giza was discussed earlier in more detail. One of the most important pieces of evidence supporting this is the existence of priests and a priestess of Hathor at Giza, at least as early as Khufu's reign. Hathor was also assisted by Neith, the daughter of Re. However, Neith did not have a main cult at Giza, as did Hathor. The three gods were worshipped throughout the pyramid complex. There is
no evidence of any temple of other gods elsewhere in Dynasty IV. Also, the niches in the temples of the pyramid complex contained statues of the triad. At the same time, the pyramid complex contained a specific place for each god.

The king, as Horus, was worshipped in the lower temple as indicated by the suggested statuary program of the king in the lower temples of Khafre and Menkaure. Hathor was worshipped in the chapels of the Queen's pyramid because she was identified with the wife of the king. Re was worshipped in the upper temple. He was the universal god who accepted all that the king did in the last element of the program of the pyramid complex. He also protected the king who was buried in the "Horizon of Re," i. e., the pyramid.

The architectural program indicates that Menkaure's lower temple court was influenced by the plan of the so-called "Sphinx Temple." This type of temple did not occur later in the Old Kingdom. Finally, the Egyptian building identifications that are found in the Abu Sir Papyri, such as: pr-wrw, wsht, tpht, and $z h$ can be located in the temples of Dynasties IV to VI.

Apparently, the architectural program was formulated to create a pyramid complex in which the triad could have been worshipped, and in which the myth of the kingship could have been celebrated. The triads of deities were worshipped there because of their connection with kingship. Therefore, the evidence cited above suggests that the pyramid complex was as much a palace as it was a temple.

6.1. Plan of the Giza Plateau. Drawn by Michael Jones.

6.2. The pyramids at Giza. Photograph coutesy of Zahi Hawass.

6.3. Plan of the Upper Temple of Khufu. Plan adapted by David Goodman from the original by Zahi Hawass.

6.4. Plan of the Upper Temple of Khafre. Plan drawn by Barbara Stone from the original by Zahi Hawass.

6.5. Plan of the Upper Temple of Menkaure (left) and Reconstruction of the Southern Magazines (right). Plan drawn by Barbara Stone from the original by Ricke.

6.6. Work on the modern sewage system. Photograph courtesy of Zahi Hawass.

6.7. Excavation plan of the Lower Temple. Plan drawn by M. Jones.


6.9. The Causeway of Khufu from Sinn el Aquz. Photograph courtesy of Zahi Hawass.
6.10. Nazlet el Samman. Excavation of Causeway Trench No. 1. Photograph by M. Jones.


ZAHI HAWASS

6.11. Plan of Trench 1, causeway route. Plan drawn by M. Jones.

6.12. Statue of Khufu in the Cairo Museum. Photograph courtesy of Zahi Hawass.

6.13. Statue of Khafre in the Cairo Museum. Photograph courtesy of Zahi Hawass.

6.14. Triad depicting Menkaure, Hathor, and a nome deity, now in the Cairo Museum. Photograph courtesy of David P. Silverman

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6.15. The pyramid city of Menkaure, located outside and inside of his lower temple. Plan courtesy of Zahi Hawass.
6.16. Part of the cemetary of the workmen and the artisans. Photograph courtesy of Zahi Hawass.


6.17. The wall of Heit el Ghorab. Photograph courtesy of Zahi Hawass.

6.18. The settlement located east of the Sphinx under the village of Nazlet el Samman. Photograph courtesy of Zahi Hawass.

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