

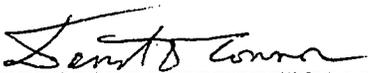
THE FUNERARY ESTABLISHMENTS OF KHUFU, KHAFA AND MENKAURA  
DURING THE OLD KINGDOM

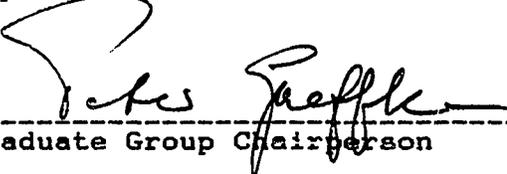
ZAHY A. HAWASS

A Dissertation  
in  
Oriental Studies

Presented to the Graduate Faculties of the University of  
Pennsylvania in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy

1987

  
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Supervisor of Dissertation

  
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Graduate Group Chairperson

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**1987**

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## ABSTRACT

Title of Dissertation:           The Funerary Establishments  
  of Khufu, Khafra and  
  Menkaura during the  
  Old Kingdom

Author's Name                 :       ZAHY A. HAWASS

Supervisor's Name            :       David O'Connor

The funerary establishment is the organization of the cult of a specific king during a period of time. It includes the architectural setting designed to house the cult. There are several major questions about the general aspects and functions of the architectural components, administration, ritual and economy of these establishments that are still matters of debate.

The site of the Giza necropolis is one of the most strongly integrated of the Old Kingdom (2598 B.C. to 2481 B.C.) funerary establishments. It is well-preserved, systematically planned and dedicated to three virtually successive rulers. Therefore, this site is one of the most important for the clarification of aspects of the royal funerary establishments.

The procedures used in this research involve the examination of both archaeological and textual data at Giza, as well as parallels to Old Kingdom architectural

components. The textual data from Giza and elsewhere supplies the names and the titles of the personnel who were members of the funerary establishments of Khufu, Khafra and Menkaura throughout the Old Kingdom.

The results of this work can be summarized as follows: The cultic significance of the establishments was that, Khufu equated himself with Ra and Khafra worshiped Khufu in this form. This new concept is reflected on the layout of the two pyramid complexes. Menkaura re-emphasized the cult of Ra through the influence of the priests of Heliopolis.

Organizationally, each pyramid complex had a funerary domain, pyramid city and workshop. One workmens' camp and harbor served the entire Giza necropolis. Khufu and Khafra had a ritual palace for the sed festival, while Menkaura's cult pyramid fulfilled the sed festival need.

On the programmatic side, there developed in Dynasty 4 a specific programme valid for the rest of the Old Kingdom for the wall reliefs, statuary, objects in magazines, architectural components, as well as the personnel of the cult. All these elements correlate to each other in ways which indicate that the pyramid complex is a combination of a temple and palace, dedicated to the triads of Ra, Hathor and Horus, who were

the principal divine forces of this period.

The analysis shows that the pyramid complex was not established for the royal funerary procession nor the king's mummification. It was built to celebrate the myth of kingship and the worship of the triad.

## TABLE OF CONTENTS

	page
Acknowledgments .....	iii
Abstract .....	vii
List of Tables .....	xiv
List of Plans .....	xvi
List of Abbreviations .....	xix
Preface.....	xxii
Introduction .....	1
 CHAPTER I: The Pyramid Complex of Khufu .....	 7
I:1: The upper temple .....	9
I:2: The temenos wall and surrounding court .....	 31
I:3: The subsidiary pyramids .....	36
I:4: The boat pits .....	53
I:5: Other structures around the pyramid	86
I:6: The ritual pyramid .....	112
I:7: the causeway .....	124
I:8: The lower temple .....	133
 CHAPTER II: The Pyramid Complex of Khafra .....	 140
II:1: The upper temple .....	142
II:2: The temenos wall and surrounding court.....	 159
II:3: The subsidiary pyramid and serdab .	163
II:4: The boat pits .....	172
II:5: Other structures around the pyramid	182
II:6: The causeway .....	188
II:7: The lower temple .....	192
II:8: The sphinx and sphinx temple .....	206
 CHAPTER III: The Pyramid Complex of Menkaura ..	 228
III:1: The upper temple .....	230
III:2: The enclosure wall and surrounding court.....	 255
III:3: The subsidiary pyramids .....	258

III:4:	The ritual pyramid .....	283
III:5:	The lack of boat pits .....	286
III:6:	The causeway .....	289
III:7:	The lower temple .....	293
III:8:	Structures and settlements attached to the complex .....	303
CHAPTER IV:	Additional Archaeological Remains on the Giza Necropolis .....	321
IV:1:	Settlements .....	321
IV:2:	Textual evidence .....	322
IV:3:	Funerary domains .....	323
IV:4:	Pyramid cities .....	340
IV:5:	Rest house .....	352
IV:6:	Workshops at Giza .....	367
IV:7:	Workmens' camp .....	370
IV:8:	Archaeological evidence .....	373
IV:9:	Pyramid city .....	375
IV:10:	The rest houses .....	384
IV:11:	Mortuary workshops .....	391
IV:12:	The workmens' camp .....	399
IV:13:	The harbor and canals at the Giza necropolis .....	405
IV:14:	The stone rubble walls at the Giza plateau .....	416
IV:15:	Conclusion of the overview of the settlements at the Giza necropolis.	419
CHAPTER V:	Function of Pyramid Complex at Giza	423
V:1:	Archaeological overview of the Giza. plateau .....	424
V:2:	Discussion of previous scholars' analysis of the function of temples and other architectural elements at the Giza necropolis .....	431
V:3:	Function of the pyramid complexes of Khufu, Khafra and Menkaura .....	472
V:4:	The Abousir Papyri and architectural elements of the upper temples .....	476
V:5:	Comparison of the Old Kingdom lower temples .....	488
V:6:	Comparison of the Old Kingdom causeways .....	491
V:7:	The programme of the wall reliefs of the Old Kingdom .....	492
V:8:	The programme of statuary in the Menkaura pyramid complex .....	524

V:9:	The programme of cult objects of the Menkaura pyramid complex .....	537
V:10:	Overview and conclusion of the function of the pyramid complex ....	546
CHAPTER VI:	The Personnel of the Funerary Establishment of Khufu, Khafra and Menkaura .....	558
VI:1:	Introduction .....	559
VI:2:	The personnel and their titles .....	560
VI:3:	Duration of the cult of Khufu, Khafra and Menkaura .....	573
VI:4:	Function and meaning of the titles ..	578
VI:5:	Chronological organization of the funerary cult .....	614
VI:6:	Discussion and conclusion .....	619
CHAPTER VII:	Conclusions .....	628
VII:1:	The cultic aspects of the establishments .....	628
VII:2:	The organizational aspects of the establishments .....	631
VII:3:	The correlationships of the different aspects of the establishments .....	633
Appendix		638
I:	Introduction .....	639
II:	Abbreviations.....	640
III:	Bibliography .....	641
IV:	Appendix .....	646
V:	Index of names listed in the Appendix	734
Index:1:	Personnel connected with funerary establishment of Khufu	734
Index:2:	Personnel connected with funerary establishment of Khafra	738

Index:3: Personnel connected with funerary establishment of Menkaura	739
List of Tables	740
List of Plans	769
Bibliography	807
Index	829

## LIST OF TABLES

TABLE		PAGE
1	Titles associated with the funerary establishment of Khufu	740
2	Titles associated with the funerary establishments of Khafra	742
3	Titles associated with the funerary establishment of Menkaura	744
4	Mortuary titles not explicitly associated with a specific king	745
5A	Personnel bearing title of ḥm-ntr Ḥwfw and title(s) of ḥm-ntr of a god or goddess	747
5B	Personnel bearing title of hmt-ntr Ḥwfw and title(s) of hmt-ntr of a god or goddess	747
6	Personnel bearing title of hm-ntr Ḥwfw and title(s) of ḥm-ntr of another king	748
7	Personnel bearing title of ḥm-ntr Ḥ(.f-R( and title(s) of ḥm-ntr of another king	749
8	Personnel bearing title of ḥm-ntr Mn-k3w-R( and title(s) of ḥm-ntr of a god or goddess	749
9	Personnel bearing title of ḥm-ntr Mn-k3w-R( and title(s) of ḥm-ntr of another king	750
10A	Personnel holding title jmj-r3 3ḥt-Ḥwfw	751
10B	Personnel holding title jmj-r3 njwt 3ḥt-Ḥwfw	751
11A	Personnel holding title jmj-r3 Ḥ(.f-R( wr	751

11B	Personnel holding title gmj-3 njwt H(.f-R( wr	752
12A	Personnel holding title gmj-r3 Mn- k3w-R( ntrj	752
12B	Personnel holding title gmj-r3 njwt Mn-k3w-R(	752
13A	Number of personnel in each dynasty who are hm-ntr of the names of Khufu	753
13B	Number of personnel in each dynasty who are hm-ntr of the names of Khafra	753
13C	Number of personnel in each dynasty who are hm-ntr of the names of Menkaura	753
14	Personnel connected with the Giza establishment and buried at another site	754
15	Personnel involved in the funerary establishments of Khufu, Khafra and Menkaura after the end of the Old Kingdom	755
16	Personnel connected with the funerary establishment of more than one of the kings buried at Giza	756
17	List of all the statues and statuettes found in the upper temple of Menkaura	757
18	List of all the statues and statuettes found in the lower temple of Menkaura	758
19	List of large statues from the lower temple of Menkaura	764
20	List of large statues from the upper temple of Menkaura	768

## LIST OF PLANS

PLAN		PAGE
1	The drainage channels of the upper temple of Khufu	769
2	The upper temple of Khufu	770
3	The five niches in the upper temple of Khufu	771
4	The upper temple of Khufu	772
5	The location of the temenos wall in the Giza necropolis	773
6	Subsidiary pyramids, Hetepheres I shaft and trial passages	774
7	Khufu's boat pits and Khafra's boat pits	775
8	Subsidiary pyramids, Hetepheres I shaft and causeway	776
9	Trial passages	777
10	Location of Khufu's lower temple	778
11	The upper temple of Khafra	779
12	The so-called workmens' barracks west of Khafra's pyramid	780
13	Lower temple of Khafra's causeway and sphinx temple	781
14	The sphinx temple	782
15	The upper temple of Menkaura	783
16	The subsidiary pyramids of Khufu	784
17	The temple of Menkaura's	

	queen GIII A	785
18	The temple of Menkaura's queen GIII B	786
19	The temple of the subsidiary pyramid of Menkaura GIII C	787
20	The workshop of Menkaura	788
21	The lower temple of Menkaura	789
22	The Sixth Dynasty phase of Menkaura's lower temple	790
23	The 1978 excavation and the location of the harbor	791
24	Reconstruction of the pyramid complex of Khufu	792
25	Reconstruction of the pyramid complex of Khafra	793
26	Reconstruction of the pyramid complex of Menkaura	794
27	The temple of Neferirkare	795
28	Egyptian names of the architectural elements of the temple of Neferirkare	796
29	Egyptian names of the architectural elements of Khufu's upper temple	797
30	Egyptian names of the architectural elements of Khafra's upper temple	798
31	Egyptian names of the architectural elements of Menkaura's upper temple	799
32	The programme of Sneferu wall reliefs	800

33	The programme of Sahure wall reliefs	801
34	The programme of Pepi II wall reliefs	802
35	The programme of Khufu wall reliefs	803
36	Location of the statues in the upper temple of Menkaura	804
37	Location of the statues in the lower temple of Menkaura	805
38	Location of the statuettes in the lower temple of Menkaura	806

## ABBREVIATIONS

The majority of the abbreviations used in this dissertation follow those employed in Helck and Otto (ed.) Lexikon der Ägyptologie.

Äg Ahb	Ägyptologische Abhandlungen Herausgegeben von Wolfgang Helck and Eberhard Otto
Ägfo	Ägyptologische Forschungen Corpus Antiquitatem Aegyptiacarum
AJA	American Journal of Archaeology
ARCEN	American Research Center in Egypt News Letter
Arch. Lacau	Photographs and papers of Pierre Lacau, in Paris, Centre d Documentaire d'Histoire des Religions
ASAE	Annales du Service des Antiquités de L'Égypte
BABA	Beiträge zur ägyptischen Bauforschung und Altertumskunde
BAe	Bibliotheca Aegyptiaca
Bd'E	Bibliothèque d'étude, Institut Français d'Archéologie Orientale
BIE	Bulletin de l'institut d'Égypte
BIfAO	Bulletin de l'institut français d'Archéologie Orientale du Cairo
BMFA	Bulletin of the Museum of Fine Arts in Boston
BSGE	Bulletin Société Géograph Égypte
CAA	Corpus Antiquitatem Aegyptiacarum

CAH	Cambridge Ancient History
CdE	Chronique d'Égypte
GM	Göttinger Miszellen
HESpok	A History of Egyptian Sculpture and Painting in the Old Kingdom
Int. J. Naut. Underwater Explor.	The International Journal of Nautical Archaeology and Underwater Exploration
JARCE	Journal of American Research Center in Egypt
JAOS	Journal of the American Oriental Society
JEA	Journal of Egyptian Archaeology
JNES	Journal of Near Eastern Studies
JEOL	Jaarbericht Vanhet vooraziatisch- Egyptisch Genootschap "EX Oriente Lux"
LX	Lexikon der Ägyptologie
MXS	Münchener Ägyptologische studien
MDAIK	Mitteilungen des Deutschen Archäologischen Instituts Kairo
MMAfC	Mémoires Mission Archéologique français au Caire
Mon. Piot	Foundation Eugène Piot (Académie des Inscriptions et Belles-Lettres) Monuments et Mémoires
NGWG	Nachrichten von der Gesellschaft der Wissenschaften zu Göttingen
OLA	Orientalia Lovaniesia Analecta
RAR	Revue archéologique

RC	La Revue du Caire
RdE	Revue d'égyptologie
Rec. Trav.	Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes
SAOC	Studies in Ancient Oriental Civilization: Chicago
SSEA	Society of the Studies of Egyptian Antiquities, (Journal).
Urk	Urkunden des ägyptischen Altertums
WZKM	Wiener Zeitschrift für die Kunde des Morgenlandes
ZAS	Zeitschrift für Ägyptische Sprache und Altertumskunde

## PREFACE

The funerary establishments of Khufu, Khafra and Menkaura represent the totality of the whole organization of the royal funerary establishments at Giza. I chose Giza necropolis as my principal site because the material there relates to three kings who are very close in time and because Giza is the most thoroughly excavated and discussed of Old Kingdom royal burial sites. In the past, most scholars believed that the organization of the royal funerary establishments was based on rituals or a cult performance of the ceremonies of embalming and the funeral.

On the contrary, I believe that my research has shown that the funerary establishment was organized to celebrate the rituals of divine kingship as embodied by a specific deceased ruler. The particular form that this celebration takes is the worship of a divine triad: the sun god Ra, the goddess Hathor and the falcon god Horus. The king is equated with both Ra and Horus, while Hathor represents both the wife of the living king and the mother of his successor; this triad is the one worshipped in the pyramid complex.

This interpretation is supported by the iconography, statuary, architecture, texts, titles and activities of the personnel of the funerary establishment. In order to maintain these establishments, a complex organization was developed, which I analyze in terms of several different areas. First, I examined the establishments in terms of the three pyramid complexes (Chapters 1-3), discussing the archaeological remains in considerable detail because the three complexes have never been comprehensively analyzed in terms of all the known remains.

This detailed analysis was especially important because a number of scholarly theories have often been based on poorly preserved material and their analyses often do not take all the available evidence into account. The results of this analysis included a new interpretation of several important points concerning, for example, subsidiary pyramids, the tomb of Hetepheres I, and the boats buried in pits around the pyramid. In addition careful review of the archaeology establishes that the major theories about the complexes have been based on often ambiguous remains.

In Chapter IV, I discuss the elements of the funerary establishments that are located outside the pyramid complex itself. Textual material shows that these outside elements included:

1. Funerary domains which supplied the cult and its personnel with food and supplies.
2. Pyramid cities, housing the personnel of the cult.
3. A symbolic palace associated with rituals performed by the deceased king.

I then proceed to show that some of these outside elements are documented by the archaeological remains, but others remain to be discovered. In addition, the archaeological evidence indicates the existence of a harbor and a workmen's camp serving the three pyramids.

In Chapter V, I review the opinions of previous scholars in order to demonstrate that the theory that the cult is based on an embalming and funerary ritual is not convincing.

I then adopt the approach suggested by Arnold for the 5th and 6th Dynasty pyramid complexes, and I apply it to Giza. This method involved:

1. A comparison of the plans and architectural form with earlier and later royal pyramid complexes.
2. An analysis of the programmes of :
  - A: Wall reliefs
  - B: Statuary
  - C: Objects in magazines
  - D: Architecture

I believe that from these analyses it can be shown that the funerary establishment was organized to celebrate the rituals of divine kingship as embodied by a specific deceased ruler.

These rituals were focused on a divine triad, Ra, Hathor, and Horus, that is essential to the myth of kingship in Egypt.

In addition, the pyramid complex does not represent a symbolic embalming area and funerary chapel; rather it is a combination of a temple for divine worship with a royal palace. All of the aspects that have already been discussed are further supported by an analysis of the titles of the personnel of the funerary establishments (Chapter VI). Analysis shows that the personnel were organized to function as both those of a cult temple and as a symbolic palace organization.

## INTRODUCTION

The royal cemetery of Giza is one of the best excavated, documented, and studied of the royal pyramid sites. Significant excavation is still required to add important new data. Previous studies do not include a comprehensive description and analysis of the funerary establishments of the three kings at Giza: Khufu, Khafra, and Menkaura. Therefore, that is the purpose of this study.

The goal of this research is to examine both the royal funerary and gods' cults in terms of the organization of priests, administrators, and support and service staffs. Also discussed will be the structures of the complex of the cult and other institutions such as the funerary domains, the pyramid cities, the palace, the workshops, the harbor, boat pits, and subsidiary pyramids. These installations were developed throughout the area of Giza, around the three pyramids, as a means of providing for the cults and the other needs of the funerary establishment.

The sources used in this study are the textual, architectural, and archaeological remains, including: wall reliefs, cult objects, inscriptions, papyri, and statuary from these structures and installations. Restudy is vital, because they themselves represent in material form major aspects of the concepts and organization of the funerary establishments.

The relatively abundant textual data supplies the names and titles of many individuals who were members of these establishments throughout the 4th Dynasty and later Old Kingdom. This written material provides basic information about organization and concepts, and illustrates important changes in these over time.

Furthermore, the comparative textual and archaeological data are relevant to other Old Kingdom royal funerary establishments. On the textual side, the Abousir Papyri are especially useful; the Papyri provide an excellent view of the operation of the 5th Dynasty royal funerary establishment over 200 years. These papyri have never before been extensively applied to this subject and may be applicable to the earlier ones.

On the archaeological side, the plans and fragments of wall reliefs of better-preserved temples and causeways of Dynasties 5 and 6 are important because they are fully identical and show significant resemblances to those of

Dynasty 4. This helps in understanding the function of the pyramid complex.

The methods that are used in this dissertation are:

1. A careful restudy (Chapters I-IV) of the architectural and archaeological remains at Giza, with special reference to temples, causeways, temenos walls, boat pits, subsidiary pyramids and cult pyramids, funerary domains, pyramid cities, workshops, palaces, stone rubble walls and the harbor. This is valid for the reconstruction of important cultic or organizational areas which have been badly damaged. These relate directly to the discussion of other types of source materials and the overall picture of the archaeology so as to provide a comprehensive material background to subsequent discussion.
2. Analytical discussion (Chapter V) of the functions of the archaeologically documented complexes that focus on the following issues:

- I. Methods of interpreting the function of royal funerary establishments in the Old Kingdom, especially the very different methods proposed by Ricke and Schott on the one hand, and Arnold on the other.

- II. General comparison of the architecture of earlier and later pyramid complexes.

III. The placement of the wall reliefs in Khufu's pyramid complex (only one of the three is well-documented) and their significance for interpretation.

IV. The programme of statuary from Menkaura's pyramid complex (only one of the three is well-documented) and its significance for interpretation.

V. The cult objects found (especially in Menkaura's temples) and their significance for interpretation.

3. A review (Chapter VI) of the cult and administrative personnel of the establishment supported by an extensive analytical appendix and tables, intended to show the of the personnel both priestly and administrative titles of the cult of the three kings at Giza and their governmental titles. The data derives from published and unpublished sources.

The result of this research (Conclusions) shows the first fully comprehensive overview, relating all types of evidence and also placing 4th Dynasty developments fully within the general developments of the Old Kingdom.

There is further support for discarding certain influential theories of interpretation, such as those of

Ricke, Schott, and others.<sup>1</sup> The theories of Arnold,<sup>2</sup> however, should be followed in regard to Giza and the 4th Dynasty. Each aspect of the funerary establishments such as architectural layout, relief decorations, statuary, cult and other objects and organization of personnel, follows a carefully laid out programme that evolves during Dynasty 4 and remains largely stable thereafter. The programme of each aspect, functionally and conceptually, correlates with that of each other, so that in their entirety, they present a unified and comprehensive plan on the part of the Egyptians as to what the royal funerary establishment was supposed to represent and do, and how these aims were to be achieved.

The personnel of the funerary establishment were organized in a consistent framework and this programme, originated in Dynasty 4, and served as the basis for the structure as it became more complex and elaborate in Dynasties 5 and 6.

Kemp wrote a statement that shows the essential requirements for undertaking such a study:

<sup>1</sup> H. Ricke, Bemerkungen zur Ägyptischen Baukunst des alten Reichs, II, BABA 5 (Cairo: 1950); S. Schott, Bemerkungen zum Ägyptischen pyramidenkult in H. Ricke, BABA 5 (Cairo: 1950).

<sup>2</sup> D. Arnold, "Rituale und Pyramidentempel," MDAIK 33 (1977), pp. 1-14.

In the short term, at least, the most important pious foundation in the Old and Middle Kingdoms were the pyramid temples for the royal statue cult. Whilst it is common to emphasize the mortuary character of the pyramids and to see them primarily as tombs with temples ancillary to them, the way in which they were in fact organized and referred to suggests that the emphasis should be reversed, and they be regarded first and foremost as temples for the royal statues with a royal tomb attached to each.<sup>3</sup>

The 4th Dynasty royal funerary establishment consisted primarily of:

I. The temple complex intended not so much for the funerary offerings of the deceased king but, as for the worship of a divine triad of whom the king is one member.

II. A palace, celebrating the idealized ruling qualities and achievement of the king and providing him with a setting in which to exercise these for eternity. The temple and the palace largely coincide with each other, except for a few significant details (e.g., the magazines).

---

<sup>3</sup> B. Kemp, "Old Kingdom, Middle Kingdom, and Second Intermediate Period c. 2686-1552 B.C.," in B. G. Trigger et al., Ancient Egypt: A Social History (Cambridge: 1983), p. 85.

CHAPTER I:  
THE PYRAMID COMPLEX OF KHUFU

The pyramid complex of Khufu, the first king to build his funerary monument at Giza, stands at the northern end of the Giza plateau. The pyramid itself is in good condition and, although it has lost all of its casing blocks, stands to almost its original height. The temples of the complex, however, have all but disappeared.

The name of Khufu's pyramid was 3ḥt Ḥwfw (Horizon of Khufu). The complex is identified as belonging to Khufu through quarry inscriptions found on the relieving blocks above the King's Chamber inside the pyramid and by later historical tradition.<sup>1</sup> It appears that the temples were destroyed during the First Intermediate Period.<sup>2</sup> There is no evidence that the cult of Khufu was maintained

<sup>1</sup> V. Maragioglio and C. A. Rinaldi, L'Architettura della Piramidi menfite, IV: La Grande Piramide di Cheope (Rapello: 1965), 52.

<sup>2</sup> This is discussed in more detail later, see below pp. 1 108-109.

during the Middle or New Kingdoms; however, the cult was revived in the 26th Dynasty.

The components of the complex discussed below are:

1. the upper temple;<sup>3</sup>
2. the temenos wall and surrounding court;
3. the subsidiary pyramids;
4. the boat pits;
5. other structures around the pyramid;
6. the ritual pyramid;
7. the causeway;
8. the lower temple.<sup>4</sup>

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<sup>3</sup> For this term, see Maragioglio and Rinaldi, L'Architettura, IV, 60ff.

<sup>4</sup> For this term, see ibid., p. 68.

### I.1: THE UPPER TEMPLE

Very little of the upper temple of Khufu remains today. The entire temple served as a quarry in the Middle Kingdom and later,<sup>1</sup> and a shaft that represents either a Saite tomb or a Roman well<sup>2</sup> was dug into the center of the western part, completely destroying even the plan of that area. The first excavations of the temple were carried out by Hassan.<sup>3</sup> Various reconstructions of the temple have been suggested, most notably by Lauer,<sup>4</sup> Ricke,<sup>5</sup> and Maragioglio and Rinaldi.<sup>6</sup>

<sup>1</sup> H. Goedicke, Re-used Blocks from the Pyramid of Amenemhet I at Lisht (New York: 1971), pp. 1-7.

<sup>2</sup> See S. Hassan, Excavations at Giza, X: The Great Pyramid of Khufu and its Mortuary Chapel (Cairo: 1960), p. 42.

<sup>3</sup> Ibid., fig. 10; see also H. Abu-Seif, "Dégagement de la face est de la pyramide de Chéops," ASAE 46 (1947), pp. 235ff.

<sup>4</sup> J. P. Lauer, "Le temple funéraire de Kheops à la grande pyramide de Guizeh," ASAE 46 (1947), pp. 111 ff.

<sup>5</sup> Ricke, Bemerkungen, II.

<sup>6</sup> Maragioglio and Rinaldi, L'Architettura, IV, 60ff. The most useful discussion of the architecture of this structure was done by Maragioglio and Rinaldi (L'Architettura, IV, 60ff., pls. 9, 10). Recognizing that the function of the building was still in question, they introduced the term "upper temple" in lieu of "mortuary temple" or "funerary temple." Their terminology will be followed in this study.

### I.1.1: GENERAL LAYOUT

Much of the temple can be fairly confidently reconstructed from the visible remains. The plan of the greater part can be recovered from traces of the foundations which were cut into the rock of the plateau. The long axis of the temple ran north-south, and measured 52.40 m. The distance between the eastern façade of the temple and the eastern face of the pyramid was 53.35 m.; the distance from the eastern façade to the temenos wall was 40.30 m.<sup>7</sup> The walls were of limestone, as evidenced by part of the north wall still in place and various blocks scattered around the area. The entrance to the temple, which stood at the end of the causeway, was located in its east wall. This is shown by a threshold of basalt which remains in situ. A socket hole stands on either side of this threshold; the doorway would have been 2 m. wide.<sup>8</sup> This entrance leads to a large court, oriented north-south and situated on the east-west axis of the pyramid, which takes up the majority of the temple area (46.0 m. x 26.7 m.).<sup>9</sup> About one quarter of the basalt pavement, made of irregularly shaped blocks

<sup>7</sup> Maragioglio and Rinaldi, L'Architettura, IV, 60.

<sup>8</sup> Hassan, Giza, X, 40.

<sup>9</sup> Maragioglio and Rinaldi, L'Architettura, IV, 62; Hassan, Giza, X, 40.

carefully fitted together, remains in place. This pavement overlies a foundation of white limestone. The foundation was laid to level the pavement, thus it varies a great deal in thickness.

From seats cut into the bedrock, one can see that around the perimeter of the court were 34 square pillars, five each on the north and south sides and twelve to the east and west; rectangular pillars were at each of the corners.<sup>10</sup> Two pillar fragments, one still in place in the southeast corner and the other found displaced in the western area, show that these pillars were made of granite.<sup>11</sup>

Some large blocks of polished granite were found on the south side of the basalt pavement. Petrie believed, on the basis of these, that the temple was lined with granite,<sup>12</sup> but Maragioglio and Rinaldi think that the granite blocks were pieces of a dado which ran around the external face of the courtyard wall.<sup>13</sup>

According to Hassan, there is a rectangular depression cut into the rock of the courtyard about 35 m. from the eastern face of the pyramid. This depression is

<sup>10</sup> Maragioglio and Rinaldi, L'Architettura, IV, 62; Rieke, Bemerkungen, II, fig. 10.

<sup>11</sup> Maragioglio and Rinaldi, L'Architettura, IV, 60.

<sup>12</sup> Petrie, The Pyramids and Temples of Gizeh (London: 1883), p. 135.

<sup>13</sup> Maragioglio and Rinaldi, L'Architettura, IV, 168, obs. 49.

1 m. deep and measures 8 m. x 6 m. There are two channels leading away from this depression, one from the north side and one from the south side. The northern channel is about 1 m. higher than the upper end of the depression and is cut into the rock and lined with local limestone. It runs north for about 1 m. and then turns northeast, runs under the wall of the courtyard, and eventually empties into a gully (plan: 1).<sup>14</sup>

Maragioglio and Rinaldi believe that this channel served to drain rain water from the courtyard.<sup>15</sup>

The second channel measures 70-90 cm. wide and 45-50 cm. deep and lies at the level of the depression. It runs south for about 5 m. and then disappears beneath the basalt pavement of the courtyard. Maragioglio and Rinaldi report that it was filled with limestone blocks before the pavement was laid.<sup>16</sup>

There are obvious ambiguities in the descriptions, especially about the relationship of the two channels to the depression, so no theory can be very certain at the moment. Hassan identifies the rectangular depression and the two channels as a basin system for the house of embalmment or the purification tent of Khufu.<sup>17</sup>

<sup>14</sup> S. Hassan, Excavations at Giza, IV: 1932-1933 (Cairo: 1943), 88-89; Hassan, Giza, X, 40, fig. 11.

<sup>15</sup> Maragioglio and Rinaldi, L'Architettura, IV, 64.

<sup>16</sup> Ibid.

<sup>17</sup> Hassan, Giza, X, 40; Hassan, Giza, IV, 88-89.

Maragioglio and Rinaldi disagree with this hypothesis, and conclude that the rectangular depression was a natural feature which served as an outlet for the southern channel before this channel was blocked up.<sup>18</sup> It is unlikely that the channels were connected with the ritual of embalment, as this would have taken place elsewhere, not in the upper temple.<sup>19</sup> Maragioglio and Rinaldi, however, do not account adequately for this drainage system, which, according to Hassan's plan, formed an integrated whole.<sup>20</sup> Their contention that the channels were for the drainage of rain water is untenable, since, as the rock of the plateau soaks up what little rain does fall, there is no need for this type of drain. Ricke suggests that the courtyard was used for sacrifices, in which case these channels might have been for the draining of the blood of the victims.<sup>21</sup> This conclusion might be possible. However, textual evidence, such as the Pyramid Texts and the Abousir Papyri, which discuss other ritual activities that were

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18 Maragioglio and Rinaldi, L'Architettura, IV, 64.

19 See below, pp. []. 461, 547.

20 Hassan, Giza, IV, fig. 46.

21 Ricke, Bemerkungen, II, 45.

involved in the daily funerary cult,<sup>22</sup> indicates that the drainage system could have served to drain various liquids involved in the daily activities that took place in the temple.

In the center of the western side of the court are two parallel north-south recesses. The easternmost was about 27 m. x 4 m., the westernmost 14 m. x 4 m. Each of these recesses contained a row of square pillars running north to south, eight in the first recess and four in the second.<sup>23</sup>

From here to the westernmost limits of the temple, the remains are more scanty and difficult to interpret. It was in this area that the Saite tomb or Roman well was dug, destroying most of the plan. However, several traces do remain.

On the axis of the pyramid is a rectangular rock-cut pit, 19.50 m. long x 9.25 m. wide x 0.60 m. deep.<sup>24</sup> This pit is irregular, and exhibits the following features: two blocks of local limestone were inserted into the southwest corner; the rock is not completely cut away in

<sup>22</sup> S. Schott, Pyramidenkult, p. 197. It is clear, as will be shown in Chapter 5, that evidence from Saqqara has a bearing on the interpretation of activities at Giza; see also Posener-Kriéger, Les Archives du temple funéraire de Neferirkare-Kakai: Les Papyrus d'Abousir, II, 504-504.

<sup>23</sup> Maragioglio and Rinaldi, L'Architettura, IV, 62.

<sup>24</sup> Ibid., p. 68.

the southeast corner; there is a rock spur, 5.60 m. x 1.20 m., projecting from the center of the east side; and in the center of the aforementioned spur is a horizontal flat area that slopes toward the center of the pit. North and south of the pit are traces of a wall whose western face was in line with the temenos wall of the pyramid.<sup>25</sup> At the intersection of the east-west axis of the temple and the western wall is the substructure of a passage with a door.<sup>26</sup>

In the northwest corner of the temple, on the inside of the limestone wall and level with the temenos wall, is a granite block that formed the threshold of a doorway. To the east of this threshold are some fragments of limestone blocks cemented onto the pavement.<sup>27</sup>

Various scholars have attempted to reconstruct the western area of the temple. Lauer sees the two western recesses as indications of a plan corresponding to the plans of the upper temples of Khafra, Menkaura and Userkaf. According to his theory, the shallow pit represents the foundations of an oblong hall oriented north-south, with an entrance in the center of the

<sup>25</sup> Ibid., pp. 62-64.

<sup>26</sup> Lauer, "Temple funéraire," p. 248.

<sup>27</sup> Maragioglio and Rinaldi, L'Architettura, IV, 164, obs. 47.

eastern wall.<sup>28</sup> He reconstructs two false doors in the west wall, citing as evidence for this reconstruction the existence of similar features in the chapels associated with the queens' pyramids (GI-b and c), and chapels associated with Old Kingdom mastabas, such as the tombs of Ti, Akhethotep, and Kamheset at Saqqara.<sup>29</sup> In these examples, the two false doors are thought to be for the tomb owner and his or her spouse; since this could not be the case in Khufu's temple, Lauer suggests that the western wall might have been panelled, in which case the two doors would have represented the entrances to the North and South Palaces. Therefore, according to Lauer, the west wall functions as a palace façade, enclosing one false door for Khufu as king of Upper Egypt and the other for Khufu as king of Lower Egypt. This hall would have been the temple sanctuary, and offerings would have been placed in front of the false doors. He also thinks it is possible that statues of the king were placed along the wall, perhaps in small niches.<sup>30</sup>

<sup>28</sup> J. P. Lauer, "Note complémentaire sur le temple funéraire de Khéops," *ASAE* 49 (1949), pp. 118-20.

<sup>29</sup> *Ibid.*, p. 118. For the tomb of Akhethotep, see C. Boreux, *The Chapel of Ankhet-hotep* (Paris: 1932), pp. 225-227; for the tomb of Kamheset, see G. W. Murray, *Saqqara Mastabas*, I (London: 1905), pl. XX, and G. A. Reisner, *The Development of the Egyptian Tomb down to the Accession of Cheops* (Cambridge, Mass.: 1935), fig. 169, pp. 275-276.

<sup>30</sup> Lauer, "Note complémentaire," p. 118.

Lauer suggests that the granite threshold in the northwest corner of the temple was part of a doorway to a corridor that ran along inside of the northern side of the temple.<sup>31</sup> He reconstructs a similar corridor on the southern side, with a north-south stairway at its western end, giving access to a terrace (plan: 2).<sup>32</sup> He places storerooms in two thick masses of masonry at the northwest and southwest corners of the court; from the remains on the northern side of the temple, he concludes that the façade of the temple was of Tureh limestone.<sup>33</sup>

Smith agrees that a long north-south hall might have occupied the west, or forepart of the temple. However, he believes that in this case there was only one false door in the western wall. His hypothesis is based on the false doors found in private tombs and royal temples of the 5th Dynasty.<sup>34</sup> He does not believe that a parallel can be drawn between the king's chapel and the chapels of his queens because the two false doors in the queens' chapels are assigned as one for the queen and one for the king; he does not discuss Lauer's alternative suggestion as to the functions of these doors.<sup>35</sup> Instead, on the

31 Lauer, "Temple funéraire," p. 252.

32 Ibid.

33 Ibid., p. 252, fig. 21.

34 W. S. Smith, The Art and Architecture of Ancient Egypt (Harmondsworth: 1958), p. 56.

35 Ibid.

basis of parallels with Khafra's upper temple, Smith reconstructs statue niches in this room. Then, as is seen in the upper temples of Khafra and Menkaura, there would be a corridor leading from the northwest of the courtyard to the area between the pyramid and the temple.<sup>36</sup>

Lauer argues that the chamber is too long to have contained only one false door,<sup>37</sup> but Maragioglio and Rinaldi point out that the long hall in the upper temple of Khafra, which is longer than this hall, contained only one false door.<sup>38</sup>

Ricke also agrees with Lauer in the reconstruction of a long north-south hall in the western area, but disagrees with both his and Smith's hypotheses concerning the placement of a false door or doors in this hall, since it would not have been in contact with the pyramid itself.<sup>39</sup> He proposes, instead, five niches in the western wall (plan: 3). Each of these niches would have contained a statue of the king, or another object. He bases the number of niches on the fact that there were

<sup>36</sup> *Ibid.*, pp. 55-56, fig. 23.

<sup>37</sup> Lauer, "Temple funéraire," p. 245.

<sup>38</sup> Maragioglio and Rinaldi, *L'Architettura*, IV, 164, obs. 47, plate 10, fig. 3.

<sup>39</sup> *Ibid.*, p.36; Ricke, *Bemerkungen*, II, 44.

attested, in tombs at Giza, four priestly titles associated with the names of the statues of Khufu.<sup>40</sup>

Smith also suggests that instead of a long hall, there might have been a small central chamber in the center of the western area, as is seen in the upper temple of Khafra.<sup>41</sup> Another possibility, suggested by Lauer, is a small central chamber with the false door and two lateral serdabs containing statues of the king.<sup>42</sup>

Stadelmann reconstructs the upper temple of Khufu by comparing it with the upper temple of Userkaf. In his theory, the sanctuary of the temple would be in the center of the western part of the temple, and would contain a false door flanked by two niches in its western wall. Passages to the north and south of the sanctuary would lead to two square rooms, one to the north and one to the south.<sup>43</sup> He also adds L-shaped rooms in the masonry north and south of the recessed portico (plan: 4).<sup>44</sup>

<sup>40</sup> See also H. Junker, Giza, VI: Grabungen auf dem Friedhof des alten Reiches (Vienna and Leipzig: 1943), 8ff.

<sup>41</sup> Smith, Art and Architecture, p. 100.

<sup>42</sup> Lauer, "Note complémentaire," pp. 120ff.

<sup>43</sup> R. Stadelmann, Die ägyptischen Pyramiden vom Ziegelbau zum Weltwunder (Darmstadt: 1985), p. 122, fig. 32; cf. Maragioglio and Rinaldi, L'Architettura, IV, plate 10, fig. 6.

<sup>44</sup> Stadelmann, Pyramiden, p. 122.

Maragioglio and Rinaldi point out that there is no real evidence for a long hall to the west of the two recesses, and suggest instead that the shallow pit may simply have been excavated to substitute better quality rocks for the original stone, or, if the rock was already missing, regularized to allow the fitting of blocks. In this case, there may have been no forepart of the temple on the west at all, but simply an uninterrupted wall (as in the complex of Khafra). They interpret the substructure as a possible indication of a niche whose end wall was formed by a false door, probably of granite, less than 1 m. wide and in line with the east face of the enclosure wall. The slanting place in the rock may have been cut to facilitate the erection of the false door; similar slanting areas are seen in the pillar sockets of the courtyard. The rock spur in the east side of the shallow pit could be explained by the necessity of leaving the rock in situ to make the sloping plane. The foundation bed for the stelai was left among the blocks which filled in the shallow pit, which was then covered by the fine limestone paving of the surrounding courtyard.<sup>45</sup>

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<sup>45</sup> Maragioglio and Rinaldi, L'Architettura, IV, 166, obs. 47.

Alternatively, Ricke suggests that, if a sanctuary was not placed in the western part of the temple proper, an altar and two stelai might have been set up between the west wall of the temple and the east face of the pyramid, as was done at Meidum and the Bent Pyramid at Dahshur. He also reconstructs small walls on either side of the stelai, built to protect the area from sand.<sup>46</sup>

Lauer objects to Ricke's placement of a cult area between the temple and the pyramid because there are no foundation holes for stelai in the rock, and there are no remains of the lateral walls. Stadelmann also disagrees with Ricke's reconstruction, stating that such cult places are only found at pyramids which were not completed as burial places for a king (Meidum, Dahshur, Bent Pyramid).<sup>47</sup>

Maragioglio and Rinaldi, however, agree with Ricke. They do not see the fact that there are no traces of such a cult site as a problem, because the foundations could have been laid on the rock in such a way that they left no traces when removed. They elaborate on Ricke's idea by reconstructing a raised platform on which an altar and two stelai were placed in the area between the pyramid and the western wall of the temple. This platform, which

<sup>46</sup> Ricke, Bemerkungen, II, 44ff, fig. 13.

<sup>47</sup> Stadelmann, Pyramiden, p. 122.

would have functioned as a cult center, would have been about 1.5 m. above the surrounding court and reached by a small staircase.<sup>48</sup> Such a platform would have left no traces if it were built of limestone laid directly onto the pavement.<sup>49</sup>

Goyon also believes that there was an offering place between the upper temple and the pyramid. However, he places a false door, in front of which stood an altar, on Maragioglio and Rinaldi's hypothetical platform.<sup>50</sup>

It is difficult to determine which of these reconstructions of Khufu's upper temple is the most likely, because there is no other Old Kingdom temple that corresponds to it exactly. From the time of Djoser to the end of the Old Kingdom, and especially in the 4th Dynasty, royal funerary architecture was in a constant state of flux. The plan adopted by each king seems to have been based on contemporary developments in the ongoing struggle between the older cult of Osiris and the rising cult of the sun god.<sup>51</sup> Thus, since religious

<sup>48</sup> Maragioglio and Rinaldi, L'Architettura, IV, 166-168, obs. 47.

<sup>49</sup> Ibid., p. 168.

<sup>50</sup> G. Goyon, Le Secret des Bâisseurs des grandes Pyramides Khéops (Paris: 1977), pp. 239-40, fig. 93.

<sup>51</sup> Ricke, Bemerkungen, II, 68-75.

beliefs were changing rapidly, the plans of the funerary complexes of the kings were very variable.<sup>52</sup>

Several scholars, however, have attempted to find features that seem to have been common to most of the upper temples of the Old Kingdom. Edwards lists the features common to upper temples from the time of Khafra on as follows: entrance hall; open court; statue niches; magazines; and sanctuary.<sup>53</sup> The direct physical evidence for Khufu's upper temple includes only the open court from this list, but it seems reasonable to reconstruct magazines in solid blocks of masonry in the western area of the temple. For the rest of the reconstruction of the temple, it is important to look at the earlier upper temples which are closest to it chronologically, as these probably would be the closest to it architecturally.

The three pyramid complexes directly preceding Khufu's are the Bent and North Pyramid complexes at Dahshur, which belonged to Sneferu (Khufu's father), and the pyramid complex at Meidum, probably begun by Huni and finished by Sneferu. The upper temple at the Bent Pyramid at Dahshur lies against the east face of Sneferu's pyramid. It seems originally to have consisted

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<sup>52</sup> G. A. Reisner, Mycerinus: The Temples of the Third Pyramid at Giza (Cambridge, Mass.: 1931), p. 35.

<sup>53</sup> I.E.S. Edwards, The Pyramids of Egypt (Harmondsworth: 1961), p. 148.

of an open offering place containing an altar and two limestone stelai. Eventually, the offering place was enclosed by brick walls, and an antechamber, entered through a door in the south-east corner, was added to the east.<sup>54</sup>

Recent excavations at the North Pyramid at Dahshur have revealed the existence of an upper temple comparable in size to the upper temple of Khufu. There is no evidence here for a stela at the base of the pyramid. Instead there is a false door in the western part of the temple; this false door is surrounded by brick magazines.<sup>55</sup>

The upper temple at Meidum is very small (about 10 m. square), and also lies against the east face of the pyramid. It is entered through a door in the southern corner of the east wall, and consists of a narrow north-south passage with a door in the northern end of its western wall, a rectangular north-south room with a doorway in the center of its western wall, and an open court whose west wall is formed by the pyramid. This

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<sup>54</sup> *Ibid.*, p. 104.

<sup>55</sup> Stadelmann, *Pyramiden*, p. 104, fig. 28; R. Stadelmann, "Snofru und die Pyramiden von Meidum und Dahschur," *MDAIK* 36 (1980), pp. 437-439; see also Stadelmann, "Pyramiden," *LÄ* 32, IV: 8 (1982), pp. 1222ff.

court contains a low limestone altar flanked by two limestone stelae.<sup>56</sup>

The Meidum complex and the Dahshur Bent Pyramid provide good evidence for an offering chapel, such as the one that has been reconstructed between the west wall of the upper temple and the east face of the pyramid, in the pyramid complex of Khufu. But Stadelmann's observations about the North Pyramid of Dahshur would make it equally possible that Khufu did not have such an offering place. However, the remains of the North Pyramid are much more poorly preserved than at Meidum and the Bent Pyramid. Further support for the proposed reconstruction is found in similar offering chapels in the complexes of Menkaura and Userkaf. In Menkaura's complex, a small offering shrine was built against the east face of the pyramid, west of the western wall of the upper temple. A rectangular depression in the floor of the main chamber of this building probably marks the place of a false door and an offering table.<sup>57</sup> This shrine, however, is considered to be a later addition, probably dating from the 6th Dynasty.<sup>58</sup> In Userkaf's anomalously oriented pyramid complex, the upper temple is located on the south

<sup>56</sup> Stadelmann, Pyramiden, pp. 82-87.

<sup>57</sup> A. Fakhry, The Pyramids (Chicago and London: 1969), pp. 144-145.

<sup>58</sup> Reisner, Mycerinus, p. 29.

side of the pyramid, but the offering chapel is located on the east.<sup>59</sup>

Having dealt with the question of an offering place against the pyramid, we turn to the reconstruction of the western part of Khufu's temple; for evidence of this, it is necessary also to look at later upper temples. A comparison of Khufu's temple with that of his son Khafra shows some similarities but also some differences. Common features are the colonnaded court, the pillared recesses of Khufu, which correspond to the eastern tripartite pillared hall of Khafra, and the north-western passage and door leading to the pyramid court.<sup>60</sup> However, in most other respects, the two temples appear to have been entirely dissimilar.<sup>61</sup>

One way that Khafra's temple can perhaps contribute to the reconstruction of Khufu's temple is in the possible long hall in the western area. Khafra's temple

<sup>59</sup> C. M. Firth, "Excavations of the Department of Antiquities at Saqqara October 1928 - March 1929," ASAE 29 (1929) pp. 64-70. The placement of the upper temple of Ueserkaf on the southern side of the pyramid is probably due to the pre-existence of the large dry moat which ran around the complex of Djoser and made it difficult to build on the east side of Ueserkaf's pyramid (N. Swelin, "The Great Dry Moat Surrounding the Step Pyramid Complex of Horus Netjerykhet," abstract from the Fourth International Congress of Egyptology, (July, 1985).

<sup>60</sup> Hassan, Giza, X, 45. We cannot compare Khufu's temple with that of his direct successor Djedefra because Djedefra's temple has been completely destroyed.

<sup>61</sup> Hassan, Giza, X, 46.

does have such a hall, which is the westernmost element of the temple. This hall is considered to have been the sanctuary.<sup>62</sup> The main feature of this hall was a false door in the west wall. The temple also contained five niches, presumably for statues, each communicating directly with the pillared court.<sup>63</sup> Similar niches, but six in number, are seen in the lower temple at Sneferu's Bent Pyramid complex at Dahshur,<sup>64</sup> and then regularly, in the number of five, in upper temples for the rest of the Old Kingdom.<sup>65</sup> It would thus seem reasonable to look for a place for such niches in Khufu's temple. It is certain that Khufu had four names, as listed by Von Beckerath,<sup>66</sup> and seen through the titles of the Old Kingdom, where we find a priest for each name of the king.<sup>67</sup> This supports the theory that there were four niches, in front of which cult activity for each name would have been carried out, in the upper temple of Khufu; the fifth niche would be for the status of Hathor. Rieke has briefly noted this possibility, which is proved by the examples collected in the appendix.

62 Edwards, The Pyramids of Egypt, p. 149.

63 Ibid.

64 Hassan, Giza, X, 46.

65 Edwards, The Pyramids of Egypt, p. 148.

66 J. von Beckerath, Handbuch der ägyptischen Königsnamen (Munich and Berlin: 1984), pp. 52, 178.

67 See appendix.

There are also significant similarities between the upper temple of Khufu and those of Menkaura and Userkaf. Menkaura's temple consists of an entrance hall leading to a large central court, in the center of whose western wall are three consecutive north-south pillared recesses corresponding to the two recesses in Khufu's temple, and a pillared hall leading to five small rooms. However, the sanctuary is different from that of Khufu: it is a long narrow east-west chamber.<sup>68</sup> It is unlikely that the western part of Menkaura's temple can be used to reconstruct the western part of Khufu's temple: the five small rooms in Menkaura's temple are magazines used for storing precious objects rather than niches for statues.

Userkaf's upper temple, as mentioned above, lies on the south side of his pyramid. The temple was entered from the south, with two doors leading to the pyramid courtyard. From the entrance, one enters a colonnaded courtyard limited on the southern side by a wall. Behind this wall is a pillared hall consisting of two recesses containing six square pillars. To the east and west are two small chambers, and in the southern wall of the hall is a doorway leading to what was probably the sanctuary.<sup>69</sup> On the south side of the temple court a

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<sup>68</sup> Fakhry, The Pyramids, p. 141.

<sup>69</sup> Hassan, Giza, X, 47.

wall closed off the pillared hall, which replaced the open porch of the Khufu and Menkaura temples.<sup>70</sup>

Since there are no statue bases in either of the pillared recesses west of the courtyard, it is reasonable to hypothesize the existence of a long hall in the forepart of the Khufu temple. This area could have contained the five niches, as Ricke suggests, and as is seen in the upper temple of Khafra.<sup>71</sup>

In summary, the physical evidence found in Khufu's temple combined with parallels to other Old Kingdom temples suggests the following reconstruction of the western part of Khufu's temple: A long hall, running north-south and containing five statue niches, was reached through a door in the westernmost pillared recess of the courtyard. There were magazines in the masonry to the north and south of this hall. An east-west passage along the inside of the north wall of the temple led from the colonnaded court to the courtyard east of the pyramid, in which stood an altar flanked by two stelai on a platform against the east face of the pyramid.

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<sup>70</sup> W. S. Smith, The Art and Architecture of Ancient Egypt, revised by W. K. Simpson (Harmondsworth: 1981), p. 125.

<sup>71</sup> Hassan, Giza, X, 45.

### I.1.2: DECORATION

In their excavations in the pyramid complex of Amenemhet I at Lisht from 1906-1934,<sup>72</sup> the Metropolitan Museum of Art found a number of interesting relief blocks that seem to have been taken from various Old Kingdom monuments. A number of these blocks bear names of Khufu.<sup>73</sup> Goedicke, who studied and catalogued these blocks, states that they must have been brought to Lisht from elsewhere, as there is no archaeological, historical, or textual evidence that Khufu built any monuments at Lisht. Since all of the known monuments built by Khufu are at Giza, it is reasonable to assume that these blocks were brought from there.

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<sup>72</sup> Goedicke, Re-used Blocks, p. 1.

<sup>73</sup> W. Hayes, The Scepter of Egypt, I (New York: 1953), 63.

## I.2: THE TEMENOS WALL AND SURROUNDING COURT

The great pyramid of Khufu was surrounded on all four sides by a temenos wall, remains of which are visible today primarily on the eastern and northern sides (plan: 5), but also on the western and southern sides of the pyramid.<sup>1</sup> This wall is about 10.20 m. from the base of the pyramid to the east and north, and 10.0 m. from the pyramid to the south and west.<sup>2</sup> Between this wall and the base of the pyramid, we can still see the limestone pavement of the pyramid court.<sup>3</sup> This pavement is of Tureh, rather than local, limestone; the slabs are irregular and can be seen to the east, west, and north of the pyramid. Modern construction to the south has covered any traces of the court here.<sup>4</sup>

The foundations of the wall, which are visible on the east side, are about 3.15 m. to 3.60 m. deep.<sup>5</sup> The wall itself was built of rock, and Maragioglio and Rinaldi hypothesize that its top was rounded.<sup>6</sup> It is thought that the foundations were wider than the base,

<sup>1</sup> Fakhry, The Pyramids, p. 105.

<sup>2</sup> Maragioglio and Rinaldi, L'Architettura, IV, 66.

<sup>3</sup> A. Badawy, A History of Egyptian Architecture, I (Giza: 1954), 138.

<sup>4</sup> Maragioglio and Rinaldi, L'Architettura, IV, 66.

<sup>5</sup> Ibid., p. 64.

<sup>6</sup> Ibid., p. 66.

and had a width of about 2.5 m.<sup>7</sup> Lauer suggests that the original height above ground level was 3.15 m.<sup>8</sup>

In the northwest and southwest corners of the court are channels, cut into the rock and lined with limestone blocks, which run underneath the temenos wall. These are thought to be drainage channels for the purpose of draining rainwater from the court.<sup>9</sup> On the contrary, it is more likely that these channels were connected with the religious activities or ritual sacrifices carried out in the court.<sup>10</sup>

The court surrounding the pyramid seems to have been isolated from the outside, because to reach it, it was necessary to pass through the upper temple. This indirect route may indicate that the court was accessible only to officials and people who were responsible for carrying out the king's cult in the pyramid complex. Thus it would seem that the court was connected with the cult of the king, and that the wall was built to isolate the court from the outside.

Maragioglio and Rinaldi mention holes, 40 cm. to 60 cm. in diameter, which were cut in the rock and some of which were filled with mortar; these are thought to be

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<sup>7</sup> *Ibid.*

<sup>8</sup> Lauer, "Temple funéraire," p. 246.

<sup>9</sup> *Ibid.*

<sup>10</sup> Schott, *Pyramidenkult*, II, 158.

connected somehow with the building of the pyramid.<sup>11</sup> Goyon also noted these holes on the east side of the pyramid, and suggested that they had to do with the laying-out of the pyramid.<sup>12</sup> Lehner also found evidence for holes around the pyramid of Khafra, and believes that they are connected with the leveling of the pyramid base.<sup>13</sup>

In Junker's plan of the area, a second wall can be seen on the north, south, and west. The distance between the inner and outer walls is about 23.60 m. on the north and west sides and 18.75 m. on the south; no traces are visible on the east.<sup>14</sup> This outer temenos wall was made of rubble and cased with mud plaster, and possibly was whitewashed.<sup>15</sup> The southern side of this wall is about 237 m. long, and still stands from 0.20 m. to 1.66 m. high.<sup>16</sup> On the south, it has a thickness of 2.50 m.; on the west, the thickness varies from 2.70 m. to 3.50 m.<sup>17</sup>

<sup>11</sup> Maragioglio and Rinaldi, L'Architettura IV, 66.

<sup>12</sup> G. Goyon, "Quelques observations effectuées autour de la pyramide de Khéops," BIFAO 67 (1969), p. 73, note 3.

<sup>13</sup> M. Lehner, "Some observations on the layout of the Khufu and Khafre Pyramids," JARCE 20 (1983), pp. 7-25; M. Lehner, "A Contextual approach to the Giza pyramids," Archiv für Orientforschung 31 (1984), p. 10.

<sup>14</sup> Maragioglio and Rinaldi, L'Architettura, IV, 66; M. Z. Nour et al., The Cheops Boat, I (Cairo: 1960), 2; Junker, Giza, X, 8, fig. 5.

<sup>15</sup> Maragioglio and Rinaldi, L'Architettura, IV, 66.

<sup>16</sup> Ibid.

<sup>17</sup> Junker, Giza, X, 8, fig. 5.

Chips and unshaped blocks of red granite were found in the south outer temenos wall, which is not exactly parallel to the pyramid base.<sup>18</sup> The western wall still stands to 2 m. in height; only traces of the northern wall remain.<sup>19</sup>

Due to the many joints which can be seen along the face of the outer wall, Nour believes that it was built by many sets of workers at the same time.<sup>20</sup> Maragioglio and Rinaldi believe that this wall was built in the time of Khafra or Djedefra, or possibly during the building of Junker's Cemetery GIS (south of the Great Pyramid), since the southern wall passes above the southern boat pits, one of which was certainly built at least partly in the reign of Djedefra.<sup>21</sup> This makes it likely that the wall was built after the time of Djedefra, since he would not have wished to cover these pits. It is probable that the wall was built during the construction of Cemetery GIS, in order to isolate the pyramid complex from the surrounding tombs.<sup>22</sup>

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<sup>18</sup> Maragioglio and Rinaldi, L'Architettura, IV, 66.

<sup>19</sup> Ibid.

<sup>20</sup> Nour et al., Cheops Boat, I, 3, pls. 4B and 5A.

<sup>21</sup> Maragioglio and Rinaldi, L'Architettura, IV, 170, obs. 51.

<sup>22</sup> M. Lehner, "The Development of the Giza Necropolis: The Khufu project," MDAIK 41 (1986), fig. 3 C, 15, 16; Lehner, "Contextual Approach," p. 36.

Thus the function of the inner wall was to isolate the pyramid court from the rest of the complex, and the purpose of the outer wall was to separate the complex of Khufu from the surrounding tombs.<sup>23</sup> The inner wall may have reached a height of 8 m., and was possibly decorated with reliefs, as is seen in temenos walls of the Middle Kingdom.<sup>24</sup> This would suggest that ritual activity took place inside the inner court, especially on the east side between the upper temple and the base of the pyramid, which may have contained an altar and two stelai.

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<sup>23</sup> Maragioglio and Rinaldi, L'Architettura, IV, 170, obs. 51.

<sup>24</sup> For example, the interior of the enclosure of the pyramid of Sesostris I at Lisht is covered with scenes of a palace façade and a priest carrying offering vessels (L. Grinsell, Egyptian Pyramids, (Gloucester; 1947), pp. 29-30, fig. 25; J.E. Gauthier and G. Jéquier, Fouilles de Licht, (Cairo: 1902) and A. M. Lythgoe, "Excavations at the South Pyramid of Lisht in 1914," Ancient Egypt (1915), pp. 145-153.

### I.3: THE SUBSIDIARY PYRAMIDS

Three small pyramids, generally attributed to queens of Khufu, lie in a north-south row just outside the east enclosure wall of the Great Pyramid and to the south of the causeway (plan: 5).<sup>1</sup> Archaeological evidence for a small chapel exists on the eastern side of each pyramid; two boat pits were also found, one each on the southern sides of the northernmost and the central pyramids.<sup>2</sup>

Vyse reopened the three pyramids in 1837;<sup>3</sup> they are mentioned by Lepsius,<sup>4</sup> Petrie,<sup>5</sup> and Reisner,<sup>6</sup> and discussed in detail by Maragioglio and Rinaldi.<sup>7</sup>

Since there is no enclosure wall isolating these pyramids, they seem to be a part of the Eastern Field containing the mastabas of Khufu's close relatives. They are separated from the inner pyramid complex of Khufu by its eastern wall, through which there is no direct access.

<sup>1</sup> Fakhry, The Pyramids, p. 112; Edwards, The Pyramids of Egypt, p. 100; Maragioglio and Rinaldi, L'Architettura, IV, 7.

<sup>2</sup> Badawy, Egyptian Architecture, I, 138; Fakhry, The Pyramids, pp. 112-115.

<sup>3</sup> H. Vyse, Operations carried on at the Pyramids of Gizeh, II (London: 1841), 63ff., pls. facing pp. 63, 66, and 69.

<sup>4</sup> R. Lepsius, Denkmäler aus Ägypten und Äthiopien, I (Leipzig: 1897), 29.

<sup>5</sup> Petrie, Pyramids and Temples, pp. 12 ff.

<sup>6</sup> Reisner, Giza, I, 3, 16-17, 70-72, 134-136.

<sup>7</sup> Maragioglio and Rinaldi, L'Architettura, IV, 78ff. and obs. 57ff.

There is also no door in the south wall of the causeway; there is instead evidence that a tunnel was cut under the causeway to connect the areas north and south of it, thus providing more convenient access to the small pyramids.<sup>8</sup>

We will now examine each pyramid separately, using Reisner's designation of the pyramids as GI-a for the northernmost pyramid, GI-b for the middle pyramid, and GI-c for the southernmost pyramid.<sup>9</sup>

### I.3.1: GI-a

This pyramid lies 61 m. from the base of Khufu's pyramid (plan: 6).<sup>10</sup> Its base measures 49.50 m., and it would originally have stood 30.25 m. high.<sup>11</sup> It has been stripped of most of its casing<sup>12</sup> and has lost almost two-

<sup>8</sup> Ibid., p. 174, obs. 57.

<sup>9</sup> Reisner, Giza, I, 129-31; B. Porter and R. L. Moss, Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs and Paintings, III<sup>1</sup> (Oxford: 1974), 16-19. Other designations given to the pyramids are nos. 7, 8, and 9, (J. E. Perring, The Pyramids of Gizeh, II (London: 1840), pls. i and ii), and V, VI, and VII (Lepsius, Denkmaeler, p. 29).

<sup>10</sup> Maragioglio and Rinaldi, L'Architettura, IV, 76. It has been suggested (Reisner, Giza, I, 3) that GI-a was originally planned east of its present location, and then moved when it was found that this placement would interfere with the shaft containing the burial of Hetepheres. For more discussion see below, pp. 106-111.

<sup>11</sup> Reisner, Giza, I, 131.

<sup>12</sup> One casing block remains in situ on the first course of the pyramid's east side. (ibid., p. 80).

thirds of its height.<sup>13</sup> The entrance is just east of the center of the north face, slightly above ground level.<sup>14</sup> From the entrance, a descending passage leads to an antechamber, which in turn leads through a horizontal passage to the burial chamber. All the elements of the substructure were cut into the rock; the burial chamber was lined with limestone.<sup>15</sup> Reisner believed that there was originally a sarcophagus made of limestone or granite in this chamber; although this is likely, there is no concrete evidence for his belief.<sup>16</sup>

A shallow recess, within which several fragments of basalt were found, was carved out of the west wall of the burial chamber.<sup>17</sup> Based on these fragments, Vyse suggests that a basalt sarcophagus stood in this recess, and that the stone fragments are the remains of this sarcophagus.<sup>18</sup> Maragioglio and Rinaldi do not agree with this hypothesis;

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<sup>13</sup> Ibid.

<sup>14</sup> Fakhry, The Pyramids, fig. 65.

<sup>15</sup> Reisner, Giza, I, 129.; idem, (Giza, I, 135) dates the construction of this substructure to years 15-17 of Khufu's reign. See also Fakhry, The Pyramids, p. 112; Badawy, Egyptian Architecture, I, 138.

<sup>16</sup> Reisner, Giza, I, 135.

<sup>17</sup> Vyse, Operations, II, 68. A niche was also found in the burial chamber of GI-c. Maragioglio and Rinaldi suggest that the niche in GI-c served some ritual purpose (Maragioglio and Rinaldi L'Architettura, IV, 94, 182, obs. 74); they do not, however, make a similar suggestion for the niche in GI-a, so we must assume that the two are dissimilar. No dimensions are given for the niche in GI-a, so it is very difficult to make any guesses as to its function.

<sup>18</sup> Vyse, operations, II, 68ff.

they suggest instead that the basalt fragments are from the pavement of the upper temple of Khufu.<sup>19</sup> This latter explanation is reasonable, since similar remains are scattered all over the Eastern Field, and are evidently fragments of this pavement.

The area just east of pyramid GI-a is cleared to the level of the bedrock, in which cuttings can be seen. These cuttings form the outline of a rectangle, 16.65 m. from north to south and 5.70 m. from east to west. This rectangle has been interpreted as the reflection of a platform on which a cult chapel would have been built. Small depressions (about 2.10 m. wide) have been noted at the extreme north and south ends of the rectangle; it is thought that these represent places where the foundations of the side walls would have been located.<sup>20</sup>

A boat pit was found cut into the bedrock on the southern side of the pyramid.<sup>21</sup> The walls of this pit are vertical and there is a ledge near the upper edge on which covering slabs would have been laid. Near the stern and prow ends of the pit, the distance of the lateral ledges from the surface of the ground diminishes abruptly.<sup>22</sup>

<sup>19</sup> Maragioglio and Rinaldi, L'Architettura, IV, 178, obs. 63.

<sup>20</sup> Ibid., p. 82.

<sup>21</sup> Ibid., p. 82; Badawy, Egyptian Architecture, I, 138; Edwards, The Pyramids of Egypt, p. 100; Fakhry, The Pyramids, p. 114.

<sup>22</sup> Maragioglio and Rinaldi, L'Architettura, IV, 82-84.

I.3.2: GI-b

This pyramid is about 10 m. south of GI-a and lies on the same north-south axis (plan: 6). Its base is 49.0 m. square and its original height would have been 30 m.<sup>23</sup> It is also in poor condition, having lost most of its casing and almost half of its height. Its entrance is located in the center of its north face, just above ground level.<sup>24</sup> The entrance leads from a descending passage into an anteroom, from which a horizontal passage leads into the burial chamber. All of the subterranean passages were cut from bedrock; the burial chamber is lined with limestone.<sup>25</sup>

It is certain that a cult chapel stood against the east face of GI-b. From the traces left, Maragioglio and Rinaldi reconstruct a platform, 15.60 m. from north to south, along this face. A chapel, 14.50 m. from north to south and consisting of one rectangular north-south room with two niches in the west wall, was built on this platform.<sup>26</sup>

<sup>23</sup> Reisner, Giza, I, 131.

<sup>24</sup> Fakhry, The Pyramids, fig. 66.

<sup>25</sup> Reisner, Giza, I, 130.

<sup>26</sup> Maragioglio and Rinaldi, L'Architettura, IV, 88-90. Maragioglio and Rinaldi dismiss the reconstruction suggested by Reisner (Reisner, Giza, I, 211).

A boat pit similar to the boat pit alongside GI-a was found on the south side of GI-b by K. El Mallakh in 1953. It was filled with stone and rubble by the excavator because it projected into the road, and thus is not visible today.<sup>27</sup>

### I.3.2: GI-c

This is the best preserved of the three small pyramids; it retains much of its core and several courses of its casing. It lies about 3.80 m. south of GI-b, and its north-south axis is several meters east of the north-south axes of the other two small pyramids (plan: 6). The length of its base is 46.25 m., its original height was 29.62 m.<sup>28</sup> Its entrance is also located on the north face, approximately in the center and just above ground level.<sup>29</sup> Several casing blocks remain in situ around the entrance. Just west of the entrance are blocks of limestone at a right angle to the face of the pyramid; Maragioglio and Rinaldi think that these represent a later addition.<sup>30</sup> From the northern entrance, a

<sup>27</sup> Fakhry, The Pyramids, p. 115; Maragioglio and Rinaldi, L'Architettura, IV, 90; K. El Mallakh (personal communication) gives the length of this pit as 17 m. and its width as 1.75 m. and reports that it is located about 3 m. from the base of the pyramid.

<sup>28</sup> Reisner, Giza, I, 130-131.

<sup>29</sup> Fakhry, The Pyramids, fig. 67.

<sup>30</sup> Maragioglio and Rinaldi, L'Architettura, IV, 92-94.

descending passage leads to an antechamber, from which a horizontal passage leads to the burial chamber. The subterranean chambers are rock-cut; the burial chamber is lined with limestone.<sup>31</sup> There is a 4 cm. deep niche in the south wall of the burial chamber;<sup>32</sup> Maragioglio and Rinaldi suggest that this served an unspecified ritual purpose.<sup>33</sup>

On the eastern side of the pyramid, a later temple to Isis incorporates the remains of the 4th Dynasty cult chapel.<sup>34</sup> The 4th Dynasty chapel was built on a platform of colossal limestone blocks which abutted the eastern face of the pyramid. The original entrance was in the east wall, slightly to the north of the central east-west axis of the chapel. This entrance was lined with two upright slabs forming a short entrance passage. The outer face of the east wall was decorated with a design of matting carved in shallow relief. On the west wall of the chapel, only one block of limestone from the south end remains. This block has a niched design carved on it.<sup>35</sup> Later additions and

<sup>31</sup> Reisner, Giza, I, 130.

<sup>32</sup> Ibid., p. 131.

<sup>33</sup> Maragioglio and Rinaldi, L'Architettura, IV, 94, 182, obs. 74.

<sup>34</sup> See M. Jones and A. Milward, "Survey of the temple of Isis Mistress-of-the-Pyramid at Giza," SSEA 12 (1982), pp. 139-151. The later Isis Temple will be discussed below.

<sup>35</sup> Ibid., p. 141.

modifications have destroyed the original interior plan of the chapel.<sup>36</sup>

Since the three small pyramids are consistent in all other elements, it seems reasonable to expect that a boat pit might yet be discovered to the south of GI-c. Excavation of this area might also yield artefacts that might give more evidence about the Isis temple or perhaps names of queens who might have been buried inside the three pyramids.

Petrie found several fragments of basalt and diorite in the area of the three small pyramids. He identified these as corners of the pyramids, and suggested, therefore, that the pyramids were partly cased in these stones.<sup>37</sup>

Maragioglio and Rinaldi, however, believe that the casings of these pyramids were completely of limestone and suggest that what Petrie found were fragments of two pyramidions or fragments from Khufu's upper temple.<sup>38</sup> It is possible that the pieces of basalt came from the upper temple and the diorite might have come from statues that were destroyed.<sup>39</sup>

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<sup>36</sup> Ibid., pp. 141-145. Reisner (Giza, I, 248) reconstructs the chapel as a north-south offering room containing two niches; there is no real evidence for this reconstruction.

<sup>37</sup> Petrie, Pyramids and Temples, p. 135.

<sup>38</sup> Maragioglio and Rinaldi, L'Architettura, IV, 176.

<sup>39</sup> The earliest known royal statues made of diorite date to the reign of Khafra.

#### I.3.4: THE DECORATION OF THE CHAPELS

Decorated fragments that may have come from the chapels of the three pyramids discussed above have been found in several areas. These fragments can be sorted into five groups: fragments found in the area of GI-a; fragments found in the area between GI-a and GI-b; fragments found in the area of GI-b; reliefs found in situ at the chapel of GI-c; and fragments from elsewhere in the Eastern Field.<sup>40</sup>

These fragments are comparable in artistic style, quality, and subject matter to other reliefs from funerary temples of the Old Kingdom.<sup>41</sup> Although other buildings in the area, especially Khufu's upper temple and the chapels associated with nearby private tombs, would have been similarly decorated,<sup>42</sup> it is reasonable to assign those fragments found in the area of the three queens' pyramids to

<sup>40</sup> There are also fragments from the area of the causeway; however, most of these probably come from Khufu's upper temple. (See Hassan, Giza, X, 20-22; Reisner, Giza, I, 325; Reisner and Smith, Giza, II, 4-7; Smith, HESPOK, pp. 157-58; Lauer, "Note complémentaire," pp. 111ff.; Maragioglio and Rinaldi, L'Architettura, IV, 180; Porter and Moss, Bibliography, III<sup>1</sup>, 16-19.)

<sup>41</sup> Cf. L. Borchardt, Das Grabdenkmal des Königs Sahu-Re, II (Leipzig: 1913), pl. 50, 11-18; H. Junker, Giza V: Grabungen auf dem Friedhof des alten Reiches (Vienna and Leipzig: 1941) 52; Goedicke, Re-used Blocks; G. Jéquier, Le Monument funéraire de Pepi II, I (Cairo: 1936), pl. 107.

<sup>42</sup> Reisner, Giza, I, 324-326, fig. 248; H. Junker, Giza II: Grabungen auf dem Friedhof des alten Reiches (Vienna and Leipzig: 1934), 156; Smith, HESPOK, p. 160.

the chapels of these pyramids.<sup>43</sup> It is certain in any case that the chapels of both GI-b and GI-c were decorated; it is therefore most likely that the chapel of GI-a also had similar reliefs.<sup>44</sup> It is difficult to assign many of the fragments specifically to one or another of these chapels.

The subject matter of the relief fragments can be sorted into six categories: queens' titles; names of royal children; palace façades; boats being paddled with oars; the bringing of offerings and offering lists; and miscellaneous fragments of inscription.<sup>45</sup>

### I.3.5: ATTRIBUTION OF THE SMALL PYRAMIDS

There is no direct evidence for the names of the queens who were presumably buried in these pyramids, but various attributions have been suggested on the basis of secondary evidence.

Due to the proximity of GI-a to the mastaba of the crown prince, Kawab, Reisner assigns this pyramid to Kawab's

<sup>43</sup> Reisner, Giza, I, 325.

<sup>44</sup> Smith, HESPOK, p. 158; Reisner and Smith, Giza, II, 5. Smith, HESPOK, p. 158 thinks that the fragment found north and east of GI-b may be from the chapel of GI-a.

<sup>45</sup> Reisner and Smith, Giza, II, 4-7.

mother, who would have been the main queen of Khufu.<sup>46</sup> An inscription in Kawab's mastaba reads:

[s3.s mr.s K3]-w(b, s3[tl] nṯr.s [hrp jm3]t ssm[tl]  
Mrjtjt.s [mwt.f] ms[tl] n Ḥwfw

"[Her son, her beloved Kalwab, the daughter of her god, [she who is in charge] of the affairs [of the jm3t], Merytyetes [his mother] who bore [him] to Khufu".<sup>47</sup>

A stela found by Mariette, for which there is no exact provenience, but which was presumably found in the Eastern Field, gives Merytyetes the titles wrt-hts Sneferu and wrt-hts Khufu, "The great officiant of Sneferu and Khufu".<sup>48</sup> Thus Merytyetes was important enough to merit a pyramid tomb, and the position of Kawab's tomb nearby makes it likely that GI-a was indeed her monument.

An alternate suggestion is made by Lehner, who proposes that GI-a was originally built as the tomb of Hetepheres I, the mother of Khufu.<sup>49</sup> Stadelmann also believes that GI-a belonged to Hetepheres I.<sup>50</sup> According to Lehner's theory,

<sup>46</sup> Reisner, Giza, I, 129.

<sup>47</sup> W. K. Simpson, The Mastabas of Kawab, Khafkhufu I and II, III (Boston: 1978), 3; Reisner and Smith (Giza, II, 6) translate the word jm3t as harem; for discussion of harem, see D. Nord, "Some Aspects of the origins of the Harem in ancient Egypt," unpublished paper; see also E. Reiser, Der Königliche Harim im alten Ägypten und seine Verwaltung (Vienna: 1972).

<sup>48</sup> Reisner and Smith, Giza, II, 6; see also H. Fischer, "NBTY in Old-Kingdom titles and names," JEA 60 (1974), pp. 94-99.

<sup>49</sup> M. Lehner, The Pyramid Tomb of Queen Hetep-heres I and the Satellite Pyramid of Khufu (Mainz: 1985) p. 41.

<sup>50</sup> Stadelmann, Pyramiden, pp. 124ff, fig. 33.

Khufu planned to build a ritual pyramid<sup>51</sup> north of GI-a, but had to abandon this because of a change in the layout of the Eastern Field.<sup>52</sup> He then took GI-a as his ritual pyramid, and removed the chapel that had been built on its east face. In this way, Lehner accounts for the complete absence of all but traces of the foundation of the chapel platform at this period.<sup>53</sup>

Reisner proposes that GI-b be assigned to an unknown queen of Libyan origin. This queen would have been the mother of a secondary group of Khufu's children, including Djedefra. He uses the facts that Djedefra built his pyramid at Abu Rawwash rather than Giza and that the tomb of Djedefhor, also presumably a son of this queen, was purposefully destroyed, as evidence that there was disagreement between various branches of the family after the death of Khufu.<sup>54</sup>

Lehner suggests that GI-b was used for Hetepheres I after GI-a was taken over as a ritual pyramid.<sup>55</sup> Although he does not suggest who the original owner might have been,

<sup>51</sup> See below, [pp. 112-117], for definition of this term.

<sup>52</sup> Ibid., pp. 118-123.

<sup>53</sup> Lehner, Satellite Pyramid, pp. 35-44.

<sup>54</sup> Reisner and Smith, Giza, II, 7. H. Junker (Giza VII: Grabungen auf dem Friedhof des alten Reiches (Vienna and Leipzig: 1944), 26) believes that Djedefhor's tomb was destroyed in the First Intermediate Period.

<sup>55</sup> Lehner, Satellite Pyramid, p. 84.

Hetepheres was very likely once buried here.<sup>56</sup> Stadelmann assigns GI-b to Merytytes.<sup>57</sup>

GI-c is generally attributed to Henutsen on the basis of a stela, usually referred to as the Inventory Stela, that was found in the Isis Temple that was built onto the eastern chapel.<sup>58</sup> The relevant part of this stela reads:

(nh mddw-Ḥr, nswt bjtj Ḥwfw dj (nh) dt gm.n.f pr St  
ḥnwt mr r-gs pr Ḥwn ḥr mḥt jmntt n pr Wsjr nb R3-  
st3w kd.n.f mr.f r-gs ḥwt-nṛ nt ntrt tn kd.n.f mr  
n s3t nswt Hnwtan r-gs ḥwt-nṛ tn

"Live Horus Medjdu Hor, king of Upper and Lower Egypt, Khufu, given life. It was beside the house of the Sphinx on the northwest of the house of Oairis, Lord of Rostaw, that he established the house of Isis. It was beside the temple of this goddess that he built his pyramid. It was beside this temple that he built a pyramid for the king's daughter, Henutsen."<sup>59</sup>

This stela is dated to the 18th Dynasty, but may be a copy of an earlier inscription.<sup>60</sup> In any case, Henutsen is an Old Kingdom name,<sup>61</sup> and in the absence of any other evidence for or against this attribution, it seems reasonable to let it stand.

<sup>56</sup> Reisner and Smith, Giza, II, 1-12.

<sup>57</sup> Stadelmann, Pyramiden, pp. 124ff., fig. 33.

<sup>58</sup> See below, pp. 51-52.

<sup>59</sup> This transliteration is taken from the hieroglyphs given by G. Daressy, "La Stèle de la fille de Chéops," Rec. Trav. 30 (1928) p. 4. For other translations, see S. Hassan, Excavations at Giza, VIII: The Great Sphinx and its Secrets: Historical Studies in the Light of Recent Excavation (Cairo: 1953), 113; cf. J. A. Breasted, Ancient Records of Egypt, I (Chicago: 1906), 85.

<sup>60</sup> Hassan, Giza, VIII, 116-117.

<sup>61</sup> Fakhry, The Pyramids, p. 112; see H. Ranke, Die ägyptischen Personennamen, I (Glückstadt: 1935), 242.

Therefore, the three small pyramids can be tentatively assigned as follows:

GI-a: Merytyetes, Hetepheres I, or Khufu himself;

GI-b: Hetepheres I or Merytyetes;

GI-c: Henutsen.

#### I.3.6: POST-OLD KINGDOM HISTORY

At some point, presumably after the fall of the Old Kingdom, the small pyramids and their chapels were greatly damaged. As mentioned above, all of the pyramids have lost most of their casing blocks, and GI-a and GI-b have lost much of their cores. The chapels of GI-a and GI-b have left only very meager traces.

As is generally the case at Giza, there is no archaeological or textual evidence of cultic activity at any of these pyramids during the Middle Kingdom.<sup>62</sup> It is not until the 18th Dynasty that any interest was taken in these monuments. During this period, the chapel of GI-c was used as a temple to Isis as Mistress of the Pyramids, probably in

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<sup>62</sup> Porter and Moss, Bibliography, III<sup>1</sup>, 11-19

connection with the worship of the Sphinx.<sup>63</sup> This chapel was added to in the 21st and 26th Dynasties, and eventually spanned the area from the east face of GI-c to the west face of the mastabas of Khufu-khaf and his wife (G 7130-G 7140). The temple incorporates the chapel of the 4th Dynasty, additions and changes made in the 21st Dynasty, and chapels built during the 26th Dynasty.<sup>64</sup> The area has been investigated by Petrie,<sup>65</sup> Reisner,<sup>66</sup> Hassan,<sup>67</sup> and Jones and Milward.<sup>68</sup>

In this Isis Temple, Mariette discovered the Inventory Stela, which states that Khufu founded the Temple of Isis.<sup>69</sup> If this statement was true, it would mean that the Sphinx was carved before the reign of Khufu. However, this stela

<sup>63</sup> Grinsell, Egyptian Pyramids, pp. 101ff. Although there is much archaeological evidence for a cult during the 26th dynasty (Hassan, Giza, VIII, 111; Porter and Moss, Bibliography, III<sup>1</sup>, 18; W. Helck, Urkunden der 18. Dynastie, IV (Berlin: 1955), 2109-10 and Hassan, Giza, VIII, 101-102; Jones and Milward, "Temple of Isis," p. 145; C. Zivie, Giza au deuxième millenaire (Cairo 1976), pp. 214-215), there is no evidence of any building activity before the 21st Dynasty (Jones and Milward, "Temple of Isis," p. 145). For connection with the Sphinx, see Reisner and Smith, Giza, II, 4-5, 150 and Zivie, Giza, pp. 104-111, 153-154.

<sup>64</sup> Jones and Milward, "Temple of Isis", p. 139.

<sup>65</sup> Petrie, Pyramids and Temples, p. 65.

<sup>66</sup> Reisner, Giza, I, 17.

<sup>67</sup> Hassan, Giza, VIII, pl. 52.

<sup>68</sup> Jones and Milward, "Temple of Isis", p. 139.

<sup>69</sup> For translation, see Breasted, Ancient Records I, 83-85; Hassan, Giza, VIII, pls IV, LVI, 113-17; Daressy "La Stéle," pp. 1-6; G. Posener, "Houroun: Nouvelles mentions de cette Divinité," JNES 4 (1945), p. 241; J. Yoyotte, "Les Bousiris et les Abousir d'Egypte (toponymie de l'Egypte pharaonique I), "Comptes rendus du groupe linguistique et études-sémitiques 8 (1957-1960), 57-60.

has been dated, on the basis of the writing and the style, to a period later than the Old Kingdom.<sup>70</sup> Maspero suggests that this is a later copy of a 4th Dynasty original,<sup>71</sup> a theory supported by Hassan's comparison to the Stela of Shabaka, which states that the original document was eaten by worms.<sup>72</sup> However, doubts have been raised as to whether or not this stela is really a copy of an Old Kingdom original.<sup>73</sup>

This stela also mentions a daughter of Khufu named Henutsen.<sup>74</sup> This name comes from the hieroglyph hnwt, which means mistress, thus connecting the 4th Dynasty owner with the later cult of Isis, Mistress of the Pyramids.<sup>75</sup>

Thus it seems that there was much interest in the cult of Isis centered around the chapel of GI-c. There may also be some connection between Isis and the crown of Hathor; there are priestesses of Hathor at Giza throughout the Old Kingdom.<sup>76</sup>

<sup>70</sup> Hassan, Giza, VIII, 116.

<sup>71</sup> G. Maspero, Guide du visiteur au musée du Caire (Cairo: 1915), p. 65.

<sup>72</sup> Hassan, Giza, VIII, 117.

<sup>73</sup> Cf. F. Junge, "Zur Fehldatierung des sog. Denkmals memphitischer Theologie oder: Der Beitrag der ägyptischen Theologie zur Geistesgeschichte der Spätzeit," MDAIK 29 (1973), pp. 195-204; P. Vernus, in an informal paper presented at the University of Pennsylvania, refuted Junge's ideas.

<sup>74</sup> Jones and Milward, "Temple of Isis," p. 141.

<sup>75</sup> Hassan, Giza, VIII, 111; Reisner and Smith, Giza, II, 4-5.

<sup>76</sup> See appendix.

The boat pits of GI-a and GI-b were divided by walls into compartments. It has been suggested that they were used in later periods for burials,<sup>77</sup> or possibly as magazines in the 26th Dynasty.<sup>78</sup>

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<sup>77</sup> Maragiolio and Rinaldi, L'Architettura, IV, 84.

<sup>78</sup> Z. Hawass "The Khufu Statuette: Is it an Old Kingdom Sculpture?," Mélanges Gamal Eddin Mokhtar, BdE 97<sup>1</sup> (1985), p. 390.

#### I.4: THE BOAT PITS

Five boat pits have been discovered in the pyramid complex of Khufu (plan: 7A). Two of these lie to the south of the pyramid and are oriented east-west, parallel to its southern face (#1 and #2). Three are east of the pyramid; two of these lie north-south, parallel to its face (#3 and #4),<sup>1</sup> and the third lies parallel to the causeway at a point several meters from the eastern wall of the upper temple (#5).<sup>2</sup> These pits are cut into the rock of the plateau. The easternmost of the southern pits (#2) was found to contain a full-size wooden boat.<sup>3</sup>

The eastern boat pits were mapped in 1843 by Lepsius.<sup>4</sup> At the time of Lepsius's survey, these pits were filled with sand and other debris.<sup>5</sup> Petrie excavated these boat pits but referred to them as trenches without giving any indication of their function.<sup>6</sup> Reisner cleaned the boat pit by the causeway,<sup>7</sup> and Hassan re-excavated all three pits.<sup>8</sup>

<sup>1</sup> Hassan, Giza, X, 38; Maragioglio and Rinaldi, L'Architettura, IV, 70; S. Hassan, Excavations at Giza, VI<sup>1</sup>: The Solar-Boats of Khafra (Cairo: 1946), 40-42.

<sup>2</sup> Hassan, Giza, X, 38.

<sup>3</sup> Hour et al., Cheops Boat, I, 7-10; Maragioglio and Rinaldi, L'Architettura, IV, 70, pls. 1, 9, and 10.

<sup>4</sup> Lepsius, Denkmäler, I, pl. 14.

<sup>5</sup> Hassan, Giza, X, 38.

<sup>6</sup> Petrie, Pyramids and Temples, pp. 47-49 and pl. 3.

<sup>7</sup> Hassan, Giza, VI<sup>1</sup>, 41.

<sup>8</sup> Ibid., pp. 40-42; Hassan, Giza, X, 38.

In 1954, while excavating the southern side of the Great Pyramid between the base of the pyramid and the southern mastabas, Kamal El Mallakh discovered the two southern boat pits.<sup>9</sup> These two pits lie outside the great temenos wall, and were covered by the debris of the enclosure wall.<sup>10</sup> The two pits are separated by a north-south wall of rocks which lies on the north-south axis of the pyramid.<sup>11</sup> The eastern pit was opened and found to contain a large wooden boat; the western is as yet unexcavated.

<sup>9</sup> Fakhry, The Pyramids of Egypt, p. 106; J. Leclant, "Fouilles en Travaux en égypte, 1953-1954," Orientalia 24 (1955), pp. 309-310; J. Dimick, "Lifting the lid from Cheops' boat grave," Archaeology 8 (1955), p. 93. These two pits were discovered when El Mallakh, noting the presence of five boat pits in the complex of Khafra and theorizing that there were also five pits around the pyramid of Khufu, searched for the two missing boat pits. He started these excavations after his discovery of the boat pit associated with GI-b. He discovered both Pits #1 and #2, but has postponed the opening of Pit #1 until the boat found in Pit #2 has been researched completely and until preservation techniques have been developed.

<sup>10</sup> Maragioglio and Rinaldi, L'Architettura, IV, 70.

<sup>11</sup> Ibid., pp. 70-72. For a view of the roofing blocks see C. Aldred, Egypt to the end of the Old Kingdom (London and New York: 1965), fig. 83; Abubakr and Mustafa, "The Funerary boat of Khufu," in Ricke Festschrift BABA 12 (1971). Pl. 9 plans 1-3; Z. Nour, "La Découverte des Nouveaux Bateaux près des Pyramides de Guizeh," RC 33 (1955), 37-41, Porter and Moss, Bibliography, III<sup>1</sup>, 15, boat pit No.2.

I.4.1: BOAT PIT #1

This pit lies south of Khufu's pyramid.<sup>12</sup> It is at present covered by 40 slabs of limestone laid side by side; it has not yet been opened.<sup>13</sup> The direction of the prow cannot be ascertained until it is opened. The shape of the boat pits is distinct since the prow end tends to be deeper and narrower, while the stern end is higher and wider.

I.4.2: BOAT PIT #2

This pit lies to the east of Pit #1; its prow points to the west.<sup>14</sup> When discovered, it was covered by 41 slabs of limestone (some of which bore quarry marks in red and black ink) which were resting on a ledge around

<sup>12</sup> Porter and Moss, Bibliography, III<sup>1</sup>, 15 (no. 2); Maragioglio and Rinaldi, L'Architeturra, IV, 70 (no. 5); J. P. Lauer, "Les Barques de Chéops," RC 33 (1955), p. 88.

<sup>13</sup> The National Geographic Society has proposed a non-destructive exploration of this pit by radar and sonar to determine if there is anything inside. This proposal is still being reviewed.

<sup>14</sup> E. Thomas, "A Further Note on Rock-cut Boats," JEA 42 (1956), pp. 117-18. El Mallakh (personal communication) also states that the prow faces west. J. Černý "A Note on the recently discovered boat of Cheops," JEA 41 (1955), p. 7, fig. 1, wrongly states that the prow faces east.

the upper edge of the pit.<sup>15</sup> These blocks weigh about 15 tons each and vary in size, the largest being about 4.80 m. long. The three westernmost of these stones were much smaller than the others; these have been interpreted as key-stones.<sup>16</sup> Small pieces of limestone were left between the blocks to keep them in their proper places.<sup>17</sup> Square holes were cut in the area of the upper part of the southern and northern sides to make the movement of the blocks easier, and very fine liquid plaster was used to fill the interstices between each block so that the pit was isolated from any change in climate and protected from rain and insects.<sup>18</sup>

The pit itself is rectangular in shape and measures 32.50 m. in length;<sup>19</sup> its sides are vertical and traces on the sides and bottom show that they were dressed with copper chisels.<sup>20</sup>

Among the quarry inscriptions found on many of the roofing blocks were 18 cartouches of Djedefra,<sup>21</sup> Khufu's son and successor, showing that he was responsible for

<sup>15</sup> Dimick, "Lifting the Lid," p. 93; Goyon, Secret des Bâisseurs, pp. 240-42.

<sup>16</sup> Dimick, "Lifting the Lid," pp. 94-95.

<sup>17</sup> Nour et al., Cheops Boat, I, 5.

<sup>18</sup> Ibid., p. 6.

<sup>19</sup> Ibid., p. 15.

<sup>20</sup> Maragioglio and Rinaldi, L'Architettura, IV, 72.

<sup>21</sup> Nour et al., Cheops Boat, I, 7, pl. 11A.

the funeral of his father.<sup>22</sup> On the southern side of the wall of the pit were found signs in red ink that list measurements which as yet have not been studied.<sup>23</sup>

Inside the pit were found the dismantled pieces of a very large wooden boat. On top of the wood was a layer of mats and ropes, an instrument made of flint, and some small white pieces of plaster.<sup>24</sup> The prow of the boat, a wooden column topped by a round wooden disk, was found in the extreme west of the pit.<sup>25</sup> This column was connected to two long wooden pieces which extended along the bottom of the pit. In the middle of the pit was a rhomboidal board, painted white and consisting of two separate pieces. At the east end of the pit was the stern post. Most of the wooden parts had been tied together with various knots.<sup>26</sup> Signs had been inscribed on the wooden pieces in red ink; these are thought to be technical terms connected with the building of the boat.<sup>27</sup> Also found inside the pit were many other items such as: twelve oars, each of which was made of a single

<sup>22</sup> Ibid., p. 5; Margioglio and Rinaldi, L'Architettura, IV, 72.

<sup>23</sup> These signs can be seen in Nour et al., Cheops Boat, I, fig. 2, 7 and Abubakr and Mustafa, "Funerary Boat," figs. 3 and 6.

<sup>24</sup> Margioglio and Rinaldi, L'Architettura, IV, 72; Nour et al., Cheops Boat, I, 7. For a view of the interior see Illustrated London News, June 19, 1954, p. 1045.

<sup>25</sup> Nour et al., Cheops Boat, I, 7, pl. 44.

<sup>26</sup> Ibid., pp. 7-8 and pl. 12.

<sup>27</sup> Ibid., p. 8, fig. 3.

piece of wood; fifty-eight poles; three cylindrical columns; and five doors.<sup>28</sup> All total, there were thirteen layers of material consisting of 651 artefacts ranging in size from 10 cm. to 23 m.<sup>29</sup>

The rebuilt boat measures about 43.4 m. long and 5.9 m. wide in the beam.<sup>30</sup> The woods used in its construction were cedar and acacia.<sup>31</sup>

Nour concluded, based on the fine traces of white color found on the surface of the wood and the lack of any traces of water marks on the sides of the boat, that the vessel had never been used,<sup>32</sup> but other scholars believe that traces on the gangplank indicate that the boat was actually used on the Nile.<sup>33</sup>

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<sup>28</sup> Ibid., p. 9, pls. 13A and B, 15A and B, 19.

<sup>29</sup> Ibid., p. 57.

<sup>30</sup> N. Jenkins, The Boat Beneath the Pyramid (New York: 1980), p. 108.

<sup>31</sup> Ibid., p. 30. The cedar wood came from Byblos in Lebanon and the acacia wood was local; see A. Lucas, Ancient Egyptian Materials and Industries, edited by J.R. Harris (London: 1962), pp. 429-456.

<sup>32</sup> Nour et al., Cheops Boat, I, 9.

<sup>33</sup> Personal communication with Hag Ahmed, the restorer of the boat, but that opinion was based on sight and not through scientific analysis.

### I.4.3: BOAT PIT #3

This boat pit was found on the eastern side of the great pyramid, south of the upper temple of Khufu;<sup>34</sup> it is now empty of debris.<sup>35</sup> It measures 51.50 m. long, 7 m. wide, and about 8 m. deep.<sup>36</sup> One ledge can be seen in the north end, and Petrie's drawings indicate a second ledge lower than the first.<sup>37</sup> These two ledges would have held stone blocks; some of the mortar that was apparently used to hold the blocks in place was preserved.<sup>38</sup> When Petrie discovered this boat pit (which he called a trench), some of the covering blocks were still in situ along the west edge and some of the limestone paving was left on the bottom.<sup>39</sup>

Hassan believes that this pit was never covered, since the great width of the pit would have been impossible to span without pillars.<sup>40</sup> Maragioglio and Rinaldi feel that it was covered by a layer of rubble, or

<sup>34</sup> Porter and Moss, Bibliography, III<sup>1</sup> 15 (no. 3); Maragioglio and Rinaldi, L'Architettura, IV, 70-71. pl. 9 (no. 2); Hassan, Giza, X, 38 and Giza, VI<sup>1</sup>, 41-42, A in fig. 14.

<sup>35</sup> Maragioglio and Rinaldi, L'Architettura, IV, 70.

<sup>36</sup> Ibid.

<sup>37</sup> Ibid.

<sup>38</sup> Ibid., p. 170.

<sup>39</sup> Petrie, Pyramids and Temples, pp. 47-49.

<sup>40</sup> Hassan, Giza, VI<sup>1</sup>, 42.

by a pavement made of slabs.<sup>41</sup> Hassan suggests that the presence of a shallow cutting in the bottom of the pit indicates the original presence of a rectangular cabin amid ships and further states that this cutting may have formed a bedding to support casing stones.<sup>42</sup> Černý<sup>43</sup> and Hassan<sup>44</sup> report that the prow end of the pit was oriented to the south. However, Thomas states that the pit was oriented to the north.<sup>45</sup>

#### I.4.4: BOAT PIT NO. 4

This boat pit, located to the east of the Great Pyramid and on the northern side of the upper temple of Khufu, is filled with debris and hidden by the nearby roadway.<sup>46</sup> The pit is about 35.05 m. from the central east-west line of the complex. It was cut vertically into the rock; the north side is dressed, and the rest is

<sup>41</sup> Maragioglio and Rinaldi, L'Architettura, IV, 172, obs. 54.

<sup>42</sup> Hassan, Giza, VI<sup>1</sup>, 42.

<sup>43</sup> Černý, "Recently discovered boat," p. 77.

<sup>44</sup> Hassan, Giza, VI<sup>1</sup>, 41, fig. 14.

<sup>45</sup> E. Thomas, "Solar Barks prow to prow," JEA 42 (1956), p. 66.

<sup>46</sup> Porter and Moss, Bibliography, III<sup>1</sup> 15; Maragioglio and Rinaldi, L'Architettura, IV, 70-71, pl. 9 (no. 1); Hassan, Giza, X, pl. 12 and Giza, VI<sup>1</sup>, C in fig. 14; Petrie, Pyramids and Temples, pl. 2.

left rough.<sup>47</sup> Remains of mortar appear in the rock wall and Hassan believes that it was never roofed.<sup>48</sup> According to Černy<sup>49</sup> and Hassan,<sup>50</sup> the prow of the pit faces north; Thomas says that it faces south.<sup>51</sup>

From the debris that was inside the boat pit came various artifacts. One was a fragment of limestone with the word 3ht written in hieroglyphs, which Hassan reconstructs as part of 3ht-Hwfw, the name of Khufu's pyramid.<sup>52</sup> Also found was a fragment of a red pot, a fragment of limestone with the sign (nh) on it, and a fragment of a granite statue.<sup>53</sup> The inscriptions and the statue fragments may originally have come from Khufu's temple;<sup>54</sup> they would of course have been deposited in the boat pit at a time later than Khufu, possibly later than the Old Kingdom.

47 Maragioglio and Rinaldi, L'Architettura, IV, 70.

48 Hassan, Giza, VI<sup>1</sup>, 42.

49 Černy, "Recently Discovered Boat," p. 77, fig. 1.

50 Hassan Giza, VI<sup>1</sup>, 41, fig. 14.

51 Thomas, "Solar Barks," pp. 66, 67 notes 2 and 6.

52 Ibid.

53 Ibid.

54 Hassan, Giza, VI<sup>1</sup>, 42.

I.4.5: BOAT PIT NO. 5

This boat pit is located on the east side of the Great Pyramid and lies parallel to the causeway of Khufu.<sup>55</sup> The pit is oriented east to west, with the prow at the east, and is shaped like a cradle.<sup>56</sup> The prow represents the curtained bow post and is vertical. Hassan correlates this shape with a type of boat found in the Archaic Period.<sup>57</sup> The pit measures 45.50 m. in length and 3.75 m. in maximum width.<sup>58</sup> A stairway containing 18 steps was found inside; and Maragioglio and Rinaldi found holes cut in the sides of the pit which they interpret as sockets for small transverse beams.<sup>59</sup> Reisner found cordage and pieces of gilded wood inside the pit, indicating that a boat had once been inside.<sup>60</sup> The stairs were filled with masonry; it is difficult to tell whether or not the pit was originally roofed.<sup>61</sup>

<sup>55</sup> Porter and Moss Bibliography, III<sup>1</sup>, 16 (no. 5); Maragioglio and Rinaldi, L'Architettura, IV, 70 (no. 3); Hassan, Giza, X, pls. 13 and 14; Hassan, Giza, VI<sup>1</sup>, 1 and 40, fig. 14.

<sup>56</sup> Hassan, Giza, VI<sup>1</sup>, 40.

<sup>57</sup> Ibid.

<sup>58</sup> Maragioglio and Rinaldi, L'Architettura, IV, 70, 171-172, obs. 54, pl. 9, figs. 7-11.

<sup>59</sup> Ibid.

<sup>60</sup> Ibid.

<sup>61</sup> Ibid.

#### I.4.6: BUILDING HISTORY

Based on their layout, it is thought that the three boat pits found on the east side of the Great Pyramid were cut during the time of Khufu and that the two southern pits were built during the reign of Djedefra.<sup>62</sup> That the southern pits were built during or after the reign of Djedefre is demonstrated by cartouches containing his name found in Pit #2.<sup>63</sup> This was probably because the southern side of Khufu's pyramid was occupied during his lifetime by the main ramp which led from the quarry east of Khafra's pyramid to the base of Khufu's pyramid.<sup>64</sup> That the pits were built not later than the end of the 4th Dynasty is demonstrated by the fact that they lie partially under the pyramid's southern enclosure wall, which is dated to the end of Dynasty 4.<sup>65</sup>

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<sup>62</sup> Nour et al., Cheops Boat, I, 5.

<sup>63</sup> Ibid.

<sup>64</sup> Lehner, Satellite Pyramid, p. 81; Lehner, "Khufu project," fig. 3C.

<sup>65</sup> Lehner, "Khufu project", p. 5, pl. 7A and B. The dating is based on the similarity of construction to that of the enclosure wall of Khafra.

#### I.4.7: FUNCTION

In the Old Kingdom, boat pits around the pyramids were some of the most important elements of the pyramid complex. These pits may have contained funerary boats used to transport the body of the king to the sacred places of the god Osiris and to bring the body to the cemetery; they could have contained types of solar boats that the king might have used for his visit to the sun god; or they could have contained boats that the king would use to accompany the sun god on his voyage across the sky.<sup>66</sup> Boat pits are found from the 1st through the

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<sup>66</sup> Edwards, The Pyramids of Egypt, p. 32.

5th Dynasties,<sup>67</sup> but the number of boat pits discovered around Khufu's pyramid is paralleled in the Old Kingdom only by the boat pits around Khafra's pyramid.<sup>68</sup>

There are three main schools of thought concerning the function of the boats contained in these pits. The first, propounded by Černy, is that four of the boats

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<sup>67</sup> The earliest examples of boat pits are found in the cemeteries at Saqqara and Helwan and date from the Archaic Period (Fakhry, The Pyramids, p. 15). A mud-brick boat which contained rope and wood was found beside a 1st Dynasty mastaba from the reign of Horaha at Saqqara (W. B. Emery, Excavations at Saqqara 1937-38: Hor-aha, (Cairo: 1939), pp. 8-18, pl. 3). No boat pits were found in 3rd Dynasty royal contexts (Porter and Moss, Bibliography, III<sup>1</sup>, 14-16; Fakhry, The Pyramids, pp. 15-16), nor were they found around any of the early 4th Dynasty pyramids of Sneferu (Fakhry, The Pyramids, p. 16; A. M. Abu Bakr, "Divine Boats of ancient Egypt, Archaeology 8, (1955) p. 97; Hassan, Giza, VI<sup>1</sup>, 156); these absences may be due to lack of sufficient excavation. Khufu, as discussed above, has five pits surrounding his pyramid; Khafra's complex also contains five boat pits (Hassan, Giza, VI<sup>1</sup>, 56). One boat pit was found in the complex of Djedefra at Abu Rawwash (E. Chassinat, "A propos d'une tête en grés rouge du roi Didoufri," Mon. Piot. 25 (1921-22), pp. 56-57); Hassan, Giza, VI<sup>1</sup>, 56; V. Maragioglio and C. A. Rinaldi, L'Architettura delle Piramidi menfite, V: Le Piramidi di Zedefra e di Chefren (Rapello: 1966), 24-27; Fakhry, The Pyramids, p. 129). No boat pits have been found around Menkaura's pyramid; however, much of this area remains to be excavated (Abubakr, "Divine Boats," p. 97). A boat pit was found at the southwestern corner of the tomb of Khentkawes (Fakhry, The Pyramids, p. 155), who may have served for a time as ruler of Egypt (B. Kemp, "Old Kingdom," p. 79; cf. Hassan, Giza, VI<sup>1</sup>, 68). Finally, two boat pits were found at Sakkara by the pyramid of Unas (J. P. Lauer, Saqqara (London: 1976), pp. 146, 156-157). See also A. Reisner, Catalogue des Antiquités égyptiennes au Musée du Caire, LXVIII: Models of Ships and Boats (Cairo: 1913).

<sup>68</sup> Hassan, Giza, VI<sup>1</sup>, 56-61.

were ritual boats for carrying the king to the four cardinal points, and that the fifth was the boat in which the body of the king was transported to Giza.<sup>69</sup> The second school, originally expressed by Emery in reference to a 1<sup>st</sup> Dynasty mastaba at Saqqara, and then adopted by Hassan,<sup>70</sup> believes that the boats were solar boats, and carried the king or the god Ra through the heavens. The third, expounded principally by Abubakr,<sup>71</sup> suggests that all the boats were originally used in the king's lifetime for pilgrimages and other ceremonies. El Mallakh, the discoverer of the two southern boat pits, thought like Hassan that the boats were solar boats for the soul of the dead king; the boat found in Pit #2 would have travelled to the west, parallel to the daily course of the sun.<sup>72</sup> A fourth theory that could be suggested is that Pits #1 and 2 contained solar boats, Pits #3 and 4 contained the boats of Horus, and Pit #5 contained the boat used to carry the body of the king, or could be used by Hathor.

<sup>69</sup> Černy, "Recently Discovered Boat," pp. 77-78.

<sup>70</sup> Hassan, *Giza*, VI<sup>1</sup>, 40-55; E. Martin-Pardey, "Schiff," *LA*, 36, V<sup>4</sup> (1983), pp. 601ff.

<sup>71</sup> Abubakr and Mustafa, "Funerary Boat," pp. 12-16.

<sup>72</sup> K. El Mallakh, personal communication.

Cerny notes that Boat Pits #1-4 are oriented so that each faces a different cardinal point.<sup>73</sup> Thus, he suggests, the king could depart at any time for any destination.<sup>74</sup> He also refers to the Pyramid Texts as evidence, since one passage states that the western gods, eastern gods, southern gods, and northern gods give the dead king four zhn (reed mats) when he goes to the sky.<sup>75</sup> Cerny thus supposes that the four boats from Pits #1-4 represent a development from these reed boats.<sup>76</sup> He goes on to suggest that the fifth pit held the boat that transported the body of the king to Giza.<sup>77</sup>

In his study of boats in Old Kingdom pyramid complexes, Hassan identifies the boat pits as receptacles for conventional solar boats regardless of their number in a particular complex.<sup>78</sup> According to his theory, the king was identified with the polar stars in the northern sky, and under their influence the day boat flies southward to the west and the night boat travels north to

<sup>73</sup> As noted above, the directions Cerny cites for Pits #1-4 are wrong and have been corrected by Thomas ("Solar Barks," p. 66; "Further Note," pp. 117-118).

<sup>74</sup> Cerny, "Recently Discovered Boat," pp. 77-78.

<sup>75</sup> Ibid., p. 79 (Pyr. Text 464a and b); Hassan, Giza VI<sup>1</sup>, 1-29 discovered the four zhn; see also Pyr. Text 1355a, as listed by Cerny. Cf. also Hassan, Giza VI<sup>1</sup>, 82-100.

<sup>76</sup> Cerny, "Recently Discovered Boat," fig. 1; Hassan, Giza VII, 14, fig. 14.

<sup>77</sup> Cerny, "Recently Discovered Boat," p. 78.

<sup>78</sup> Hassan, Giza, VI<sup>1</sup>, 70-87.

reach the east.<sup>79</sup> The crew of the night boat was the "Indefatigable Stars," and the king acted as the boat's commander.<sup>80</sup>

Hassan uses evidence from the Pyramid Texts and the Palermo Stone to support his theory. The Pyramid Texts contain several passages indicating the use of solar boats. In one Utterance: "the king comes to Ra and is proclaimed king of earth. He ascends with Atum, rises and sets with Ra and the solar barges."<sup>81</sup> In another Utterance, the king appears as a star, like Ra, and Horus the king is to sail to the sky.<sup>82</sup> And in another Utterance: "ye gods of the west, ye gods of the east, ye gods of the south, ye gods of the north, these four boats which you placed for Osiris when he ascended towards heaven."<sup>83</sup> Another Utterance tells us that the king's ka will become a star and join the northern stars, and yet another one associates the king with four cardinal points, stating that he will sail to the sky like Horus and Ra.<sup>84</sup>

<sup>79</sup> Ibid., p. 55.

<sup>80</sup> Ibid.

<sup>81</sup> Ibid., p. 44, Utt. 217.

<sup>82</sup> R. O. Faulkner, The Ancient Egyptian Pyramid Texts (Oxford: 1969), p. 58, Utt. 245; p. 60, Utt. 248; p. 42, Utt. 216.

<sup>83</sup> See discussion in Hassan, Giza, VI<sup>1</sup>, 45; Cerny, "Recently Discovered Boat," p. 79.

<sup>84</sup> Faulkner, Pyramid Texts, p. 42, Utt. 215.

Abubakr also believed at first that the two southern boats represented solar boats, and also quotes from the Pyramid Texts.<sup>85</sup> He refers to the passage where Ra uses a boat to make his journey across the sky. The float, or boat that he used during the day, was called m(ngt, and the one for the night was called msktt.<sup>86</sup> Since the king represents the sun god on earth and after his death, he also would need similar boats. According to the Pyramid Texts, the king needs such boats to travel across the sky and reach his father Ra.<sup>87</sup> Abubakr suggests that the boats on the southern side of the pyramid of Khufu were used by the king and the god as solar boats.<sup>88</sup>

In the second to fifth registers of the Palermo Stone are representations of several different kinds of boats, which Hassan discussed.<sup>89</sup> In one line, we read that King Neferirkare erected a large "day" boat at the southern corner of the sun temple.<sup>90</sup> Another inscription of the same king refers to a day and a night boat belonging to Ra.<sup>91</sup> In 1900-1901, Borchardt discovered a brick built boat for the king Niuserre beside his sun

<sup>85</sup> Abubakr, "Divine Boats," pp. 96-101.

<sup>86</sup> Ibid., p. 96.

<sup>87</sup> Ibid., p. 97.

<sup>88</sup> Ibid.

<sup>89</sup> Hassan, Giza, VI<sup>1</sup>, 77.

<sup>90</sup> Ibid., p. 79.

<sup>91</sup> Ibid., p. 78.

temple in Abusir.<sup>92</sup> Because of their association with this temple, these boats are clearly "solar" boats.

However, only one pyramid complex from this dynasty, that of Unas, was found to contain boat pits. There are two pits in this complex, both lying parallel to the southern side of the causeway.<sup>93</sup> The two boats of Unas probably represent the night and the day boats of Ra referred to in the Palermo Stone. No boat pits have been found yet around the pyramids of the 6th Dynasty, which may be due to lack of sufficient excavations. Another possibility is that for economic<sup>94</sup> or cultic<sup>95</sup> reasons, the 6th Dynasty rulers made representations of boats in scenes on the walls of their funerary complexes rather than cutting pits and burying actual boats. In support of this conclusion are fragments bearing representations of two boats found within the pyramid of Pepi II.<sup>96</sup>

As to Abubakr's theories, he argued that the three eastern boat pits contained boats that were used in the king's lifetime, and symbolically after death, for the

<sup>92</sup> L. Borchardt, Das Grabdenkmal des Königs Ne-user-Re (Leipzig: 1907), pp. 52-53; Hassan, Giza, VI<sup>1</sup>, 79 and fig. 34.

<sup>93</sup> Hassan, Giza, VI<sup>1</sup>, 82; Černý, "Recently Discovered Boat," p. 79; U. Schweitzer, "Archaeologischer Bericht aus Ägypten," Orientalia 19, (50), p. 120, pl. I, fig. 2.

<sup>94</sup> Kemp, "Old Kingdom," pp. 112-116.

<sup>95</sup> Ibid., p. 112; for the change of cult, especially the struggle between Osiris and the rising sun cults, see Ricke, Bemerkungen, II, 72.

<sup>96</sup> Jéquier, Pepi II, II, pl. 105.

visiting of the important cult centers of Egypt, namely Buto, Sais, and Heliopolis.<sup>97</sup> These sites were visited by the king during his coronation rites.<sup>98</sup> The king would certainly have used boats during his lifetime to visit these cult centers, but there is no proof that he needed them beside his pyramid.

In a later article, Abubakr and Mustafa state clearly that the recently discovered boat of Khufu was not a solar boat.<sup>99</sup> Their analysis is based on a scene from the wall of the tomb of Kaninisut which shows a sailing boat above which a text reads: jw t m Dp r skdwt sht htp nfr wrt: "the coming from Buto and the sailing to the fields of the great beautiful offering," and a second text which reads: skdwt r Jwnw: "sailing to Heliopolis."<sup>100</sup> On this single piece of evidence, which is not even royal in character, they label the five boats of Khufu as follows: one for the pilgrimage to

<sup>97</sup> Abubakr and Mustafa, "Funerary Boat," p. 16.

<sup>98</sup> ibid., p. 98. Abubakr compares the boats presumably connected with this ancient tradition with the modern boats associated with pilgrimages, such as the divine boat of Abdel Kehim el Guenawy at Wena, and other boats on the top of the Miret ibntulun and Imam el Shafi mosques in Cairo, which are considered divine boats for the pilgrimage to Mecca (ibid., p. 101). Such a comparison is dangerous due to the vast differences in belief between ancient and modern Egypt.

<sup>99</sup> Abubakr and Mustafa, "Funerary boat," p. 12.

<sup>100</sup> For translation, see ibid., pp. 15-16; H. Junker, Giza, II, 156. See also the hieroglyphs and their translation by Junker (ibid., p. 169)

Heliopolis; the second for the pilgrimage to Sais; the third for the pilgrimage to Buto; the fourth for various rites of coronation; and the last one for the sons of Horus who participated in the rites of coronation.<sup>101</sup> They support this identification with the following six points, which they do not discuss:

1. The kings of the 4th Dynasty did not officially adopt the dogma of the cult of Ra.

2. The Pyramid Texts do not claim that the kings had a solar boat for themselves.

3. The form of Khufu's boat differs considerably from that of a solar boat, particularly in regard to the bow.

4. Not a single one of the characteristic emblems of the solar boat was found in the pit which contained all the parts of Khufu's boat.

5. Khufu's boat was provided with ten rowing oars and two steering oars, thus it was a real, rather than a symbolic, boat.

6. There is some proof that the funerary boat was once used, e.g., the impressions of the tightly fitting ropes still visible on some of the logs assuring water tightness of the boat.<sup>102</sup>

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<sup>101</sup> Abubakr and Mustafa, "Funerary Boat," p. 16.

<sup>102</sup> Ibid.

Taken one by one, these points can be disproved:

1. It is by no means universally accepted that the kings of the 4th Dynasty did not adopt the cult of Ra. There is, on the contrary, solid evidence that they did so. Djedefra was the first to hold the title "son of Ra."<sup>103</sup> This is important to note, since Djedefra's name is found many times on the blocks of Pit #2.<sup>104</sup> Khafra also held this title, establishing his link with Ra.<sup>105</sup> The worship of Ra dates back to the 1st Dynasty, as shown by the title "highest overseer of Ra" held by a man named Nesewad under King Den.<sup>106</sup> There are names known from the 2nd Dynasty that contain the name of Ra, such as Raneb. One of Djoser's names was Ranub, and his architect Imhotep held the title "high priest of Ra."<sup>107</sup> The only two kings of Dynasty 4 who do not have Ra in their names are Sneferu and Khufu, but there was a man who held the title "high priest of Ra" during the time of

<sup>103</sup> D. Müller, "Der Gute Gott Redjedef Sohn des Re," ZAS 91 (1964), pp. 129-33.

<sup>104</sup> M. Moursi, Die Hohenpriester des Sonnengottes von der Frühzeit bis zum Ende des neuen Reiches (Munich and Berlin: 1972), p. 12.

<sup>105</sup> H. Frankfort, Kingship and the Gods: A Study of Ancient Near Eastern religion as the integration of society and nature (Chicago: 1978), pp. 42.

<sup>106</sup> Moursi, Hohenpriester, p. 12; see also D. Silverman, Review of Die Hohenpriester des Sonnengottes von der Frühzeit bis zum Ende des neuen Reiches, by M. Moursi, JARCE 12 (1976), pp. 11-12.

<sup>107</sup> Ibid., pp. 12-15.

Sneferu,<sup>108</sup> indicating that the cult was active.

Stadelmann has even suggested that these two kings were considered to be embodiments of Ra himself.<sup>109</sup>

2. Other utterances in the Pyramid Texts do state that the king had his own solar boats.<sup>110</sup> Although these texts date from the 5th Dynasty on, they are based on beliefs going back into the Predynastic Period.<sup>111</sup> If they are to be accepted as evidence in this discussion, they must be looked at as a whole.

3. Černy<sup>112</sup> and Jenkins<sup>113</sup> agree with Abubakr and Mustafa that the boat from Pit #2 is not a solar boat, since it does not have a ram-headed or a hawk-headed prow. The hull form of Khufu's boat is similar to that of the hull described in the Pyramid Texts. Khufu's boat may differ in other features, such as the large deckhouse and the hut for the captain, from those mentioned in the solar boats of the Pyramid Texts, but this does not prove that it is not a solar boat.

4. Hassan lists all the determinatives which occur with boats in the Pyramid Texts. Two of these symbols

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<sup>108</sup> Ibid., p. 16.

<sup>109</sup> Stadelmann, Pyramiden, pp. 126ff.

<sup>110</sup> See, for example, Utterances 214 (Faulkner, Pyramid Texts, p. 41), 215 (ibid., p. 42), 217 (ibid., p. 44), 222 (ibid., pp. 49-50), and 263 (ibid., p. 72).

<sup>111</sup> Frankfort, Kingship and the Gods, pp. 148-61.

<sup>112</sup> Černy, "Recently Discovered Boat," p. 76.

<sup>113</sup> Jenkins, Boat Beneath the Pyramid, p. 161.

are flint tools and reed mats.<sup>114</sup> Both of these symbols were found in Khufu's boat.<sup>115</sup> These could well be considered solar symbols, thus disproving Abubakr's and Mustafa's statement that none of the characteristic emblems of the solar boat were found in the pit.

5. The oars cited by Abubakr and Mustafa as proof that Khufu's boat was not a solar boat could be considered symbolic oars. In the mind of the ancient Egyptians, the stars would row and the king would steer the boat.<sup>116</sup> This identification is supported by Lipke,<sup>117</sup> who writes that the oars are too heavy to be used, therefore they must have been symbolic.

6. Contrary to Abubakr's and Mustafa's statement that the boat showed signs of use, there is much evidence that the boat was never used. There are traces of white color on the surface of some pieces of the boat, and a complete absence of water marks on the sides of the boat, which indicate that it was never used on the Nile.<sup>118</sup> Zaki Iskander, who was in charge of the scientific study and conservation of the objects and materials found in

<sup>114</sup> Hassan, Giza, VI<sup>1</sup>, 82-86.

<sup>115</sup> Nour et al., Cheops Boat, I, 43.

<sup>116</sup> Faulkner, Pyramid Texts, p. 60, Utterance 248; p. 91, p. 101, Utterance 320.

<sup>117</sup> Oar No. 22 weighed about 57.15 kg (127 lbs.) (P. Lipke, The Royal Ship of Cheops, (Greenwich Archaeological Series no. 9) (Greenwich: 1984), p. 126.

<sup>118</sup> Nour et al., Cheops Boat, I, p. 9.

the pit, found remains of cedar and acacia wood on the site along with traces of mud plaster covering the blocks of the pits. He concluded that the boat had been built near to where it had been buried.<sup>119</sup> Another boat expert, Landstrom, states that the boat was never painted nor decorated, indicating that the boat was built in a hurry.<sup>120</sup>

The traces that Abubakr and Mustafa point to as proof that the boat was used, namely the impressions of tightly fitting ropes and the shape of the gangplank which supposedly shows the effects of carrying people from the shore to the boat, are based on superficial observation rather than scientific analysis,<sup>121</sup> and should be carefully considered. Lipke states: "If the ship had been used it would seem more than likely that a large number of the battens would be so marked, or at least that the impressions would be concentrated in areas undergoing maximum strain."<sup>122</sup> The bulk of the evidence indicates that the boat was never used.

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<sup>119</sup> Z. Iskander " The Scientific Study and conservation of the objects and materials found in the discovery of the wooden boat at Giza," in Nour et al., The Boat of Cheops, I, 29-57.

<sup>120</sup> B. Landstrom, Ships of the Pharaohs: 4000 Years of Egyptian Shipbuilding (London: 1970), p. 33.

<sup>121</sup> Personal communications with Hag Ahmed at Giza Plateau over a period of time from 1967 to 1980.

<sup>122</sup> Lipke, "Royal Ship of Cheops," p. 125.

Also supporting the hypothesis that the boat was never used is the fact that the deckhouse is not big enough for a comfortably long journey, and has no windows at all.<sup>123</sup> Hag Ahmed's suggestion that reed mats were soaked with water and placed around the deckhouse, to create a cool environment to keep the body of the king fresh while it traveled from Memphis to Giza,<sup>124</sup> is rendered unlikely by the fact that the body would not have traveled alone, and there is no other place on the boat where high officials or royal relatives could travel comfortably. Also, this trip is so short that such an elaborate arrangement would be unnecessary.

Goyon identifies the two boats on the east as sun boats, the boat parallel to the causeway as a cult boat, and the boats on the south as funerary boats.<sup>125</sup> As noted earlier, it is likely that some boats were solar, some for the king as Horus and one was a funerary boat or for Hathor. It seems that in order to identify the function of Khufu's boats, we must first identify the cult which was active at the time when they were buried. As is discussed below, the cults of Ra and Horus were very strong at this time, thus it is likely that the boats were connected with their cults.

<sup>123</sup> Nour et al., Cheops Boat, I, 7-10.

<sup>124</sup> Jenkins, Boat Beneath the Pyramid, p. 162.

<sup>125</sup> Goyon, Secret des Bâtisseurs, pp. 240-242.

It is possible that the eastern boat pits were for boats connected with the king as Horus. These would have served him for his trip to the horizon of Ra. There are two types of boats of Horus which occur in hieroglyphic inscriptions from the Old Kingdom: these are the mj.t boat and the d3t bark, corresponding to these two boat pits which lie on a north-south axis.<sup>126</sup>

In Egyptian religion, the king was considered the embodiment of Horus on earth; Frankfort states: "...there is no doubt that the divinity of pharaoh was specifically conceived as a sharing of essentials with the god Horus."<sup>127</sup> The symbol of the king as Horus is the falcon; in the 4th Dynasty, the epithet of Horus appears with the names of Sneferu and Khufu.<sup>128</sup> The kings of the 4th Dynasty also bore the title nswt-bjty, "king of Upper and Lower Egypt,"<sup>129</sup> making explicit the

<sup>126</sup> For example, a man named Iyenhor held the title "priest of the mj.t bark and d3t bark of Horus" (Porter and Moss, Bibliography, III<sup>1</sup>, 71; Junker, Giza, II, 132). No description of the functions of these two boats is given, but it seems that they were cult boats (A. Erman and H. Grapow, Wörterbuch der ägyptischen Sprache, II (Berlin: 1971), 41). Fischer found that the mj.t bark is mentioned in funerary texts after msktt boats. He also makes parallels with Middle Kingdom funerary scenes and finds that the person who was in charge of the mj.t bark bore a title which can be translated as "the one who enters the mj.t bark" (H. Fischer, "Three Old Kingdom Palimpsests in the Louvre," ZAS 86 (1961), p. 24).

<sup>127</sup> Frankfort, Kingship and the Gods, p. 36; see also J. Cerny, Ancient Egyptian Religion (London: 1952).

<sup>128</sup> Frankfort, Kingship and the Gods p. 39.

<sup>129</sup> Ibid., p. 46.

dual nature of the kingship. It is therefore possible to suggest that the king as Horus required two boats to fulfill this duality.

O'Connor suggests, referring to the Amarna period, but perhaps with a wider application, that an east-west direction was associated with the sun, or universal, god, while a north-south direction represented the living king on earth:

"The disc's progress is from east to west, and the king's from north to south, but these are in fact complementary axes, merging celestial and terrestrial geography, for while the sun disc's progress is from horizon to horizon, the terrestrial realm in Egyptian eyes (especially at centrally placed Akhetaten) has a north-south orientation, created by Upper and Lower Egypt, and the southern and northern groups of foreigners beyond these."<sup>130</sup>

This observation, if true, would support the idea that boats on a north-south axis were Horus boats.

The Pyramid Texts also support the hypothesis that these two eastern boats were connected with the king as Horus:

"The reed-floats of the sky are set down for Horus that he may cross on them to the horizon, to Harakhti, the reed floats of the sky are set in place for me that I may cross on them to the horizon to Re."<sup>131</sup>

<sup>130</sup> D. O'Connor, "The Royal City of Dynasty 18 and the Urban Process in Egypt," unpublished paper.

<sup>131</sup> Faulkner, Pyramid Texts, p. 73, Utt. 264; p. 72, Utt. 263.

This quotation supports the idea that there were Horus boats for the king, but it may appear to suggest that they should be oriented east-west rather than north-south.<sup>132</sup> This passage, however, does not state that the king will fly in the float from the eastern horizon to the western horizon, but that the floats are used to get to the horizon to be with Ra.<sup>133</sup>

Nevertheless, it would seem possible to argue that the two eastern boat pits were for the king as Horus. Their axes were directed north to south<sup>134</sup> because the king as Horus had power that extended north and south. That these boat pits were different in function from the two southern boat pits is indicated by their shapes, which were cut to resemble boats, contrasting with the southern pits, which are simply rectangular in shape. The location of these pits near the upper temple suggests that they were connected with the living king whose activities are recorded in the reliefs of the upper temple, and which perhaps in some degree corresponded to his palace as the living, or "Horus," ruler.

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<sup>132</sup> Another version of the direction suggested by Thomas is that the north-south direction is a solar motion ("Solar Barks," p. 79).

<sup>133</sup> It is possible that the purpose clause is to be understood as the emphasized adverbial adjunct for the nominal (emphatic) passive sdm.f.

<sup>134</sup> Maragioglio and Rinaldi, L'Architettura, IV, 70.

As to the two southern boat pits, they could not have been for funerary boats (Abubakr's theory), as discussed above; perhaps they contained solar boats in which the king was thought to accompany the god Ra in his daily trips across the sky. The Pyramid Texts state that the god Ra has two boats in which to travel east and west.<sup>135</sup> Thomas states: "Here is the sun sailing around the earth in his two boats from E. to W. and W. to E., and moving from one boat to the other at sunrise and sunset."<sup>136</sup> In the New Kingdom, solar boats were found placed prow to prow, a tradition which can be extrapolated to the Old Kingdom. Since the sun always sails west above the earth and east below it,<sup>137</sup> one boat should have been directed to the east, thus representing *msktt*, the night boat, and the second should be directed to the west, thus representing *m(ndt*, the day boat. In this case, the boat that was found in Pit #2, which was directed west, represents the day boat. In this plan, then, the boat in the unexcavated pit, Pit #1, should be directed east and contain the night boat.

Some evidence for this hypothesis can be found in the layout of the two southern pits, which are separated by a wall of living rock which is on the north-south axis

<sup>135</sup> Faulkner, *Pyramid Texts*, p. 301, Utt. 609a.

<sup>136</sup> Thomas, "Solar Barks," p. 66.

<sup>137</sup> *Ibid.*, pp. 65-66.

of the Great Pyramid.<sup>138</sup> One of the two so-called air shafts is located on the central axis of the southern face of the pyramid and faces the east-west axis of the two boats.

Two similar channels are found in the Queen's Chamber; their outer ends are now embedded in the expanded walls of the pyramid.<sup>139</sup> Scholars first suggested that these were air channels opened for ventilation.<sup>140</sup> Badawy and others believe that the channels provided a passage for the king's spirit to ascend to the astral regions.<sup>141</sup>

This latter explanation of the function of the air channels appears to be justifiable. Thus the king would have travelled through the northern channel to join the northern stars.<sup>142</sup> However, in my opinion, the southern

<sup>138</sup> Ibid. p. 72.

<sup>139</sup> Fakhry, The Pyramids, pp. 118-20.

<sup>140</sup> Vyse, Operations Carried on at the Pyramid of Gizeh, I, (London: 1840), 287; Petrie, Pyramids and Temples, pp. 83-84.

<sup>141</sup> A. Badawy, "The Stellar Destiny of Pharaoh and the so-called air-shafts of Cheops pyramid," MDAIK 10, 2-3 (1964), pp. 189ff; I. E. S. Edwards, "The Air Channels of Chephren's pyramid," Studies in Ancient Egypt, the Aegean, and the Sudan: Essays in honor of Dows Dunham (Boston: 1981), p. 56; see also V. Trimbel "Astronomical Investigation concerning the so-called air-shafts of Cheops," MDAIK 10, 2-3 (1964), pp. 183-87; cf. discussion in E. Thomas, "Air Channels in the Great Pyramid," JEA 39 (1953), p. 113.

<sup>142</sup> See Hassan, Giza, X, 11. The north entrance faces the Imperishable Stars who also, according to the Pyramid Texts, were the rowers of the boats (Faulkner, Pyramid Texts, p. 14, Utt. 214; pp. 279-80, Utt. 667.

channel in the King's Chamber would have been provided for Khufu as Ra to travel to the day and night boats south of the pyramid. These channels occur only in the pyramids of Khufu and Khafra,<sup>143</sup> which are also the only two pyramids to be associated with five boat pits; thus the connection between channels and boat pits is strengthened.

The eastern boat pits were cut during or right after the construction of the pyramid of Khufu and these two boats were cut before the change in the cult of Khufu. Either this type of boat might exist in earlier pyramids or they might also be an invention of Khufu.

Another reason for understanding the southern boats to be solar is that during the construction of the pyramid complex of Khufu, the cult of the king changed and Khufu became Ra himself. Stadelmann suggested this idea because the name of Khufu's pyramid, *Ḥt Hwfw*, "the horizon of Khufu," indicates that Khufu is to be equated with Ra, whose natural location is on "the horizon." Furthermore, he notes that Djedefra and Khafra, the sons and immediate successors of Khufu, were the first kings to bear the title *s3 R(*, "sons of Ra," suggesting that their father, Khufu, was Ra.<sup>144</sup>

<sup>143</sup> Maragioglio and Rinaldi, *L'Architettura*, IV, pp. 129-30, obs. 33.

<sup>144</sup> Stadelmann, *Pyramiden*, pp. 126ff.

Further support for this idea, in my opinion, is the enlargement of the Upper Temple of Khufu and the abandonment of the ritual pyramid.<sup>145</sup> Moreover, the kings of the Old Kingdom who had a pyramid were buried beneath it, with the exception of Khufu, who was buried within it. 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; the normal burial chamber was placed under the ben-ben from Dynasty III (except for that of Khufu). A burial chamber within the ben-ben would identify the king with Ra, because the god and the king would be on the horizon.<sup>146</sup>

Since the ramp from the southern quarry to the pyramid site occupied the south side of the pyramid for the period of its construction,<sup>147</sup> the southern boat pits could have been begun by Khufu after the ramp was removed and finished by Djedefra after his father's death; or built completely in the time of Djedefra. That the pits were planned and started by Khufu and completed by his son is perhaps preferable since Khufu was the one who was responsible for the establishment of his cult.

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<sup>145</sup> Lehner, Satellite Pyramid, pp. 72-74.

<sup>146</sup> See Fakhry, The Pyramids, p. 8, for the shape of the ben-ben; see also Edwards, The Pyramids of Egypt, pp. 290-293, for a full discussion of the ben-ben and the pyramid shape.

<sup>147</sup> Lehner, "Khufu project," p. 8.

The Abousir Papyri refer specifically to two boats connected with the upper temple of Neferirkare, wj3 mpt, the northern boat, and wj3 rsj, the southern boat.<sup>148</sup> It is not clear whether these terms refer to the northern and southern boats of the temple or the northern and southern boats of the king of Upper and Lower Egypt. However, it seems that these two boats have the same function as the two eastern boats of Khufu because the latter have a north-south orientation. The papyri refer to the inspection of the boats and mention damage that was incurred by one boat.<sup>149</sup> The report implies that the boats in the funerary establishments were inspected daily during the 5th Dynasty, perhaps to assure that they were there so that the king could use them. These inspections were carried out by the temple staff.<sup>150</sup>

It is most likely that the fifth boat pit, as Černy suggests,<sup>151</sup> contained the funerary boat in which the body of Khufu was transported to Giza. Its position parallel to the causeway, outside the pyramid complex proper, supports this theory.

<sup>148</sup> Posener-Kriéger, Les Archives, II, 430, 437, 509.

<sup>149</sup> Ibid., p. 509.

<sup>150</sup> Ibid., pp. 512-514.

<sup>151</sup> Černy, "Recently Discovered Boat," p. 78.

### I.5: OTHER STRUCTURES AROUND THE PYRAMID

Scattered around the pyramid complex of Khufu are several constructions whose functions are unknown or whose existence is uncertain. Following is a list of these features:

1. The "Nebenpyramid";
2. The North chapel;
3. The "trial passage," and the narrow trench;
4. GI-x (the unfinished pyramid);
5. G 7000x (the secret tomb of Hetepheres).

#### I.5.1 THE "NEBENPYRAMID"

This construction was found and named by Junker during his excavations in the GIS cemetery south of the Great Pyramid.<sup>1</sup> It lies about 21.50 m. south of the base of the pyramid, 42 m. from the pyramid's southeastern corner, and just outside of the second enclosure wall.<sup>2</sup> It is cut into the rock of the plateau, and consists of a 4.30 m. long descending passage which slopes to the north and ends in a small room, 1.5 m. x 1.2 m. x 0.8 m. The passage measures 0.9 m. in height and 1 m. in width. The

<sup>1</sup> Junker, Giza, X, 9-12, fig. 6.

<sup>2</sup> See ibid.

top of the room is 1.3 m. below the surface of the bedrock and lies under the second enclosure wall.<sup>3</sup> The walls and floor of this room are well dressed.<sup>4</sup>

Maragioglio and Rinaldi believe that the "Nebenpyramid" was probably constructed during the reign of Khufu.<sup>5</sup> A terminus ante quem is provided by the second enclosure wall, under which it lies. This second wall was built during the construction of the southern row of large mastabas, which forced the wall to be built much closer to the pyramid than it otherwise might have been.<sup>6</sup> The mastabas were built in the period from the end of the reign of Khafra through the beginning of the reign of Menkaura.<sup>7</sup> The second enclosure wall also lies over the southern boat pit, which was built by Djedefra.<sup>8</sup> Thus, the wall must have been built in the time of Menkaura or later, and the "Nebenpyramid" must have been built before this. Thus there is no proof that the "Nebenpyramid" was built during the reign of Khufu; one

<sup>3</sup> Ibid.; Maragioglio and Rinaldi, L'Architettura, IV, 74-75, pl. 2, fig. 4; Lehner, Satellite Pyramid, p. 37.

<sup>4</sup> Maragioglio and Rinaldi, L'Architettura, IV, 74-75.

<sup>5</sup> Ibid., pp. 172-74, obs. 56.

<sup>6</sup> The contemporaneity of the wall with the mastabas is proven by the discovery of a fragment of the wall's mud plaster beneath the superstructure of one of the mastabas (Maragioglio and Rinaldi, L'Architettura, IV, 174, obs. 56).

<sup>7</sup> Reisner, Giza, I, 82.

<sup>8</sup> Nour et al., Cheops Boat, I, 7.

can only say that it was built before the end of Khafra's reign.

According to Lehner, the only possible place for a supply ramp from the southern quarry to the pyramid was on the southern side of the pyramid.<sup>9</sup> This ramp must have been in place for most, if not all, of Khufu's reign. If this reconstruction is correct, as seems probable, it is unlikely that the "Nebenpyramid" could have been dug during Khufu's reign at all, as the southern side of the pyramid should have remained free of any architectural element while the ramp was in place.

In attempting to interpret the function of the "Nebenpyramid", most scholars work on the assumption that it was built during Khufu's reign. A pyramid superstructure is postulated on the basis of the substructure, which resembles the substructures of subsidiary pyramids elsewhere.<sup>10</sup> The most important of the theories are as follows:

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<sup>9</sup> Lehner "Contextual Approach," pp. 13-15. The supply ramp could not have come from the west, as Khufu began to erect the tombs in this area in year 5 of his reign. Tombs also were begun on the east side of the pyramid early in Khufu's reign (year 15), ruling out a supply ramp on this side. The north side is excluded, since there are no quarries to the north. This leaves the south side, which was the most likely side due to the position of the quarry, which lies south of the pyramid.

<sup>10</sup> Maragioglio and Rinaldi, L'Architettura, IV, 74.

Junker thought that this structure was planned as a queen's pyramid. Possibly for topographical reasons, it was abandoned and rebuilt to the east.<sup>11</sup>

Reisner also believes that the "Nebenpyramid" was built as a queen's pyramid, pointing out that before and after Khufu's time, the location of queens' pyramids was to the south of the main pyramid. He uses as examples the southern pyramid complex of Sneferu at Dahshur and the pyramid complexes of Khafra and Menkaura at Giza. He believes, with Junker, that it was abandoned because of the proximity of the quarry.<sup>12</sup>

Several objections have been raised to this hypothesis. Maragioglio and Rinaldi point out that the subterranean apartments of the eastern subsidiary pyramids are very different from the "Nebenpyramid".<sup>13</sup> Also, the location of this construction is very near to the pyramid base; this is not a suitable place for a queen's pyramid: a queen's pyramid should be far enough from the base of the main pyramid to accommodate a good-sized superstructure. Further, there is no evidence at all for any superstructure.

<sup>11</sup> Junker, Giza, X, 9-12, fig. 6.

<sup>12</sup> Reisner, Giza, I, 72.

<sup>13</sup> Maragioglio and Rinaldi, L'Architettura, IV, pl. 11, fig. 4; 172-174, obs. 56.

The comparisons Reisner draws to other southern subsidiary structures are partially invalidated by the fact that it is far from certain that all of the parallels cited were queens' pyramids.<sup>14</sup> In any case, there is no evidence for any superstructure for the "Nebenpyramid", so the assumption that there would have been a pyramid built over it is not justified.

Another theory concerning this structure is voiced by Maragioglio and Rinaldi. They suggest that it is a tomb (Reisner type 9) which predates the Great Pyramid, and which was abandoned when the pyramid was built.<sup>15</sup> They reject their own theory because the passage is short and the chamber would not have been deep enough if the eventual superstructure had been built.<sup>16</sup>

<sup>14</sup> Ricke, for example, labels several of these subsidiary pyramids "cult pyramids" that would have been connected with the cult of the king himself (Bemerkungen, II, 125-26). The southern subsidiary pyramid in the Bent Pyramid complex at Dahshur certainly belonged to the king himself, rather than to a queen (Maragioglio and Rinaldi, L'Architettura delle Piramidi Menfite, III: Il Compresso di Meydum, la Piramide a Doppia Pendenze e la Pietra di Dahsciur (Rapello: 1964), 74-83). Khafra's southern subsidiary pyramid is discussed below, see pp. 163-168; P. Lacovara and M. Lehner ("Brief Communications: An enigmatic object explained," JEA 71 (1985), 169-174), Reisner, (Giza, I, 131, fig. 66), and Maragioglio and Rinaldi, (L'Architettura, V, 90-93, 130-1) consider GII-a to be a queen's pyramid. Ricke (Bemerkungen, II, 125-26) and J. P. Lauer "Récherche et découverte du tombeau sud de l'Horus Sekhem-khet dans son complexe funéraire à Saqqarah," RdE 20 (1968), p. 123) believe it was a cult or satellite pyramid.

<sup>15</sup> Maragioglio and Rinaldi, L'Architettura, IV, 174.

<sup>16</sup> Ibid.

A fourth hypothesis, expounded by Brinks, suggests that the "Nebenpyramid" was built as the substructure for a satellite or ritual pyramid for Khufu.<sup>17</sup> Maragioglio and Rinaldi reject this theory, stating that if the Giza plateau was empty of any structure when Khufu began his pyramid, then any ritual pyramid would have been built on the north-south axis of the Great Pyramid, as at Dahshur, and noting further that the space available for the hypothetical superstructure of this construction is very small, not nearly large enough to justify identification as the ritual pyramid for a pyramid as large as Khufu's.<sup>18</sup>

A final hypothesis offered by Maragioglio and Rinaldi suggests that the "Nebenpyramid" is a serdab similar to the one found south of the pyramid of Khafra.<sup>19</sup> Khafra's serdab held a carrying shrine and could also have held a statue 1.6 m. high.<sup>20</sup> Their objection to this theory is the later treatment of the area by Djedefra and his successors, which indicates to

<sup>17</sup> J. Brinks, Die Entwicklung der Königlichen Grabungen des alten Reiches (Hildesheim: 1979), pp. 113, 122 pl. 5.

<sup>18</sup> Maragioglio and Rinaldi, L'Architettura, IV, 174-176, obs. 56.

<sup>19</sup> Ibid.

<sup>20</sup> Lacovara and Lehner, "An enigmatic object explained," p. 6; see below, pp. 168-171. for further description of this feature.

them that the construction was not considered important, as it should have been if it were a serdab.<sup>21</sup>

From the various theories, it is clear that the evidence is inconclusive. It is possible that the area on the south of Khufu's pyramid was free of structures during the building of the pyramid, due to the presence of the supply ramp.<sup>22</sup> The "Nebenpyramid" probably had no significance with reference to Khufu's pyramid. Most likely it was dug before or after Khufu's reign and has nothing to do with the cult of the king.

#### I.5.2 THE NORTH CHAPEL

Of all the Egyptologists who have studied the area north of the Great Pyramid, only Maragioglio and Rinaldi believe that they have found evidence for a northern cult chapel. They suggest that no one had found traces of such a feature because they were not looking for it, and present as evidence an unpaved area which lies below the center of the north face of the pyramid, just opposite

<sup>21</sup> Maragioglio and Rinaldi, L'Architettura, IV, 174-176, obs. 56.

<sup>22</sup> See below, pp. 119-120.

the entrance, and measures 4-6 m. wide and up to 1.30 m. deep.<sup>23</sup>

Before assuming that this gap represents the site of a northern cult chapel, Maragioglio and Rinaldi explore the possibility that it might have been dug in the time of Mamoun, son of Haroun El Rashied, in connection with attempts to find the entrance to the pyramid. They suggest that the Arabs abandoned their pit when they reached the solid rock below the pavement.<sup>24</sup>

Maragioglio and Rinaldi reject this theory, since the entrance to the pyramid was evidently known before the time of Mamoun.<sup>25</sup> Moreover, there is no evidence to the south, west, or east of the great pyramid to show that the Arabs searched for the entrance on those sides; it seems instead that they knew that the entrance of the great pyramid was on the north side. Further, it is likely that they knew the exact location of the entrance, and unlikely that they would try to dig through the courtyard to find it.

Thus, Maragioglio and Rinaldi are left with the assumption that the gap in the courtyard represents the area occupied by a building which has been destroyed. They theorize that whatever was there was dismantled, by

<sup>23</sup> Maragioglio and Rinaldi, *L'Architettura*, IV, 60.

<sup>24</sup> *Ibid.*, pp. 160-162, obs. 44.

<sup>25</sup> *Ibid.*

the Arabs or even the ancient Egyptians, and used as building material.<sup>26</sup>

Maragioglio and Rinaldi conclude that the supposedly dismantled building was a chapel or north cult building, possibly connected with an altar, as is seen at the Bent Pyramid at Dahshur.<sup>27</sup> This hypothesis, however, has no archaeological support. The existence of a cult chapel on the north is excluded by the presence of the cult area on the east between the base of the great pyramid and the west wall of the upper temple. It is unlikely that this gap in the courtyard pavement has anything to do with an Old Kingdom structure.

### I.5.3: THE "TRIAL PASSAGES" AND THE NARROW TRENCH

North of the causeway of Khufu and beside the secret tomb of Hetepheres I are corridors cut out of the rock (plan: 6).<sup>28</sup> These passages, called the trial passages, lie 87.50 m. from the eastern base of Khufu's pyramid and 43.50 m. north of the east-west axis. The passages are

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26 Ibid.

27 Ibid.

28 Ibid., p. 68, pl.9.; Lehner, Satellite Pyramid, pp. 45ff., fig. 10.

oriented north to south; the rock was cut carefully and well squared, and some parts were cased with mortar.<sup>29</sup>

The passages have a total length of 22 m. and a total vertical depth of 10 m. At the north end there is an opening in the bedrock which is cut in steps. This becomes a sloping passage 1.05 m. wide and 1.20 m. high, which continues at a mean angle of  $260^{\circ} 32'$  for a distance of about 21 m. At a point about 11 m. from the north entrance to this passage, a second passage, of almost identical cross-sectional dimensions, begins. This second passage ascends southward at approximately the same angle as that by which the first passage descends. At 5.8 m. from its beginning, this second passage reaches the surface of the bedrock and widens into a corridor which is open to the sky. A square shaft, about 0.72 m. in width, was cut vertically from the surface of the bedrock to the point where the two passages meet.<sup>30</sup>

About 6 m. west of the trial passages is another long corridor called the narrow trench.<sup>31</sup> This runs parallel to the other passages, and is almost exactly

<sup>29</sup> Maragioglio and Rinaldi, L'Architettura, IV, 58.

<sup>30</sup> Lehner, Satellite Pyramid, p. 45, figs. 9, 21, 23; for the location of these passages, see Maragioglio and Rinaldi, L'Architettura, IV, 68-70, pl. 9, figs. 136.

<sup>31</sup> Lehner, Satellite Pyramid, D in figs. 9, 21, 23; Maragioglio and Rinaldi, L'Architettura, IV, 70.

equal in width to the vertical shaft in the trial passages. Its southern end is well-cut but its northern end was left rough. It measures 0.15 m. deep at the north end and 0.43 m. deep at the south end. It is 0.71 m. wide and 7.35 m. long.<sup>32</sup> Lehner believes that it has some connection with the trial passages.<sup>33</sup>

The function of these trial passages has been debated by scholars since their discovery by Ferring and Vyse, who believed that they were part of the substructure of a fourth queen's pyramid which was left without a superstructure.<sup>34</sup> They offer as evidence for this view the fact that these passages lie on the same north-south axis as G I-a, b, and c. They also note that the rock around the north entrance to the passages was levelled, indicating that there was a superstructure planned.<sup>35</sup>

Petrie, who also examined and mapped these passages, noted the similarity between these passages and the passages inside the Great Pyramid. He suggests that the trial passages functioned as a model for the Great Pyramid's interior structure.<sup>36</sup> Petrie found that "the

<sup>32</sup> Maragioglio and Rinaldi, L'Architettura, IV, 70; for slightly different measurements, see Lehner, Satellite Pyramid, pp. 45-46.

<sup>33</sup> Lehner, Satellite Pyramid, p. 45.

<sup>34</sup> Vyse, Operations, I, 89.

<sup>35</sup> Vyse, Operations, II, 130.

<sup>36</sup> Petrie, Pyramids and Temples, pp. 50-51, pls. II, III.

trial passages" had the same height and width as the passages in the pyramid, but were shorter in length. The only feature that differs in the two sets of passages is the vertical shaft, which he did not recognize as appearing in the pyramid.<sup>37</sup> According to Maragioglio and Rinaldi, the trial passages reproduce the following features of the pyramid passages: the descending corridor (d); the ascending corridor (a); the northern end of the Grand Gallery (g) with the lateral benches; and the middle horizontal corridor (h), which is only roughly outlined.<sup>38</sup> A final point of evidence which convinces Maragioglio and Rinaldi is the fact that the rock was levelled on the sides of the north opening, which they interpret as an indication of the point where a passage built in masonry continued hewn in the rock.<sup>39</sup>

Lehner brings up the story of Khufu and the Magician from the Westcar Papyrus in possible support of this theory.<sup>40</sup> This story relates Khufu's attempts to discover the number of the secret chambers of the god Thoth so that he could model his tomb after them.<sup>41</sup> Lehner, however, also lists several objections to the

<sup>37</sup> Ibid., p. 50.

<sup>38</sup> Maragioglio and Rinaldi, L'Architettura, IV, 68.

<sup>39</sup> Ibid., p. 170, obs. 53.

<sup>40</sup> Lehner, Satellite Pyramid, pp. 45-47.

<sup>41</sup> W. K. Simpson et al., The Literature of Ancient Egypt (New Haven: 1977), p. 15.

theory that these are model passages: flaws in the sides of the passages would not have been filled with plaster if they were not meant to be used; the lower part of the ascending passage narrows as if to provide a resting place for plugging blocks, which implies a superstructure and a burial; the north opening of the descending passage is cut in steps as if to provide a place for the masonry of a superstructure; and the narrow trench appears to mark the north-south axis of a pyramid.<sup>42</sup> On the basis of these points, he reconstructs a pyramid over the area. This pyramid would have been either comparable in size to GI-a, b, c, or twice as large as these pyramids, and would have lain on their north-south axis.<sup>43</sup> The upper temple, the causeway, and the fifth boat pit were cut into the hypothetical area of this pyramid, indicating that it was never built.

Lehner suggests that this pyramid might have been planned as a satellite, or ritual, pyramid for Khufu. He thinks that it might have been planned to be twice as large as the eventual queens' pyramids, and assumes that it was abandoned for topographical reasons.<sup>44</sup> Lehner's reconstruction of a pyramid in this area is reasonable and fits the evidence well. However, it is unlikely that

<sup>42</sup> Lehner, Satellite Pyramid, pp. 50-51.

<sup>43</sup> See ibid., pp. 63ff, figs. 9 and 15.

<sup>44</sup> Ibid., pp. 79-85.

this pyramid was meant to be a ritual pyramid for Khufu.<sup>45</sup>

#### I.5.4: THE UNFINISHED PYRAMID (GI-X)

In 1924, George Reisner found the substructure of an unfinished pyramid just east of pyramid GI-a. He labelled this GI-x. About 12.7 m. north of this, almost on the east-west axis of Khufu's pyramid, is the shaft in which the funerary furniture of Hetepheres I was found; this is referred to as G7000x.<sup>46</sup> GI-x is a T-shaped cutting in the rock consisting of: an open trench which slopes from north to south and measures 6.35 m. wide; and a corridor descending from north to south which measures 0.54 m. high, 0.85 m. wide, and 3.75 m. long.<sup>47</sup> Traces of plaster were found in the bar of the T, indicating to Reisner that masonry had once been set into the cutting.<sup>48</sup>

Reisner believes that this cutting was abandoned when the nearby tomb of Hetepheres I was dug. At this

<sup>45</sup> See below, pp. 118-123.

<sup>46</sup> Maragioglio and Rinaldi, L'Architettura, IV, 96, and pl. 2, fig. 5; Lehner, Satellite Pyramid, p. 4.

<sup>47</sup> Reisner, Giza, I, fig. 18; Maragioglio and Rinaldi, L'Architettura, IV, 96; Lehner, Satellite Pyramid, p. 3.

<sup>48</sup> Reisner, Giza, I, 70, Lehner, Satellite Pyramid, p. 3; see also Maragioglio and Rinaldi, L'Architettura, IV, 96.

time, the site of the pyramid was shifted 28 m. to the west, and GI-a was built instead of GI-x.<sup>49</sup>

Reisner arrived at this conclusion after comparing the passages of GI-x to the passages of GI-a and finding them to be very similar.<sup>50</sup> Thus, according to Reisner, GI-x was begun before G7000x. He also believes that this explains the proximity of GI-a to the upper temple.

Lehner offers a different explanation for the existence of GI-x. Based on the relationship which he sees between GI-x and G7000x, he suggests that the two were features of the same subsidiary complex. According to his theory, G7000x was dug first, and GI-x was started later, only to be abandoned when the plan of the Eastern Field was changed.<sup>51</sup>

Maragioglio and Rinaldi offer another alternative explanation for GI-x, namely that it represents a trial cutting designed to test the process of laying masonry onto bedrock for the entrances of the small pyramids.<sup>52</sup>

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49 Reisner, Giza, I, 70-72.

50 Ibid.

51 Lehner, Satellite Pyramid, pp. 7-14, 35-40; see below, pp. 101-111.

52 Maragioglio and Rinaldi, L'Architettura, IV, 182, obs. 76.

I.5.5: THE SECRET TOMB OF HETEPHERES I (G7000X)

A group of burial goods, including an empty sarcophagus, from the 4th Dynasty was found in 1925 by Alan Rowe, Reisner's assistant, in the construction labelled G7000x (plan: 8).<sup>53</sup> Various inscribed objects from the tomb indicate that its owner was named Hetepheres, who was evidently the wife of Sneferu and the mother of Khufu.<sup>54</sup> G7000x consists of a stairway with twelve steps, each 3.4 cm. long and 5.5 cm. wide, a vertical shaft, about 27.42 m. deep, and a burial chamber, 5.22 m. north to south, 2.67-2.77 m. east to west, and 1.95 m. in height.<sup>55</sup> The shaft follows two vertical fissures in the rock, which facilitated its construction; the sides of the shaft were left rough.<sup>56</sup> Cuttings in the walls and floor of the burial chamber indicate that it was left unfinished, and would otherwise have been somewhat larger.<sup>57</sup>

The shaft was filled to the top with limestone-plaster blocking. Artefacts and sherds were included in

<sup>53</sup> G. A. Reisner, "The Tomb of Hetep-heres," BMFA 25 (1927), p. 2.

<sup>54</sup> Ibid., pp. 1-12.

<sup>55</sup> Reisner, "Hetep-heres," p. 6.

<sup>56</sup> Ibid., p. 31.

<sup>57</sup> Reisner, Giza, II, 15-16.

this fill.<sup>58</sup> An uninscribed mud sealing was found near the bottom of the shaft, and at the very bottom were found fragments of an inscribed sealing bearing the name of Khufu's mortuary workshop.<sup>59</sup>

A niche in the west wall of the shaft, 2.10 m high and 1.67 m deep, contained an offering for the queen.<sup>60</sup> This niche had been blocked with plastered masonry; the offering consisted of three leg bones of a bull wrapped in a reed mat, a horned skull which had been crushed, two wine jars, a limestone boulder, two chips of basalt, and some charcoal.<sup>61</sup> Reisner believes that the boulder, the basalt, and the charcoal are intrusive and do not belong to the original offering.<sup>62</sup>

In the burial chamber of G7000x were found many objects. Among these were: an alabaster sarcophagus; a bed canopy, on whose jambs were written the names and titles of Sneferu; a curtain box, also bearing names and titles of Sneferu; two armchairs; a carrying chair; a leather case for walking sticks; several wooden boxes; some copper tools; plentiful jewelry; and numerous other small objects. Four of these articles, namely the

<sup>58</sup> Reisner, Giza, I, 176; Reisner and Smith, Giza, II, 13, pls. 1-2 and figs. 12-14; Lehner, Satellite Pyramid, pp. 30-31.

<sup>59</sup> Reisner and Smith, Giza, II, 14.

<sup>60</sup> Ibid., p. 13.

<sup>61</sup> Ibid.

<sup>62</sup> Reisner, "Hetep-heres," p. 7; see below, pp. 104-107.

carrying-chair, a small box containing silver anklets, an inlaid panel, and a gold disc, bore the name of Hetepheres and the title "Mother of the King of Upper and Lower Egypt."<sup>63</sup> Mud-sealings bearing the name of Khufu were also found in some of the boxes.<sup>64</sup> Pottery sherds were scattered about the chamber; fragments from specific vessels were found far apart.<sup>65</sup> Two groups of copper tools were found in the burial chamber, the first on the floor under the bed canopy and the second on top of the deposit by the southwest corner of the sarcophagus.<sup>66</sup> Debris of local stone and other rubbish was left in the chamber.<sup>67</sup>

A sealed recess in the west wall of the burial chamber contained an alabaster canopic chest on a small wooden sledge. This chest was of the same stone and workmanship as the sarcophagus.<sup>68</sup> It was divided into four compartments, three of which contained packages lying in a solution of natron and water and the fourth of which contained dried organic material. A mud seal, protected by a small pottery lid, was found on the lid of

<sup>63</sup> Reisner and Smith, Giza, II, 23-47; Reisner, "Hetepheres," pp. 30-31.

<sup>64</sup> Reisner and Smith, Giza, II, 48.

<sup>65</sup> Ibid., p. 60.

<sup>66</sup> Lehner, Satellite Pyramid, pp. 25-26.

<sup>67</sup> Reisner, "Hetepheres," p. 20.

<sup>68</sup> Reisner, "The Empty Sarcophagus of the mother of Cheops," BMFA 26 (1928), p. 81.

the box.<sup>69</sup> Splashes of plaster lay on the floor near the niche, under the surrounding deposit of equipment.<sup>70</sup>

Reisner accounts for the condition of the burial chamber, the broken and scattered pottery, chips from the sarcophagus lid found scattered around the chamber, the lack of a superstructure, and the lack of a body, with the following hypothesis: Hetepheres died during the first part of Khufu's reign (as indicated by the sealings from his mortuary service) and was originally buried by him at Dahshur, near the body of her husband Sneferu. At some point in Khufu's reign, her tomb was broken into and her body was stolen.<sup>71</sup> Khufu found out that the tomb had been disturbed and had the burial completely dismantled and moved to Giza, where G7000x was hastily dug to receive it. Since the side of the alabaster sarcophagus facing the wall of the chamber is damaged, which would have been impossible to do while it was in its eventual position, Reisner suggests that this side was not originally against the wall. He thus concludes that the contents of G7000x are in reverse order from their places in the original tomb at Dahshur.<sup>72</sup> Reisner accounts for the equipment found in the blocking of the shaft by

69 Ibid., pp. 21-22.

70 Ibid., p. 81.

71 Reisner, "Hetep-heres," p. 23.

72 Reisner and Smith, Giza, II, 16.

suggesting that it represents forgotten items that were thrown down into the shaft at the last minute. Since an offering was made at the new tomb, Khufu presumably did not know that the body of the queen was missing. These events would have occurred during the paving of Khufu's upper temple, accounting for the basalt fragments in the offering niche, and would have been carried out hastily and in secret.<sup>73</sup> GI-x, which was being built for one of Khufu's queens, was then abandoned because of its proximity to Hetepheres' new tomb.<sup>74</sup>

Lehner has several objections to Reisner's interpretation of G7000x. For example, he finds it unlikely that robbers would have carefully lifted the lid of the sarcophagus, rather than smashing it, and that they would have left the other valuables in the tomb alone. He does not believe that Khufu would have allowed the burial to take place without seeing the body, and suggests that if the original burial had indeed been made at Dahshur (a theory for which there is absolutely no proof) the second burial should also have been made there. He objects to the idea of a "secret tomb," seeing no 4th Dynasty parallels for such a burial, and also seeing no way to keep the digging of a deep shaft and

<sup>73</sup> Reisner, "Hetep-heres," pp. 30-34.

<sup>74</sup> Ibid., p. 9.

burial chamber secret. Finally, a reburial undertaken as an act of filial piety should not contain broken pottery and violated equipment.<sup>75</sup>

Lehner also disagrees with Reisner's suggestion that GI-x was abandoned after G7000x was dug, finding it unlikely that mortuary personnel, who must have known the proposed layout of the complex, would have dug a tomb for Hetepheres where it would interfere with another important tomb.<sup>76</sup> He advances the following alternative hypothesis: Hetepheres died early in Khufu's reign, and G7000x was hastily prepared for her burial. It was dug in conformity to 3rd Dynasty prototypes, and the form of its superstructure had not yet been determined. Soon afterward, GI-x was begun as a second substructure meant to lie under the same superstructure. Eventually, the northern entrance to this superstructure would have been built directly above G7000x, thus the layout would have conformed to the 3rd Dynasty prototype seen in the southern subsidiary pyramid in the Bent Pyramid complex at Dahshur.<sup>77</sup> At some point soon after GI-x had been begun, the plan of the Eastern Field was modified, due to the enlargement of the upper temple, GI-x was abandoned,

<sup>75</sup> Lehner, Satellite Pyramid, pp. 2-4.

<sup>76</sup> Ibid., p. 4.

<sup>77</sup> Lehner, Satellite Pyramid, pp. 35-40, pp. 35-40; see above pp. 99-100.

and the three small pyramids, GI-a, b, and c, were built. Hetepheres' body was then taken from G7000x and buried with a new set of funerary equipment in one of these pyramids, probably GI-a or GI-b.<sup>78</sup>

Lehner enumerates each of Reisner's points of proof and gives alternative interpretations of their meaning that fit with his theory. For example, he accounts for the basalt fragments found in the offering niche by suggesting that they are tools,<sup>79</sup> and suggests that the limestone boulder was thrown into the niche to crush the skull and invalidate the offering.<sup>80</sup> He proposes that the second group of copper tools found in the burial chamber was left by the workmen who pried off the lid of the sarcophagus and removed the body of the queen;<sup>81</sup> and points out that if robbers had removed the lid, they probably would have smashed it rather than removing it carefully. He also notes that the chipping of the lid is not just on the east side, but runs around the lid, allowing for the possibility that this was done while the sarcophagus was in G7000x.<sup>82</sup>

78 Lehner, Satellite Pyramid, pp. 15-17. See below, pp. 121-123.

79 Lehner, Satellite Pyramid, p. 25.

80 Ibid., p. 33.

81 Ibid., pp. 25-28.

82 Ibid., pp. 28-29.

Many of Lehner's points are very convincing, but his theory still does not account adequately for all of the evidence. If G7000x represents the original burial, why was the tomb left in such disorder; why was the Queen Mother buried in such haste? Most importantly, as Lehner himself recognizes,<sup>83</sup> the presence of the canopic material in G7000x argues against official removal of the body after the burial.

An alternative theory that could be proposed and that deals with these points is that Hetepheres was originally buried in GI-a or GI-b (more probably GI-a) and then moved to G7000x, which represents a pre-existing cutting from the 2nd or 3rd Dynasty, either at the end of the Old Kingdom or during the First Intermediate Period. There is much evidence that a good deal of Khufu's complex was destroyed during this time, and it is possible that the mortuary service responsible for Khufu's funerary cult moved Hetepheres' burial in order to hide it from pillagers.<sup>84</sup> The body may have been removed from its original burial by vandals looking for jewels. The offering in the niche was probably transferred hastily from its original place, accounting for its disturbed condition. The basalt chips found with

<sup>83</sup> Ibid., pp. 40-41.

<sup>84</sup> For discussion of this theory, see below, p. 576.

it would thus indicate that the burial was made after the upper temple had been destroyed, rather than while it was being built.

This theory takes into account Reisner's observations which suggest that the objects in the tomb are in reverse order from their original positions. A reversal of this sort is reasonable to expect if the equipment was moved over a short distance, such as that from GI-a to G7000x, but not if it was moved from Dahshur to Giza.<sup>85</sup> It also accounts for the lack of an official seal over the entrance to the vertical shaft. The tools in the chamber would thus have been left by the workers who moved the burial, and the limestone debris would represent residue from the vandalized pyramid complex. The artefacts and pottery in the shaft are indicative of the haste in which this secret tomb was prepared.

That G7000x is a 3rd Dynasty type of construction is pointed out by Lehner.<sup>86</sup> It fits well into Reisner's category IV B (2), which is known from the 2nd and 3rd Dynasties.<sup>87</sup> It could easily have been dug much earlier and abandoned before Khufu's complex was begun. Other

<sup>85</sup> Lehner points out that this reversal of objects would make much more sense if the burial had been moved over a short rather than a long distance, (Satellite Pyramid, p. 27) but does not account for his observation in his hypothesis.

<sup>86</sup> Ibid., pp. 36-37.

<sup>87</sup> Reisner, Tomb Development, p. 7.

2nd and 3rd Dynasty tombs have been found at Giza, proving that the site was used during these periods.<sup>88</sup>

GI-a would have served nicely as Hetepheres's original tomb. Lehner reconstructed the bed canopy and arranged the furniture in what should have been its original position and concluded that all would have fit almost perfectly into the burial chamber of GI-a.<sup>89</sup> However, GI-b or GI-c are also possibilities for the original tomb, as their burial chambers are of comparable size and shape.<sup>90</sup> GI-a and GI-b remain the more likely, however, since their alternative attributions are less definite.<sup>91</sup>

The main difficulty with Reisner's hypothesis is: how would Hetepheres's burial goods have been moved all the way from Dahshur to Giza in secrecy? Also, there is no trace of a tomb for her at Dahshur.<sup>92</sup> These points render Reisner's hypothesis unlikely.

Lehner's theory also leaves several important questions unresolved. First, why should Hetepheres have been buried in such haste that her tomb was left in complete disorder? Second, the presence of her canopic

<sup>88</sup> Porter and Moss, Bibliography, III<sup>1</sup>, 294-295.

<sup>89</sup> Ibid., pp. 42-43, fig. 8.

<sup>90</sup> Lehner, Satellite Pyramid, p. 22; see above, pp. 40-44.

<sup>91</sup> See above, pp. 46-49.

<sup>92</sup> See Lehner, Satellite Pyramid, pp. 4-5.

material within the tomb makes it improbable that her body was removed under official auspices. Finally, if this last point is ignored, and the hypothesis that her body was officially moved, why would a completely new set of funerary equipment have been made? Further, why should her funerary equipment have been hidden while other important burials were left unprotected?

It would appear more likely that the funerary equipment of Hetepheres I was moved from its original place by priests loyal to the 4th Dynasty rulers during the First Intermediate Period. This suggestion still does not account for the absence of the queen's body removed by the workers. Further archaeological research may shed some light on this problem and help to answer some of the unresolved questions.

### I.6: THE RITUAL PYRAMID

Subsidiary pyramids have been discovered in the complexes of most of the pyramids of the Old Kingdom. There is debate over whether these represent queens' pyramids, or ritual pyramids, that is to say pyramids built for the owner of the main tomb. Several of the subsidiary pyramids at Giza definitely belonged to queens.<sup>1</sup> Some of the others are associated with evidence that proves that they belonged to the owner of the main pyramid;<sup>2</sup> it has been suggested that these developed from the Southern Tomb of King Djoser of Dynasty 3.<sup>3</sup> Most of the subsidiary pyramids contain no evidence that distinguishes them as either queens' or ritual pyramids.

<sup>1</sup> Reisner, Giza, I, 72; Grinsell, Egyptian Pyramids, p. 179.

<sup>2</sup> A. Fakhry, The Monuments of Sneferu at Dahshur, I: The Bent Pyramid (Cairo: 1959), 89-96; G. Jéquier, Les Pyramides des reines Neit et Apouit (Cairo: 1933), pp. 10-11.

<sup>3</sup> Ricke, Beiträge zur ägyptischen Bauforschung und Altertumskunde, IV: Bemerkungen zur ägyptischen Baukunst des alten Reiches, I (Zurich: 1944), 106-107; Lehner, Satellite Pyramid, p. 75; J. P. Lauer Histoire monumentale des pyramides d'égypte, I: Les Pyramides à degrés (III<sup>e</sup> dynastie) (Cairo: 1962), 132-33; Jéquier, Pepi II, I (Cairo: 1936), 9, note 2. It is important to note here that the change from mastaba to pyramid for these subsidiary tombs has not been explained.

I.6.1: SUMMARY OF OLD KINGDOM SUBSIDIARY TOMBS

The Southern Tomb of Djoser lies within the southern wall surrounding his complex, west of the north-south axis of the Step Pyramid, and is in the form of a mastaba. The burial chamber, which is not thought to be large enough for an actual interment, was empty. Other internal chambers contained quantities of pottery and stone vessels thought to have held milk and beer, and the remains of a wooden box.<sup>4</sup> The most significant finds were in a long north-south gallery, where three panelled niches were decorated with reliefs portraying Djoser himself, clearly identified in the inscriptions.<sup>5</sup> These stelai, along with the small burial chamber, strongly suggest that that this tomb was built for the use of Djoser, and not for one of the members of his family.

The Southern Tomb of Sekhemkhet also lies on the north-south axis of the main pyramid, but inside the enclosure wall. It was never finished, but was also in the form of a mastaba. Within the tomb were found the

<sup>4</sup> J. P. Lauer, La Pyramide à degrés, I (Cairo: 1936), 99-100; C. M. Firth, J. E. Guibell, and J. P. Lauer, The Step Pyramid, I (Cairo: 1935), 20; C. M. Firth, J. E. Guibell, and J. P. Lauer, The Step Pyramid, II (Cairo: 1936), 62-63; Lehner, Satellite Pyramid, pp. 76-77.

<sup>5</sup> Lauer, Pyramide à degrés, I, 18-20; J. P. Lauer, La Pyramide à degrés, II (Cairo: 1936), 105-109, pls. 31-36.

remains of a gilded wooden coffin, dated stylistically to the Old Kingdom, associated with the skeleton of a child.<sup>6</sup>

The subsidiary pyramid at Meidum is again located south of the main pyramid. There were no finds in this pyramid, but for a fragment of a stela which bears part of a falcon; this has been interpreted as part of a royal stela, which would assign the small pyramid to the owner of the main pyramid.<sup>7</sup>

In the Bent Pyramid complex at Dahshur, a subsidiary pyramid was built south of the main pyramid, on its north-south axis. The interior of this pyramid was empty, but a stela bearing the names and titles of Sneferu next to a representation of the king seated on a throne was found outside the northern entrance.<sup>8</sup> No trace of a subsidiary pyramid has yet been found in the Northern Pyramid complex at Dahshur.<sup>9</sup>

<sup>6</sup> Lehner, Satellite Pyramid, p. 77; Lauer, "Récherche et découverte," pp. 101-102.

<sup>7</sup> Maragioglio and Rinaldi, L'Architettura, III, 26-28, 44ff; Lehner, Satellite Pyramid, p. 75; cf. Petrie, Mackay, and Wainwright, Meidum and Memphis, III (London: 1910), 10-12.

<sup>8</sup> A. Fakhry, Sneferu, I, 89-96; Maragioglio and Rinaldi, L'Architettura, III, 74ff., 116, pl. 15, figs. 1-2.

<sup>9</sup> Stadelmann, "Snofru," pp. 437-49; R. Stadelmann, "Die Pyramiden des Snofru in Dahschur: Erster Bericht über die Grabungen an der nördlichen Steinpyramide," MDAIK 38 (1982), pp. 379-93.

There are three subsidiary pyramids east of Khufu's pyramid.<sup>10</sup> These are generally referred to as the queen's pyramids, but it has been suggested that GI-a represents a ritual pyramid.<sup>11</sup> In the complex of Djedefra at Abu Rawwash, a subsidiary pyramid was started in the southwest corner of the complex.<sup>12</sup> Khafra has one subsidiary pyramid, south of the main pyramid and on its central north-axis. Inside this pyramid were found ox bones and fragments of wood, and a jar seal bearing the name of Khafra.<sup>13</sup> It has been referred to as both a queen's pyramid and a ritual pyramid.<sup>14</sup> There are three subsidiary pyramids south of Menkaura's pyramid.<sup>15</sup> These are again usually referred to as queen's pyramids, but it has been suggested that either GIII-a<sup>16</sup> or GIII-c<sup>17</sup> were ritual pyramids.

Userkaf's complex contains one subsidiary pyramid, which is located to the south of the west side of the

<sup>10</sup> See above, pp. 37-44.

<sup>11</sup> Lehner, Satellite Pyramid, p. 84.

<sup>12</sup> Lepsius, Denkmäler, I, 23; Lehner, Satellite Pyramid, p. 76.

<sup>13</sup> U. Hölscher, Das Grabdenkmal des Königs Chephren (Leipzig: 1912), pp. 34-35, 57, 64.

<sup>14</sup> See below, pp. 164-168.

<sup>15</sup> Reisner, Mycerinus, pp. 55-68.

<sup>16</sup> Ricke, Bemerkungen, II, 126; Stadelmann, "Pyramiden," pp. 1237-38; J. P. Lauer, "Sur le dualisme de la monarchie égyptienne et son expression architecturale sous les premières dynasties," BIFAO 55 (1955), p. 168.

<sup>17</sup> See below, pp. 118-123.

main pyramid.<sup>18</sup> Almost all of the remaining 5th and 6th Dynasty pyramid complexes contain one subsidiary pyramid; these are always, except in the case of Niuserra, whose subsidiary pyramid is on the east end of the south side,<sup>19</sup> east of the main pyramid and south of the upper temple.<sup>20</sup> The only evidence of attribution in any of these later subsidiary pyramids is from the small pyramid in the complex of Neit, a queen of Pepi II. A group of model vessels bearing the name of the queen herself was found in this pyramid,<sup>21</sup> thus it is suggested that all of these later subsidiary pyramids are ritual pyramids dedicated to the use of the owner of the main pyramid.<sup>22</sup> The fact that many of the 6th Dynasty queens had their own pyramids and complexes (including, as in the case of Neit, subsidiary pyramids)<sup>23</sup> renders the identification

<sup>18</sup> Firth, "Excavations," p. 66; J. P. Lauer, "Le temple haut de roi Ouserkaf à Saqqarah," ASAE 53 (1955), pp. 119ff.

<sup>19</sup> Borchardt, Ne-user-Re, pp. 108-109, pl. 18.

<sup>20</sup> Lehner, Satellite Pyramid, p. 76; J. P. Lauer, Le Mystère des pyramides (Paris: 1974), pp. 133-71' cf. Stadelman, Pyramiden, figs. 51, 52, 55, 59, 61, 63, and 67.

<sup>21</sup> Jéquier, Neit et Apout, pp. 10-11.

<sup>22</sup> Jéquier, Pepi II, I, 2; Lauer, "Temple haut," pp. 167-69; J. P. Lauer, Histoire monumentale des pyramides d'Egypte, I: Les pyramides à degrés (III<sup>e</sup> Dynastie) (Cairo: 1962), 132-33; Ricke, Bemerkungen, I, 106-107; Ricke, Bemerkungen, II, 125.

<sup>23</sup> Grinsell, Egyptian Pyramids, pp. 130, 132-133, 143, 148-50.

of any of these later subsidiary pyramids as queens' pyramids highly unlikely.

Thus it can be seen that some of these subsidiary pyramids, especially some of those at Giza, were probably queens' pyramids. In fact, the possibility remains that any of these subsidiary pyramids that are not otherwise identified are queens' pyramids.<sup>24</sup> However, it seems justified to take as a working hypothesis that at least in the Old Kingdom, a ritual tomb was an important element of the royal funerary complex.

#### I.6.2: FUNCTION OF THE RITUAL TOMBS

The function of the ritual pyramids is not known, and has been debated at length. The most frequently cited possible functions are: symbolic burials for the king as ruler of Upper and Lower Egypt;<sup>25</sup> tombs for the viscera;<sup>26</sup> tombs for crowns;<sup>27</sup> burials of placentas;<sup>28</sup> burials for the king's ka;<sup>29</sup> temporary storage of the

<sup>24</sup> Reisner, Giza, I, 72.

<sup>25</sup> Rieke, Bemerkungen, II, 127,-105

<sup>26</sup> Lauer, Histoire monumentale, I, 134.

<sup>27</sup> Lehner, Satellite Pyramid, pp. 35ff.

<sup>28</sup> J. Brinks, Entwicklung, pp. 76-9.

<sup>29</sup> Goedicke, Re-used blocks, p. 9; Rieke, Bemerkungen, II, 106; Lehner, Satellite Pyramid, p. 36.

body;<sup>30</sup> solar symbols;<sup>31</sup> and dummy tombs connected with the sed festival.<sup>32</sup>

The reliefs in the panels in Djoser's Southern Tomb represent the king wearing the white crown and running, holding a staff and a mace. These scenes can be interpreted as representations of the sed festival.<sup>33</sup> In this instance, the last of these theories appears to be the most likely, and therefore, it is probable that the Southern Tomb of Djoser and the subsequent ritual tombs, are associated with the sed festival.

### I.6.3: THE RITUAL TOMB IN KHUFU'S COMPLEX

It is not at all certain that Khufu had a ritual pyramid in his complex; there is certainly no obvious feature which can be assigned this function, as the three subsidiary pyramids in Khufu's complex are generally considered to be queens' pyramids. Thus, it is necessary first to look elsewhere for the site of a possible ritual pyramid. Lehner suggests that the cuttings referred to

<sup>30</sup> Lauer, "Temple haut," p. 130.

<sup>31</sup> Firth, "Excavations at Saqqara," pp. 67-70.

<sup>32</sup> Lauer, Histoire monumentale, I, 134. For discussion of these functions see Lehner, Satellite Pyramid, pp. 35ff; Brinks, Entwicklung, pp. 76-94.

<sup>33</sup> Lauer, Pyramide à degrés, I, 18-20; Lauer, Pyramide à degrés, II, 105-109, pls. 31-36.

as the trial passages were cut as the substructure of a ritual pyramid for Khufu; the three queens' pyramids were planned at the same time.<sup>34</sup> According to his hypothesis, this pyramid was never completed, probably due to the expansion of the upper temple and the change in route of the causeway.<sup>35</sup> At this point, queen's pyramid GI-a was taken over as the ritual pyramid. He chooses this pyramid because of its proximity to Khufu's upper temple and the absence of any traces of a mortuary temple associated with it.<sup>36</sup>

The biggest difficulty with this theory is that it would have put the ritual pyramid on the east side of Khufu's pyramid, rather than to the south. As mentioned above, the earlier prototypes indicate that the ritual pyramid should be to the south of the main pyramid, and all of the structures in the complexes of Khafra and Menkaura that could be interpreted as ritual pyramids lie to the south of their main pyramids.<sup>37</sup> Lehner argues that this eastern location was a topographical necessity, since the ramp from the quarry to the pyramid site would, according to his theory, have occupied the south side of the pyramid during its building period.<sup>38</sup> However, if it

<sup>34</sup> Lehner, Satellite Pyramid, p. 36.

<sup>35</sup> Ibid., 39.

<sup>36</sup> Ibid.

<sup>37</sup> See below, pp. 163-168, 258-285.

<sup>38</sup> Lehner, Satellite Pyramid, p. 81.

was important for the ritual pyramid to be to the south of the main pyramid, Khufu could have planned it for the south side and then built it after the ramp was removed. Lehner alternatively suggests that this location could be a product of the period of experimentation that was occurring at the time when the pyramid was being built.<sup>39</sup> Supporting Lehner's hypothesis is the fact that many of the ritual pyramids have interiors which echo the interiors of the main pyramids with which they are associated.<sup>40</sup>

However, other equally possible functions have been suggested for the "trial passages," the most likely of which is that they are models for the passages inside the Great Pyramid (plan: 9).<sup>41</sup>

As for the theory that GI-a was taken over as the ritual pyramid when the layout of the Eastern Field was changed, there is little evidence. Lehner's assumption that there was no chapel on GI-a's east face is far from certain; Maragioglio and Rinaldi believe that there is enough evidence in the area to reconstruct a chapel here.<sup>42</sup> It is also possible that this chapel was

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<sup>39</sup> Ibid.

<sup>40</sup> Jéquier, Neit et Apouit, pp. 10-11.

<sup>41</sup> See above, p. 94-99.

<sup>42</sup> Maragioglio and Rinaldi, L'Architettura, IV, 178, obs. 63; see also Fakhry, The Pyramids, p. 112.

deliberately removed in the time of Khufu.<sup>43</sup> The presence of a boat pit which was in use during the Old Kingdom<sup>44</sup> argues against identification of GI-a as a ritual pyramid; no known ritual pyramid is associated with a boat pit. This boat pit might have been built in conjunction with GI-a before its hypothetical conversion to use as a ritual pyramid; however, if this were the case, it should have been filled up rather than left functional.

Also arguing against Lehner's theory that GI-a was taken over as the ritual pyramid are two important points. First, if the function of GI-a was transferred to GI-b, this would start a chain of events that would eventually result in the lack of a tomb for some important personage. Second, from what we know about other ritual pyramids, the layout of the internal apartments was significant, and should have resembled as closely as possible the internal apartments of the main pyramid.<sup>45</sup> Thus GI-a could not have fulfilled the function of a ritual pyramid properly.

Then, if all three subsidiary pyramids were for queens and the "Nebenpyramid" and the "trial passages" are dismissed as possible sites of the ritual pyramid,

<sup>43</sup> Lehner, Satellite Pyramid, p. 39.

<sup>44</sup> See above, pp. 39-40.

<sup>45</sup> Jéquier, Neit et Apouit, pp. 10-11.

the possibility that Khufu did not have a ritual pyramid must be considered.

Scenes of the sed (jubilee) festival are well represented in the decorated blocks from the upper temple of Khufu, which show the ceremony enacted in the presence of various deities; such scenes occur for the first time in these reliefs.<sup>46</sup> Thus the sed festival is obviously important in Khufu's complex.

But does this mean that a "sed" (ritual or subsidiary) pyramid was necessary? Since the aforementioned scenes were in the upper temple, perhaps the function of the upper temple was expanded to include the function of the ritual pyramid,<sup>47</sup> thus rendering the actual existence of a ritual pyramid unnecessary. So it is possible that, due to the changes in cult and experimentations with the layout of the complexes that was happening during this period,<sup>48</sup> a ritual pyramid was never planned.

To summarize, if a ritual pyramid was planned, the "trial passages" are its most likely location. At any point, the upper temple may have been modified to include the function of the ritual pyramid, or a change in cult

<sup>46</sup> Goedicke, Re-used Blocks, pp. 29-49.

<sup>47</sup> See below, pp. 514-523.

<sup>48</sup> Ricke, Bemerkungen, II, 105, 127; Lehner, "Contextual Approach," p. 13.

that occurred during Khufu's reign may have dispensed with the need for such a structure.

### I.7: THE CAUSEWAY

The remains which survive today of the causeway consist of blocks of fine Tureh limestone lying about 250-270 m. from the upper temple of Khufu. It is believed that the original causeway was simply a corridor built on the bedrock of the plateau, and that it led from the eastern wall of Khufu's upper temple to a point which now lies under the village of Nazlet el-Saman.<sup>1</sup> There is also evidence that an underground passage once ran under the causeway, approximately in the middle of its length. This passage would have been used by funerary personnel to cross from one side to the other without having to walk all the way around.<sup>2</sup>

The earliest reference to this structure is found in the work of Herodotus, who states:

for ten years the people were afflicted in making the road whereon the stones were dragged, the making of which road was to my thinking a task but a little lighter than the building of the pyramid, for the road is five furlongs long and ten fathoms broad, and raised at its highest to a height of eight fathoms and

<sup>1</sup> Edwards, The Pyramids of Egypt, p. 134.

<sup>2</sup> Ibid.; Fakhry, The Pyramids, p. 104; Hassan, Giza, X, 19; Badawy, Egyptian Architecture, I, 97; Maragioglio and Rinaldi, L'Architettura, IV, 68; Lauer "Temple funéraire," pp. 246-248.

it is all of stone polished and carven with figures.<sup>3</sup>

This statement gives us some indication of the size of the causeway, and informs us that it was decorated with reliefs.

Several travellers of the 18th and 19th centuries drew maps and pictures of the causeway. These depictions show the causeway to run at an angle from the east face of the upper temple, with one slight change of direction about two-thirds of the way down its total length of about 500 m. The foundations can be seen east of the Senn el-Agouz. According to these sources, the causeway was built, or at least cased, with Tureh limestone.<sup>4</sup> The most important and informative of these maps was drawn by Lepsius in 1843; this shows the end of the causeway in the fields below the Giza plateau.<sup>5</sup>

A photograph taken in 1862 shows the remains of the causeway on the east side of the pyramid. It does not

<sup>3</sup> Herodotus, Histories, II, translated by A.D. Godley, Loeb Classical Library (Cambridge, Mass., and London), pp. 425-427, paragraph 125.

<sup>4</sup> F.L. Norden, Travels in Egypt and Nubia (1738), I (London; 1757), pl. XLIII; J. E. Perring, The Pyramids of Gizeh, I, (London: 1839); Vyse, Operations, I, plate opposite p. 1; Col. Jacotin, Description de l'Égypte ou Recueil des observations et les recherches qui ont été faites en Égypte pendant l'expédition de l'armée française: Antiquités (1822), V (A), pl. 6.

<sup>5</sup> Lepsius, Denkmäler, fig. 1, pl. 14.

include the end of the causeway, but only the end of the cliff covered with scattered stones of different sizes.<sup>6</sup>

By the time Hassan began to investigate the area in 1938, the scattered stones seen by the earlier travellers had disappeared, and much of the area had been built over. However, some of the older villagers of Nazlet el-Saman confirmed what the early sources indicate, namely that the causeway had ended in the fields to the east of the village.<sup>7</sup> From several blocks found in situ in the lower part of the south wall, Hassan calculated the foundation of the causeway to be 9 m. wide, and 10.5 m. wide where it crosses the subway (plan: 10).<sup>8</sup>

Soundings were made in the area of the causeway by Goyon. He began his work at the foot of the cliff that limits the Giza plateau (Senn el-Agouz), and continued in an area within the village that is free of houses, about 20 m. from the highest stone visible at the end of the plateau.<sup>9</sup>

In the course of his work, Goyon found part of the original foundation of the causeway. In his trenches,

<sup>6</sup> This photograph was taken by Francis Bedford and published in I. Jeffrey, Photography: A Concise History (New York: 1981), pp. 36-37.

<sup>7</sup> Hassan, Giza, X, 17-20.

<sup>8</sup> Ibid., p. 19.

<sup>9</sup> G. Goyon, "La Chaussée monumentale et le temple de la vallée de la pyramide de Khéops," BIFAO 67 (1969), pp. 51, 67, figs. 1 and 3, cf. also plan on p. 70.

Goyon found twenty-two courses consisting of limestone blocks from Tureh of various sizes.<sup>10</sup> Two stones in situ which were found buried in the cliff represent the foundations of the beginning of the causeway. The upper of these measured 1.53 m. by 0.45 m. and the lower measured 1.25 m. by 0.54 m.<sup>11</sup> Another block was found about 27 m. east of these two; it measures 1.60 m. by 1.15 m. Goyon used the placements of these three blocks to calculate the direction of the causeway as 14-15° north of east,<sup>12</sup> the width as 14.80 m. at the top and 18.35 m. at the base (corresponding to the dimension given by Herodotus),<sup>13</sup> and the height of its base as 20-22 m.<sup>14</sup> Goyon states that these blocks give no indication that the walls were battered, but postulates that there may have been a batter on each face.<sup>15</sup>

Goyon also describes the use made by the ancient builders of small stones and mortar to level and raise the base height of the causeway.<sup>16</sup> The facing of the causeway on both its north and south sides consists of gypsum and mortar. Quarry marks were found on some of

<sup>10</sup> Ibid., pp. 55, 63; Goyon, Secret des Bâisseurs, pp. 140-142, figs. 45-46.

<sup>11</sup> Goyon, "La Chaussée," p. 56; cf. also figs. 2 and 4.

<sup>12</sup> Ibid., pp. 60, 67.

<sup>13</sup> Ibid., pp. 56-58.

<sup>14</sup> Goyon, Secret des Bâisseurs, pp. 141-42.

<sup>15</sup> Goyon, "La Chaussée," p. 57.

<sup>16</sup> Ibid., p. 53.

the stones, indicating to Goyon that the facing was cut at the quarry.<sup>17</sup>

Goyon calculates the length of the causeway from the foot of the Great Pyramid to the lower temple to be 658.60 m.,<sup>18</sup> and believes that it ran in one direction (15° north of east) from beginning to end.<sup>19</sup> He believes that the causeway was once a large covered corridor, decorated with scenes and inscriptions, which served as a religious connection between the upper and lower temples.

Lauer attempted to trace the remains of the causeway and produced a plan which shows it beginning from the east face of the upper temple at an angle of 14° north of east, running for about 80 m. and then disappearing for about 130 m., then reappearing. According to Lauer, the causeway changes direction at the Senn el-Agauz.<sup>20</sup>

Maragioglio and Rinaldi disagree with Lauer's results, stating that his work is based on very little evidence. They conclude, from the few blocks found near the upper temple, that the causeway was about 7.5 m. wide at floor level, and that the internal corridor was about 1.8 m. wide.<sup>21</sup>

<sup>17</sup> Ibid., p. 60.

<sup>18</sup> Ibid., pp. 62-63.

<sup>19</sup> Ibid., pp. 61-62.

<sup>20</sup> Lauer, "Temple funéraire," pp. 246-248.

<sup>21</sup> Maragioglio and Rinaldi, L'Architettura, IV, 170, obs. 52.

According to Goyon, the construction of this causeway is similar to the other two examples of causeways known from the Old Kingdom (those of Khafra and Unas),<sup>22</sup> but that there are several architectural components which are unique.<sup>23</sup> Ricke suggests that these unique features reflect changes in cults that took place during the Old Kingdom.<sup>24</sup>

Recent study of the causeway has been carried out by Lehner, who traced the 18th and 19th century maps as cited by Goyon and Maragiolio and Rinaldi.<sup>25</sup> He agrees with those scholars who see a second direction beginning at Senn el-Agouz, arguing that it is impossible to reconstruct the causeway as running in a straight line from the upper temple to the lower temple.<sup>26</sup> This change of direction is well-documented by photographs taken by 18th and 19th century travellers.

Lehner disagrees with several of Goyon's conclusions. He argues that 20-22 m., cited by Goyon as the height of the base of the foundation at Senn el-Agouz, could be the height of the foundation before the turn at Senn el-Agouz, and thinks that the new height

<sup>22</sup> Goyon, "La Chaussée," p. 50.

<sup>23</sup> Ibid., p. 51.

<sup>24</sup> Ricke, Bemerkungen, II, 68, 72, 75.

<sup>25</sup> Lehner, "Khufu project," pp. 4-7, fig. 3B.

<sup>26</sup> Ibid.

here should be 30 m.<sup>27</sup> He also argues with Goyon about the width of the causeway, which he believes should be 14 m.<sup>28</sup> Finally, he recalculates the length of the causeway on the basis of Goyon's trench #4 at the end of Sidi-Hammed el-Westani's street, which he thinks represents the site of the lower temple. He arrives at a length of 390 m. for its upper part, and 220 m. for the part from the turn to the end, finishing with a total length of 610 m., as opposed to Goyon's total of 658 m.<sup>29</sup> However, since the location of this temple is still uncertain, further excavation must be done before the length of the causeway can be ascertained.

Herodotus's statement that the causeway was engraved with figures, combined with the evidence of decorated causeways known from the complexes of Unas at Saqqara, and Pepi II, also at Saqqara, make it very likely that Khufu's causeway was indeed covered with reliefs. Decorated blocks of limestone belonging to the causeway have been found in the area of the Eastern Field and in the upper end of the causeway passage.<sup>30</sup> Because of the destruction that took place in the area, there is sometimes difficulty in determining whether these blocks

27 Ibid., p. 6-7.

28 Ibid., fig. 3B.

29 Ibid., p. 7, fig. 3B.

30 Fakhry, The Pyramids, p. 104.

belong to the causeway or to some other feature of the complex.

Hassan has catalogued these scenes and has made an attempt to approximate their original places on the walls of the causeway.<sup>31</sup> The relief is low and finely executed, and is comparable to other Old Kingdom reliefs, especially those found in the lower temple of the Bent Pyramid of Snefru at Dahshur,<sup>32</sup> and those from the upper and lower temples of Khufu found at Lisht.<sup>33</sup> One fragment is in a different style; Hassan suggests that it is a work of the Saite period, produced when Khufu's cult on the Giza plateau was renewed in the 26th Dynasty.<sup>34</sup> Eight other fragments from the area of the causeway, one of which is of red granite, are thought by Reisner and Smith to have belonged originally to the upper temple or a queen's chapel.<sup>35</sup>

The scenes on these blocks show the following subjects: the performance of the sed festival, as seen also in the upper temple; portrayals of a falcon, possibly representing the king as Horus; the name of the

<sup>31</sup> Hassan, Giza, X, 20-24, 34, pls. 5-8, figs. 3, 4, 7, and 8.

<sup>32</sup> Ibid., pp. 20-21; W. S. Smith, "Old Kingdom sculpture," AJA, 45 (1941), pp. 514ff.

<sup>33</sup> Goedicke, Reused Blocks, p. 6.

<sup>34</sup> Hassan, Giza, II, 23-24; Fakhry, The Pyramids, p. 101.

<sup>35</sup> Reisner and Smith, Giza, II, 5, fig. 7 and note 6.

pyramid of Khufu; and scenes with various types of birds and animals, accompanied by hieroglyphic inscriptions.

### I.8: THE LOWER TEMPLE

There is no archaeological evidence at Giza which proves the existence of the lower temple of Khufu (traditionally known as the valley temple). Most Egyptologists believe that the temple now lies under the village of Nazlet-el-Samman, which is located at the foot of the cliff at the eastern end of the cemetery of Khufu's relatives (plan: 10).<sup>1</sup> However, Egyptologists have reconstructed its existence using the following sources: older inhabitants from the nearby village of Nazlet-el-Samman; soundings done in the streets of this village; parallels drawn with other Old Kingdom pyramid complexes; and inscribed blocks from Lisht which are thought to have come from this temple. Hypotheses concerning its exact location have been offered by Reisner,<sup>2</sup> Smith,<sup>3</sup> Hassan,<sup>4</sup> Goyon,<sup>5</sup> Lauer,<sup>6</sup> Maragioglio and

<sup>1</sup> See Hassan, Giza, X, 17; Maragioglio and Rinaldi, L'Architettura, IV, 68; Lauer, "Temple funéraire," p. 259; Goyon, "La Chaussée," p. 50; H. Messiha, "The Valley Temple of Khufu (Cheops)", ASAE, 55 (1983), p. 13; Fakhry, The Pyramids, p. 135; and Badawy, Egyptian Architecture, I, 97.

<sup>2</sup> Reisner, Giza, I, 1.

<sup>3</sup> Smith, Art and Architecture, revised by Simpson, pp. 100-103.

<sup>4</sup> Hassan, Giza, X, 17-19.

<sup>5</sup> Goyon "La Chaussée," pp. 63-68.

<sup>6</sup> Lauer, "Temple funéraire," p. 259.

Rinaldi,<sup>7</sup> Badawy,<sup>8</sup> Petrie,<sup>9</sup> Borchardt,<sup>10</sup> Perring,<sup>11</sup> Messiha,<sup>12</sup> Ricke,<sup>13</sup> Fakhry,<sup>14</sup> Edwards,<sup>15</sup> and Lehner.<sup>16</sup>

The information gathered by Hassan from older inhabitants of Nazlet-el-Samman suggests that Khufu's lower temple should be located under or nearby the old house of Geritley Pasha.<sup>17</sup> Details given by these villagers include the information that the garden beside the house covers a paved area, and that under the house they used to see huge rooms with walls about 3 m. high built of huge stones.<sup>18</sup> The information from the villagers agrees with that gathered from maps of the site drawn by travellers in the 19th century, including Lepsius,<sup>19</sup> Norden,<sup>20</sup> Perring,<sup>21</sup> and Vyse.<sup>22</sup>

South of the village of Nazlet el-Samman were found blocks of limestone which formed part of a wall. This

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- 7 Maragioglio and Rinaldi, L' Archittetura, IV, 68-69.  
 8 Badawy, Egyptian Architecture, I, 89, 95-96.  
 9 Petrie, Pyramids and Temples, pp. 134-135.  
 10 L. Borchardt, Langen and Richtungen der vier Grundkanten der grossen Pyramid bei Gise (Berlin: 1926), pp. 1-20.  
 11 Perring, Pyramids of Gizeh, I.  
 12 Messiha, "Valley Temple," pp. 9ff.  
 13 Ricke, Bemerkungen, II, 7, 88, 94.  
 14 Fakhry, The Pyramids, p. 104.  
 15 Edwards, The Pyramids of Egypt, p. 135.  
 16 Lehner, "Khufu project," p. 7.  
 17 Hassan, Giza, X, 17-18.  
 18 Ibid.  
 19 Lepsius, Denkmäler, I, pl. 14.  
 20 Norden, Desc. Ant. V, pl. 6.  
 21 Perring, Pyramids, I, two plates at the beginning.  
 22 Vyse, Operations, I, pl. I.

block of masonry measures 200 m. long and 7 m. wide.<sup>23</sup> The type of masonry used indicates that these blocks could be understood as part of an enclosure wall. Other buildings were found in the area, as were fragments of granite and mud brick and objects such as vases.<sup>24</sup> Maragioglio and Rinaldi believe that these remains could be from either the lower temple or the pyramid city of Khufu.<sup>25</sup>

Messiha and Goyon made soundings in the village, in an area which lies on the east-west axis of the pyramid of Khufu, at distances around 640 m. from its foot. Their purpose was to attempt to locate the lower end of the causeway and the lower temple.<sup>26</sup> In the 1961, 1965, and 1967 seasons, Messiha found large blocks of limestone.<sup>27</sup> He used these findings to create a hypothetical reconstruction of the floor of the temple, which he made to measure 50 m. by 50 m.<sup>28</sup> There is no archaeological evidence for these measurements, but

<sup>23</sup> Maragioglio and Rinaldi, L'Architettura, IV, 68.

<sup>24</sup> E. Dhorme, "Guizah IV<sup>e</sup> et V<sup>e</sup> Dynasties: La service des Antiquités nous communique les notes suivantes," CdE 17 (1934), pp. 70-77.

<sup>25</sup> Maragioglio and Rinaldi, L'Architettura, IV, 68.

<sup>26</sup> Messiha, "Valley Temple," pp. 13-17, site map and figs. 1-4; Goyon, "La Chaussée," p. 63. These soundings were located on Harret Shams-ed-Deen, Haret Emad-ed-Deary ed Deen, st., beside the Mansouria canal, at Senn-el-Agouz, and at Beit el Pasha.

<sup>27</sup> Messiha, "Valley Temple," p. 16.

<sup>28</sup> Ibid.

Messiha's work at least proves the existence of the lower temple and indicates its general location under the modern village.

Goyon's trenches revealed walls which formed a corridor 1.40 wide. These lay to the east of the causeway, and ran parallel to it. The blocks that form this corridor are of basalt and limestone and measure about 1.10 m. in length and 55 cm. in thickness; the corridor was paved with limestone.<sup>29</sup> These blocks do not correspond in size to the blocks of the causeway, thus Goyon and Messiha believe that the building whose remains they had located must be either the lower temple or the palace of Khufu.<sup>30</sup> Lehner, however, feels that these remains might belong to a building subsidiary to the lower temple,<sup>31</sup> and that the use of basalt and limestone, the same materials that were used in the upper temple, indicate that the building here was similar in building style to the upper temple. Lehner states also that the 1839 and 1840 maps of Perring and Vyse showed basalt fragments found about 160 m. south of the lower temple and near Senn-el-agouz.<sup>32</sup>

29 Ibid., pp. 63-66, figs. 7-8.

30 Ibid., p. 66.

31 Lehner, "Khufu project," p. 12.

32 Ibid.

Lehner believes that the lower temple should be located just west of the Mansouria canal. He also suggests that this canal was once connected with the harbor which was fronted on the lower temple.<sup>33</sup> This canal is located at the eastern edge of the village.

Lehner draws a hypothetical reconstruction of the lower temple of Khufu, basing his plan on the lower temple of Khafra.<sup>34</sup> This reconstruction is completely theoretical, and also unlikely, since the upper temple of Khufu shares almost no features with the upper temple of Khafra.

Lehner alternatively suggests that the lower temple might have consisted simply of an open court lying alongside the causeway at the edge of cultivation, or that it paralleled the lower temple of Sneferu at the Bent Pyramid at Dahshur.<sup>35</sup> The latter temple was divided into three major parts: an entrance hall with two rooms on each side; a pillared portico; and six rooms, possibly shrines for the king.<sup>36</sup> However, since the upper temple of Khufu is so much larger and more complex than that of

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33 Ibid.

34 Ibid.

35 Ibid.

36 Edwards, The Pyramids of Egypt, p. 107; Fakhry, The Pyramids, pp. 76ff, plan 44.

Sneferu, it is likely that the lower temple too was very different from its predecessors.<sup>37</sup>

The only actual fact known about the lower temple is that it was made of limestone and basalt, the same materials that were used in Khufu's upper temple. Reconstructions of its design and the mapping of its exact location must be considered purely hypothetical until further excavations have been done in the area.

#### I.8.1: DECORATION

The discovery at Lisht of blocks from the pyramid of Amenemhet I proved that both the upper temple and the lower temple were decorated.<sup>38</sup> Through parallels with relief decoration from later lower temples, Goedicke tentatively assigns ten blocks to the lower temple of Khufu.<sup>39</sup>

<sup>37</sup> L. Borchardt, "Ein Königerlass aus Dahschur," ZAS 42 (1905), pp. 1-3; Fakhry, Sneferu, I, 9.

<sup>38</sup> Goedicke, Re-used Blocks, pp. 11-22.

<sup>39</sup> Ibid., pp. 13, 16, 18, 19, 20, 100, 102, 103, 104. Two of these are fairly securely assigned to this building, the other eight are good possibilities; see below, pp. .

I.8.2: POST OLD-KINGDOM HISTORY

The lower temple of Khufu was reused as a quarry for the pyramid of Amenemhet I at Lisht.<sup>40</sup> This shows that the temple was destroyed before or during the beginning of the 12th dynasty.<sup>41</sup>

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<sup>40</sup> Ibid., pp. 11, 19.

<sup>41</sup> See below, pp. 514-523.

CHAPTER II: THE PYRAMID COMPLEX  
OF KHAFFRA

The pyramid complex of Khafra, the second one to be built at Giza, stands to the south of Khufu's monument. It is the most complete pyramid complex known from the Old Kingdom, as all of its components are relatively intact.

The name of Khafra's pyramid complex was  $\text{H}(\text{.f-R}(\text{ wr}$  ("Khafra pyramid, the great"); it is identified with Khafra through inscriptions found on the entrances of the lower temple and some reliefs from the upper temple. There is evidence in the lower temple that the statues of the king were destroyed at some point. Moreover, reliefs originating from this complex that were discovered at Lisht suggest that it was destroyed in the First Intermediate Period.

No evidence has yet been found that suggests that the cult of Khafra existed in the Middle or New Kingdom, but there are clear indications that it was revived in the 26th Dynasty.

The components of the complex discussed below are:

1. the upper temple;
2. the temenos wall and surrounding court;
3. the subsidiary pyramid and the serdab;
4. the boat pits;
5. other structures, namely Petrie's workmen's barracks and the north chapel;
6. the causeway;
7. the lower temple;
8. the Sphinx and Sphinx temple.

## II.1: THE UPPER TEMPLE

This temple is one of the best preserved of those of the Old Kingdom. It was excavated completely by the Von Sieglin expedition in 1909-1910,<sup>1</sup> and has since been investigated by Maragioglio and Rinaldi.<sup>2</sup> The temple was built of local limestone set directly onto the rock of the plateau. Its inner walls were faced with Tureh limestone, and its outer walls were faced with granite,<sup>3</sup> the blocks of which were set at an inclination of 81°50'.<sup>4</sup> The floor was paved with alabaster and other materials,<sup>5</sup> the ceiling was formed with granite beams supporting limestone.<sup>6</sup> The interior columns have no capitals and were left undecorated.<sup>7</sup> Most of the fine limestone, alabaster, and granite has disappeared, the

<sup>1</sup> Hölscher, Chephren, pp. 50-58.

<sup>2</sup> Maragioglio and Rinaldi, L'Architettura, V, 64-72.

<sup>3</sup> Ibid., p. 118, obs. 29. Hölscher found blocks of Tureh limestone which he thought were used to case the outer faces of the temple walls (Hölscher, Chephren, p. 62) but it was later shown that these blocks were used in the temple interior (Maragioglio and Rinaldi, L'Architettura, V, 118, obs. 29).

<sup>4</sup> Cf. Hölscher, Chephren, p. 62 and Maragioglio and Rinaldi, L'Architettura, V, 64.

<sup>5</sup> Badawy, Egyptian Architecture, I, 97; Fahkry, The Pyramids, p. 135, Maragioglio and Rinaldi, L'Architettura, V, 64.

<sup>6</sup> Maragioglio and Rinaldi, L'Architettura, V, 120, obs. 29.

<sup>7</sup> Ibid., p. 64.

bulk of what remains consisting of the huge nummulitic blocks of limestone that form the core of the temple.

The main axis of the temple runs due east-west. It is entered from a narrow gateway of granite in the southern half of its east face which connects it with the ceremonial causeway.<sup>8</sup> From the gateway, a short corridor runs obliquely to the west.<sup>9</sup> At the end of the corridor, a doorway opens to either side. The southern door opens onto another short corridor running due west, which leads to two granite-lined rooms arranged in the shape of a y.<sup>10</sup>

The northern door at the end of the entrance corridor leads through a short passage running due north to a small rectangular room whose roof is supported by two columns. The central east-west axis of this room lies on the central east-west axis of the temple (plan: 11).<sup>11</sup> A doorway in the northwest corner of this chamber leads north into a series of four narrow east-west rooms which open to the east along the north passage. The central two rooms have identical dimensions, the two outer rooms are slightly larger. The floors and walls of the four rooms were cased with alabaster.<sup>12</sup>

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<sup>8</sup> Ibid.

<sup>9</sup> Ibid., p. 65.

<sup>10</sup> Ibid.

<sup>11</sup> Ibid., p. 66.

<sup>12</sup> Ibid.

Ricke suggests that the two rooms arranged in the shape of a U to the south and the four long rooms to the north correspond to six niches which are found in the lower temple of Khafra.<sup>13</sup> He places the crowns of the Sais burial in the two southern rooms and four alabaster sarcophagi for the inner organs which were connected with the Buto burial in the four northern rooms.<sup>14</sup> Based on this hypothesis, Edwards suggests that the first ceremonies performed in the temple were linked to Buto and Sais,<sup>15</sup> but he does not describe these ceremonies or elaborate on their significance. Hölscher identifies both sets of rooms as storerooms.<sup>16</sup> For the four northern rooms, Maragioglio and Rinaldi tentatively agree with Hölscher, but leave open the possibility that they had a more important function, since they are paved with alabaster.<sup>17</sup> Ricke's hypothesis has no evidence to support it, and it is probable, owing to the plan of these rooms and the fact that they are lined with alabaster, that they were not storerooms. Since they are located near the entrance to the temple and are separated

<sup>13</sup> Ricke, Bemerkungen, II, 108.

<sup>14</sup> Ibid. Ricke and Schott developed many important themes about the pyramid temples; these are discussed in detail in Chapter 5.

<sup>15</sup> Edwards, The Pyramids of Egypt, p. 148.

<sup>16</sup> Hölscher, Chephren, p. 58. Hölscher published his work in 1912, long before Ricke and Schott's hypotheses.

<sup>17</sup> Maragioglio and Rinaldi, L'Architettura, V, 66.

from it by the room with two pillars, it is clear that they were entered only by certain temple personnel; perhaps they contained temple records.<sup>18</sup> The southern rooms which are paved with granite could be storerooms.

An alabaster-paved ramp with a slope of 22° runs due west up to the roof of the temple from the northwest corner of the north passage.<sup>19</sup> Since this ramp leads only to the roof, it was probably used by temple inspectors in their daily inspection of the pyramid complex. Another important function of the roof was for observation of the sun, stars, and moon.<sup>20</sup> According to the Abousir Papyri, other personnel who might have used this area were the night and day guards.<sup>21</sup>

Returning to the central room with two pillars, a short passage leads due west to a large pillared hall formed of three stepped recesses. The widest section is to the east, and contains eight pillars; the central section contains four pillars and the westernmost section has two. The pillars are of granite, and measure about

<sup>18</sup> For example, the Abousir Papyri, which represent such a record, were found in one of the storerooms of the temple of Neferirkare (Posener-Kriéger, Les Archives, I, IX; the location of the Abousir Archives found in a storeroom is not similar to the Khafra location.

<sup>19</sup> Ibid.

<sup>20</sup> Reisner, Mycerinus, p. 33; cf. discussion in Chapter 5.

<sup>21</sup> Cf. Posener-Kriéger, Les Archives, II, 449, 547-48; H. Loperieno-Behlmer, "Stern," LÄ 41, VI<sup>1</sup> (1985), pp. 11-14.

0.98 m. square. From the evidence of some bevelled blocks of granite found in the area, Maragioglio and Rinaldi conclude that this room was roofed and that small holes were made in the ceiling to admit light and fresh air. This room also lies on the temple axis and becomes narrower as it runs from east to west.<sup>22</sup> Ricke labels this room the "Gate of Nut,"<sup>23</sup> and Fakhry equates it with the pillared hall west of the courtyard in Khufu's upper temple.<sup>24</sup>

Two long narrow rooms built into the thick masonry around the pillared hall run west from the northwest and southwest corners of its eastern section. These are identical in size and shape, and are entered through short passages narrower than the rooms themselves. Ricke believes that these rooms each contained a solar boat: the day boat in the southern room and the night boat in the northern room.<sup>25</sup> Based on a specially cut and dressed block of granite out of which a statue of the king could have been carved, Hölscher labels them serdabs, and suggests that the southern room contained a statue of Khafra as king of Lower Egypt, and that the northern room contained a statue of Khafra as king of

<sup>22</sup> Maragioglio and Rinaldi, L'Architettura v. 66.

<sup>23</sup> Ricke, Bemerkungen, II, 50-55.

<sup>24</sup> Fakhry, The Pyramids, p. 135.

<sup>25</sup> Ricke, Bemerkungen, II, 112-13.

Upper Egypt. He points to breaches in the walls of these rooms as evidence that they contained precious objects that looters or funerary personnel wished to remove intact.<sup>26</sup> Hölscher's hypothesis has generally been accepted, but Maragioglio and Rinaldi point out that no other royal Old Kingdom temple contains comparable serdabs; such serdabs are found only in private tombs. They believe that the breaches in the walls were made so that the granite blocks used to line the room could be removed, and conclude that the rooms may simply have been storerooms.<sup>27</sup>

From the center of the west end of the large pillared hall, a narrow passage leads west to a long room, oriented east-west, containing ten pillars arranged in two east-west rows of five pillars each, labeled the "Tiefe Halle," or "Wide Hall."<sup>28</sup> Based on New Kingdom temples, Hölscher suggests that this room contained statues of the king on one side and dyads of the king and

<sup>26</sup> Hölscher, Chephren, pp. 26-27; U. Hölscher and G. Steindorff, "Die Ausgrabung des Totentempels der Chephren Pyramide durch die Sieglin Expedition 1909," ZAS 46 (1909), pp. 5-6. Hölscher also advances, and then discards, the theory that this area represents the placements for secondary doors which provided access to the temple through these "serdabs".

<sup>27</sup> Maragioglio and Rinaldi, L'Architettura, V, 66 and 120, obs. 30.

<sup>28</sup> Ricke, Bemerkungen, II, fig. 16; Hölscher, Chephren, p. 26; Maragioglio and Rinaldi, L'Architettura, V, 68, pl. II, fig. 12.

his wife on the other side.<sup>29</sup> There is no evidence to support this reconstruction; no fragments of statues of the king with his wife have been found in the area. It is more likely that the statues were of Khafra alone, perhaps in the red crown on one side and in the white crown on the other. Thus the king could confirm his power as ruler of Upper and Lower Egypt.<sup>30</sup> However, there is no evidence to support this hypothesis, either.

From the center of the western end of this room, another narrow passage leads to a large room or courtyard which spans the width of the temple.<sup>31</sup> A corridor runs around the outside of the court. None of the walls that would have separated this corridor from the courtyard have survived, but remains of an alabaster floor and the outline of the wall foundation, which was cut into the bedrock, can be seen, and this evidence indicates that the corridor was 2.10 m. wide on the west and 1.57 m. wide on the east, north, and south.<sup>32</sup> There are passages through the walls that bounded the peripteral corridor, five each on the east and west and three each on the north and south.<sup>33</sup> Based on a fragment of granite found

<sup>29</sup> Hölscher, Chephren, pp. 26-53.

<sup>30</sup> Brinks, Entwicklung, p. 159.

<sup>31</sup> Maragioglio and Rinaldi, L'Architettura, V, 68; Lauer, Problème des Pyramides, p. 94, fig. 28.

<sup>32</sup> Maragioglio and Rinaldi, L'Architettura, V, 68, pl.

11.

<sup>33</sup> Ibid.

in the area, Maragioglio and Rinaldi believe that the entrances to these passage were flanked by columns bearing hieroglyphs colored blue and green.<sup>34</sup>

The courtyard was open to the sky and rectangular holes in the pavement indicate that it once contained twelve statues or pillars, two each to the north and south, and four each to the east and west, which were backed on the wall of the peripteral corridor.<sup>35</sup>

Hölscher reconstructs these twelve objects as Osirian statues of the king, similar to those seen in the Middle and New Kingdoms, citing chips of granite polished on the outside of the temple as evidence for these statues. He suggests that the two against the north wall and the northern four of the eight against the east and west walls would have worn the red crown; the remaining six would have worn the white crown. Between each two statues, he postulates a false door decorated with hieroglyphic inscriptions including the names and titles of the king.<sup>36</sup>

Ricke also reconstructs statues in the twelve sockets, but believes that each was about 3.5 m. high and portrayed the king seated on a throne. These statues

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34 Ibid.

35 Ibid.; Hölscher, Chephren, pp. 27-28.

36 Hölscher, Chephren, pp. 27-28 and 56; J. Vandier, Manuel d'Archéologie, II (Paris: 1954), 57-60.

would have stood in niches, the sides of which would have been inscribed with hieroglyphs and a representation of the goddess Nekhbet as a vulture. He bases this on a block found at Lisht which is decorated with the Horus name of Khafra and two falcons.<sup>37</sup> On the strength of a relief fragment found in the area which shows a bound Asiatic,<sup>38</sup> he reconstructs scenes of captive foreigners on the walls separating these niches, and people or foreigners bringing offerings to the king. Above the heads of the statues and the niches are carved the cartouches of the king with representations of Nekhbet.<sup>39</sup>

Maragioglio and Rinaldi think that the twelve holes are not pits for statue bases, but instead believe that they represent sockets for pillars. They cite a small step in each of the sockets, commonly seen in connection with pillars, as evidence that whatever was set into the holes was inserted horizontally and then made vertical, a procedure more likely to have been used on pillars than on statues. Their reconstruction of the courtyard is

<sup>37</sup> Ricke, Bemerkungen, II, 50, fig. 18. However, Maragioglio and Rinaldi point out that it is not certain that this block came from the upper temple of Khafra (Maragioglio and Rinaldi, L'Architettura, V, 120-22, obs. 32).

<sup>38</sup> Ricke, Bemerkungen, II, 50-51.

<sup>39</sup> Ibid., pl. 2.

based on comparisons with the courtyard of the Sphinx temple.<sup>40</sup>

Since no Osirian statues are known from the Old Kingdom,<sup>41</sup> and more importantly, since the statue fragments found in the area indicate that the statues would have been relatively small, it is likely that Ricke is correct noting that if there were statues lining the courtyard, they would have represented the king seated on a throne.<sup>42</sup> Comparisons with the Sphinx temple should not be valid, as the two temples differ in size and function.

A square foundation, thought to be the base of an altar, was found in the exact center of the courtyard,<sup>43</sup> this could have been a place to offer gifts from the estates and visitors to the deceased king. This open court should no doubt have some link with the sun god.<sup>44</sup>

Two granite blocks which formed part of a channel were found just west of the center of the court, with an outlet under the upper course of the foundation. Hassan hypothesizes that it continued outside the south wall of the courtyard and was connected with the house of

<sup>40</sup> Maragioglio and Rinaldi, L'Architettura, V, 122-124.

<sup>41</sup> See Hawass, "Khufu Statuette," p. 388; cf. also B. Kemp, "The Osiris Temple at Abydos," MDAIK 23 (1968), pp. 138-155.

<sup>42</sup> Ricke, Bemerkungen, II, 50-52, figs. 17 and 19.

<sup>43</sup> Maragioglio and Rinaldi, L'Architettura, V, 68.

<sup>44</sup> See below, p. 554.

embalming.<sup>45</sup> Maragioglio and Rinaldi could find no traces of the channel continuing outside the temple, and believe it was there to drain the water that fell on the temple roof.<sup>46</sup> Ricke's suggestion that the courtyard was used for sacrifice is more plausible. He felt that the channel was therefore used to drain off the blood of the victims.<sup>47</sup> The house of embalming cannot be in the upper temple, as Hassan proposed.<sup>48</sup>

The pavement of the courtyard was about 5 cm. lower than that of the surrounding rooms of the temple. Maragioglio and Rinaldi believe that this was to facilitate the drainage of water; supporting this theory is a slope leading to an underground conduit on the south side of the courtyard.<sup>49</sup>

Five passages lead from the west side of the courtyard to the surrounding corridor and then into five long east-west rooms.<sup>50</sup> The four outer rooms are identical in size, measuring 2.78 m. wide; the middle shrine is slightly wider, measuring 3.30 m.<sup>51</sup>

<sup>45</sup> Hassan, Giza, IV, 91.

<sup>46</sup> Maragioglio and Rinaldi, L'Architettura, V, 120, obs. 31.

<sup>47</sup> Ricke, Bemerkungen, II, 45.

<sup>48</sup> See below, pp. 547-548.

<sup>49</sup> Maragioglio and Rinaldi, L'Architettura, V, 68.

<sup>50</sup> Hölscher, Chephren, p. 28.

<sup>51</sup> Maragioglio and Rinaldi, L'Architettura, V, 70.

The floors of these five rooms were made of alabaster and the walls and the ceiling are made of granite. The bedrock under the floor in the central room is marked by grooves which may have been made by people seeking treasure while the temple was under construction,<sup>52</sup> or which may represent traces of leveling done in preparation for the laying of the pavement.<sup>53</sup>

Petrie suggests that these rooms represented the five halls in the Old Kingdom temple at Hierakonpolis, and held the five divinities of the family of Osiris.<sup>54</sup> Hölscher believes that these five rooms each contained a statue of the king,<sup>55</sup> and Edwards adds that each statue may have held a different cult symbol.<sup>56</sup> Ricke and Badawy believe that these rooms corresponded with the five boat pits around the temple, and held five barks for the king.<sup>57</sup> Through the titles of the mortuary personnel, it can be seen that there were priests of only three names of Khafra, as opposed to the priests of the four names of Khufu.<sup>58</sup> Thus two of the rooms should

<sup>52</sup> Hölscher, Chephren, p. 29.

<sup>53</sup> Maragioglio and Rinaldi, L'Architettura, V, 126, obs. 33.

<sup>54</sup> W. M. F. Petrie, Egyptian Architecture (London: 1938), p. 88.

<sup>55</sup> Hölscher, Chephren, p. 29.

<sup>56</sup> Edwards, The Pyramids of Egypt, p. 149.

<sup>57</sup> Ricke, Bemerkungen, II, 55; Badawy, Egyptian Architecture, I, 98.

<sup>58</sup> See Table no. 13B.

contain statues for Khufu as Ra, and Hathor.<sup>59</sup> It is certain here that Khafra followed his father Khufu in having the five rooms in his temple, which demonstrates the link between the two temples and the cults of the two kings.<sup>60</sup> These rooms probably represent the end of the public part of the temple; the inner temple begins here.<sup>61</sup>

A long narrow passage runs west from the southwest corner of the courtyard to a point past the five long rooms, where it turns and runs north into a complex series of rooms. Continuing past a passage turning off to the west, the north passage leads into five long east-west rooms of limestone which open to the east behind the five large rooms. These rooms are generally considered to be magazines.<sup>62</sup> There may well be a connection between the five large rooms and these five smaller rooms, also considered to be "sacrifice magazines" by Stadelmann.<sup>63</sup>

The aforementioned passage, turning off to the west, leads past a small group of rooms, thought to be guard-

<sup>59</sup> See below, p. 566.

<sup>60</sup> See below, pp. 222-227.

<sup>61</sup> Grinsell, Egyptian Pyramids, pp. 25-26; see also below, p. 435.

<sup>62</sup> Maragioglio and Rinaldi, L'Architettura, V, 70, pl. 11.

<sup>63</sup> Stadelmann, Pyramiden, p. 135, fig. 39.

rooms,<sup>64</sup> to a north-south passage which runs along the back of the temple. Halfway along this passage, on the central east-west axis of the pyramid, is found evidence for a small niche in the western wall in which Hölscher reconstructs a stela in the form of a false door.<sup>65</sup> Hölscher believes that this was where offerings to insure the life and prosperity of the king in eternity were made.<sup>66</sup> Ricke objects to this theory: since the west wall of the temple is not in contact with the pyramid, it is unlikely that offerings were made here.<sup>67</sup> Maragioglio and Rinaldi suggest instead that a statue of the king was placed in this niche.<sup>68</sup> This is unlikely; the dimensions of the room suggest that there is a false door or stela in this area.<sup>69</sup>

Past the offering niche, the north-leading passage ends in a small square room, which in turn leads through a doorway in its east wall to a long east-west room. These two rooms have alabaster floors and granite walls and may have been used for storing precious objects connected with the worship of the deceased king.<sup>70</sup> A

<sup>64</sup> Ibid. There is, however, no evidence for this identification.

<sup>65</sup> Ibid., p. 70; Hölscher, Chephren, p. 29.

<sup>66</sup> Hölscher, Chephren, pp. 30-31.

<sup>67</sup> Ricke, Bemerkungen, II, 54-55.

<sup>68</sup> Maragioglio and Rinaldi, L'Architettura, V, 126, obs.

34.

<sup>69</sup> Stadelmann, Pyramiden, p. 135, fig. 39.

<sup>70</sup> Ibid., p. 70.

long north-south room at the south end of the north-leading passage has a recess in its southwest corner which may have contained a statue or stela.<sup>71</sup>

Returning to the large courtyard, a long east-west passage leads from the northwest corner of the courtyard to the inner court surrounding the pyramid of Khafra. This appears to be the only other entrance to the temple.<sup>72</sup>

Maragioglio and Rinaldi and Ricke reconstruct a small offering chapel in the space between the west wall of the temple and the base of the pyramid. This chapel would have been on the central east-west axis of the temple, and would have been in contact with the pyramid face. Ricke reconstructs a platform on which stood a stela and an altar, citing the chapels at the pyramid of Meidum as prototypes.<sup>73</sup> The stela would then bear the representation of the king as Horus. Maragioglio and Rinaldi agree with this reconstruction, and add a surrounding wall with a door in its north side.<sup>74</sup> The only actual evidence found to support this hypothesis is a hole about 90 cm. deep found in the courtyard between the pyramid and the inner temenos wall, at about the

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71 Ibid.

72 Ibid.

73 Ricke, Bemerkungen, II, 49, fig. 16.

74 Maragioglio and Rinaldi, L'Architettura V, 128, obs. 34 and pl. 12, fig. 3-4.

center of the pyramid's east face, which might represent the socket for the stela.<sup>75</sup> There is some evidence for such shrines in the complexes of Khufu and Menkaura.<sup>76</sup>

### II.1.1: THE RELIEFS

Only one block found at Lisht has been assigned to the upper temple of Khafra. This is a block of granite which measures about 2.17 m. x 0.94 m.<sup>77</sup> It is carved with the epithet *nswt-bjty*: "king of Upper and Lower Egypt," and a large cartouche containing the nomen of Khafra. To the right of the cartouche, the upper part of a uraeus can be seen, followed further to the right by Horus in the double crown.<sup>78</sup>

There were two more blocks found at Lisht which may be from this temple, but these could not be moved from their original places in the pyramid core at Lisht and their inscriptions have not been recorded. Goedicke believes that more blocks from the core of Amenemhet I's pyramid are buried in the area; future excavations may

<sup>75</sup> Ibid., p. 128, obs. 34.

<sup>76</sup> See above, pp.20-23 and below, pp. 243-244. Stedelmenn (Pyramiden, p. 135, fig. 39) does not think that there was an activity there.

<sup>77</sup> Goedicke, Re-used Blocks, pp. 23-24.

<sup>78</sup> Ibid., p. 24.

uncover blocks of Khafra's from the pyramid core of Amenemhet I.<sup>79</sup>

Another decorated fragment from the upper temple was found by Hölscher in the "Deep Hall" of Khafra's upper temple. On the surface of this fragment is the lower part of a serekh, below which is part of nswt-bjty.<sup>80</sup> Hölscher reconstructs the relief as the royal name H.(f-R( and his Horus name Wsr-jb inside a serekh surmounted by Horus in the double crown followed by the nbtj name with the two goddesses followed by the nomen in a cartouche and the inscription dj (nh dt: "given life forever;" he assigns this fragment to the courtyard of the upper temple.<sup>81</sup>

A block bearing the inscription wsjr jb H.(f-R( was found at Tanis; this may come from Khafra's upper temple.<sup>82</sup>

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<sup>79</sup> Ibid.

<sup>80</sup> Hölscher, Chephren, p. 55, fig. 45.

<sup>81</sup> Ibid., p. 28, fig. 16.

<sup>82</sup> H. Ricke, "Der Harmachistempel des Chephren in Giseh," BABA 10, (Wiesbaden: 1970), p. 31, fig. 18.

## II.2: THE TEMENOS WALLS AND THE SURROUNDING COURT

The pyramid of Khafra is surrounded by two enclosure walls separated by a courtyard.<sup>1</sup> The inner wall lies about 10.1 m. from the east, north, and south faces, and 10.47 m. from the west face of the pyramid.<sup>2</sup> Its thickness varies from 3.25 m to 3.60 m. It is built on the rock of the plateau, except in the southeast corner, where large blocks of limestone form its foundation (plan: 5).<sup>3</sup>

Remains of the outer enclosure wall have been found along the north, south, and west sides of the pyramid. It runs parallel to the inner wall. Its length from east to west is 338 m., and it is at a distance of 128.1 m. from the base of the pyramid, 69.42 m. from the inner wall. It ranges from 7.60 m. to 8.75 m. in thickness.

The north outer wall consists of large, undressed blocks, regular on the north face and rough on the

<sup>1</sup> Fakhry, The Pyramids, p. 137; Maragioglio and Rinaldi, L'Architettura, V, 72-74 and 94-96; Hölscher, Chephren, p. 60.

<sup>2</sup> Hölscher, Chephren, p. 59; Maragioglio and Rinaldi, L'Architettura, V, 72. Vyse reports a measurement of 1.97 m. for the distance from the north face to the inner enclosure wall (Vyse, Operations, II, 119), but Maragioglio and Rinaldi remeasured this distance after the area had been cleared of debris, rendering their measurement more accurate (Maragioglio and Rinaldi, L'Architettura, V, 72).

<sup>3</sup> Maragioglio and Rinaldi, L'Architettura, V, 72.

south.<sup>4</sup> According to Petrie, the thickness of the wall varies from 7.60 m. to 8.75 m.<sup>5</sup> A thinner wall was built on top of the main wall; few traces of this remain.<sup>6</sup> Petrie found the south face covered by rubble in which retaining walls parallel to the wall had been built; these retaining walls have been covered by pavement since the Old Kingdom.<sup>7</sup>

The west wall is slightly thinner than the north wall, and stood about 2 m. high when Petrie discovered it. It is built of small blocks of limestone and rubble; the outer face is very smooth.<sup>8</sup> Of the south wall, Petrie found only a 152 m. long stump.<sup>9</sup> Maragioglio and Rinaldi think that this wall was left unfinished by Khafra, as it was later connected to the temenos wall of Menkaura's complex by an elbow.<sup>10</sup>

The floor of the courtyard that spans the area between the inner and outer walls is made of white limestone cut in slabs of different shapes and sizes and laid directly onto the rock of the plateau.<sup>11</sup> A long ramp led from the north-west corner of the corridor

<sup>4</sup> Ibid., p. 94.

<sup>5</sup> Ibid., p. 94, pl. 5.

<sup>6</sup> Ibid., p. 94.

<sup>7</sup> Ibid.; Petrie, Pyramids and Temples, p. 100.

<sup>8</sup> Maragioglio and Rinaldi, L'Architettura, V, 94-96.

<sup>9</sup> Petrie, Pyramids and Temples, p. 102.

<sup>10</sup> Maragioglio and Rinaldi, L'Architettura, V, 96.

<sup>11</sup> Ibid.

surrounding the open court to the terrace on which the pyramid stood. The subsidiary pyramid and a serdab lie on the south between the two enclosure walls.<sup>12</sup>

A series of round holes about 40 cm. in diameter were cut into the rock around the pyramid, about 9.50 m. from its base, and spaced about 5 m. apart.<sup>13</sup> This type of hole is also found in Khufu's complex, and is thought in each case to be connected with the laying out of the pyramid.<sup>14</sup>

#### II.2.1: FUNCTION

Edwards believes that the position of the ramp leading to the terrace of the pyramid indicates that people who were not allowed to enter the upper temple were permitted access to the pyramid enclosure.<sup>15</sup> He adds that this ramp could also have been used by the workmen who sealed the pyramid entrance after the funeral of the king, since the inner wall would have ruled out any other means of approach.<sup>16</sup> Edwards proposed these

<sup>12</sup> Ibid., pl. 5.

<sup>13</sup> Ibid., p. 72; Hölscher, Chephren, p. 60.

<sup>14</sup> Maragioglio and Rinaldi, L'Architettura, V, 66; Goyon, "Observations," p. 73, note 3; Lehner, "Contextual Approach," pp. 8-10.

<sup>15</sup> Edwards, The Pyramids of Egypt, p. 150.

<sup>16</sup> Ibid.

two solutions without indicating which he preferred. His latter solution appears to be more reasonable.

### II.3: THE SUBSIDIARY PYRAMID AND SERDAB

#### II.3.1: GII-A

A single subsidiary pyramid (GII-a) lies to the south on the north-south axis of Khafra's pyramid, in the area between the two temenos walls (about 28.65 m. from the pyramid base) (plan: 5).<sup>1</sup> It was first discovered by Holscher.<sup>2</sup> Very little remains of the superstructure, but blocks of local limestone found on the site indicate that GII-a was built of this material, and show that the inclination of the faces was between 53° and 54°. Marks on the bedrock show where it was leveled to receive the foundation of the superstructure.<sup>3</sup>

A series of steps leading downward in the center of the pyramid's north side form the entrance to its substructure. From the bottom of these steps, a short corridor, 11.50 m. long, leads to an opening in the center of the north wall of the burial chamber, about 1.70 m. from its floor.<sup>4</sup> Inside the burial chamber, a rock-cut ramp leads from the opening to the floor.<sup>5</sup> The

<sup>1</sup> Maragioglio and Rinaldi, L'Architettura, V, 88.

<sup>2</sup> Holscher, Chephren, pp. 34-35 and pl. XIII.

<sup>3</sup> Maragioglio and Rinaldi, L'Architettura, V, 88.

<sup>4</sup> Reisner, Giza, I, 131-132; Holscher, Chephren, p. 64; Maragioglio and Rinaldi, L'Architettura, V, 88.

<sup>5</sup> Reisner, Giza, I, 131, fig.66.

dimensions of this chamber are 2.5 m. north to south by 6.8 m. east to west; it is 2.05 m. high.<sup>6</sup> The walls of this chamber were plastered and numerous reference lines can be seen; such lines have been noticed by Maragioglio and Rinaldi in the chambers of several different pyramids and in one of Khufu's boat pits no indication of its purpose has been suggested.<sup>7</sup>

Inside the burial chamber were found pieces of wood, ox bones, fragments of stoppers from jars or vases and two carnelian necklaces.<sup>8</sup> One of the stoppers bears an inscription which reads: s3 nawt smaw ht.f mrj.f smr w(t: "The eldest royal son of his body, beloved by him, the sole friend."<sup>9</sup> No trace of a stone sarcophagus was found in the substructure of this pyramid.

### II.3.2: ATTRIBUTION

Some scholars believe that GII-a belonged to a queen of Khafra, others think that it is a cult or ritual

<sup>6</sup> Ibid., p. 131; cf. also Maragioglio and Rinaldi, L'Architettura, V, 90, for slightly different measurements (2.63 x 7.86 x 2.10 m.).

<sup>7</sup> Maragioglio and Rinaldi, L'Architettura, V, 90 and 144.

<sup>8</sup> Ibid.

<sup>9</sup> Hölscher, Chephren, p. 107, fig. 157.

pyramid.<sup>10</sup> Hölscher believes that the king's wife or daughter was buried inside this pyramid, stating that queens' pyramids are usually of about this size, and are normally located on the south or southeast of the main pyramid.<sup>11</sup> Reisner also believes that it is a queen's pyramid, but offers no supporting evidence apart from a comparison to the burial chamber in GIII-a.<sup>12</sup> Maragioglio and Rinaldi agree with Hölscher and Reisner, citing as evidence the finds, especially of necklaces, from inside the substructure. They suggest that the fragments of wood represent part of a wooden sarcophagus.<sup>13</sup>

This hypothesis is supported by the possible altar found on the north side of the pyramid, opposite the entrance.<sup>14</sup> The fact that there is no trace of a cult place on the east can be seen as a reflection of the destructions which occurred at the end of the Old Kingdom.<sup>15</sup>

Ricke believes that GII-a is a satellite or a cult pyramid which functioned as the tomb of the king's ka.<sup>16</sup>

<sup>10</sup> See above, pp. 35-52, for discussion of subsidiary pyramids.

<sup>11</sup> Hölscher, Chephren, p. 35.

<sup>12</sup> Reisner, Giza, I, 131-132, fig. 66.

<sup>13</sup> Maragioglio and Rinaldi, L'Architettura, V, 90.

<sup>14</sup> Ibid., p. 130, obs. 39.

<sup>15</sup> See above, pp. 22, 108-109.

<sup>16</sup> Ricke, Bemerkungen, II, 125-26; see above, pp. 117-118 for discussion of ritual pyramids.

He proposes also that it could have been used as a temporary burial place for the king's body while the main pyramid was being completed.

Lauer also believes that the subsidiary pyramid of Khafra is a cult pyramid, functioning as a symbolic tomb, or cenotaph, for the king.<sup>17</sup> Stadelmann believes that GII-a is a cult pyramid because no stone fragments that belong to a sarcophagus were found; the objects found indicate instead that GII-a is a cult pyramid rather than a burial place.<sup>18</sup> Stadelmann uses parallels to the subsidiary pyramids at Dahshur and Abousir as support for his hypothesis, and also mentions that GII-a cannot be a queen's pyramid, as we already know the locations of the tombs of Khafra's queens.<sup>19</sup> This is not true, as we know of two queens of Khafra whose tombs have not been found.<sup>20</sup> Lehner also considers this monument to be a cult pyramid, and suggests that it would have held a statue of the king.<sup>21</sup>

I believe Khafra's subsidiary pyramid is a queen's pyramid, as suggested by Hölscher, Reisner, and Maragioglio and Rinaldi. Following the tradition set by

<sup>17</sup> Lauer, "Recherche et Découverte," pp. 98, 105.

<sup>18</sup> Stadelmann, Pyramiden, p. 134.

<sup>19</sup> Ibid., pp. 134-135.

<sup>20</sup> Smith, "Old Kingdom in Egypt and the Beginning of the First Intermediate Period," in I. E. S. Edwards, ed.

Cambridge Ancient History, I<sup>2</sup> (Cambridge: 1971), 175,

<sup>21</sup> Lehner, Satellite Pyramid, p. 36.

Khufu, the subsidiary pyramids in the 4th Dynasty complexes at Giza should belong to queens, and the function of the earlier and later cult pyramids was taken over by the upper temple.<sup>22</sup> The finds from the substructure support its identification as a tomb, and the two carnelian necklaces suggest that the owner was a woman. The ox bones probably formed part of an offering, similar to that found in the burial shaft of G7000-x. The wooden fragments might well be part of a wooden sarcophagus.

It is probable that the pyramid was opened and robbed during the First Intermediate Period.<sup>23</sup> Since the superstructure was almost completely destroyed, it is not surprising that there is no trace of a chapel on the east side; this could well have been destroyed at the same time.<sup>24</sup>

Four queens of Khafra are known to us from inscriptional evidence: Khamerernebty I, Khafra's main queen, who is known to us from her tomb near the Sphinx;<sup>25</sup> Meresankh III, whose tomb is in the Eastern

<sup>22</sup> See above, pp. 118-123.

<sup>23</sup> See above, p. 108.

<sup>24</sup> Maragioglio and Rinaldi, *L'Architettura*, V, 130, obs. 39.

<sup>25</sup> Smith, "Old Kingdom," p. 175.

Cemetery;<sup>26</sup> Hedjhekenu, mother of prince Sekhemkara, who is mentioned in her son's tomb;<sup>27</sup> and Per(senti?), mother of Nekaura, also mentioned in her son's tomb.<sup>28</sup> Since Khamerernebtj I and Mersyankh III already have known tombs, it is unlikely that this pyramid was built for one of them. However, it could belong to either Hedjhekenu or Per(senti?), or to another queen whose name has not yet been found. The prince referred to on the clay stopper could be either Sekhemkara, Nekaura, or an unknown prince.

### II.3.2: THE SERDAB

This feature is situated west of the subsidiary pyramid of Khafra, 4 m. from its east-west axis.<sup>29</sup> It was discovered by Abdel Hafeez Abd el-Al in 1960 when he was clearing the area south of Khafra's pyramid.<sup>30</sup> The

<sup>26</sup> D. Dunham and W. K. Simpson, The Mastaba of Queen Mersyankh III: Giza Mastabas I (Boston: 1974), 1-2; W. S. Smith, "Inscriptional Evidence for the History of the fourth Dynasty," JNES 11 (1952), pp. 113-28; Reisner and Smith, Giza, II, 1-12.

<sup>27</sup> Smith, "Old Kingdom," p. 175.

<sup>28</sup> Ibid.

<sup>29</sup> A. H. Abd el-Al and A. Youssef, "An Enigmatic wooden Object Discovered beside the Southern Side of the Giza second pyramid," ASAE 62 (1977), pp. 103-20, pls. 1-XV and idem, ASAE 63 (1979), pls. i, iia and iib.

<sup>30</sup> Ibid.

serdab was an undisturbed sealed passage, undistinguished by any superstructure.<sup>31</sup>

The substructure consists of a descending corridor about 80 cm. square, which runs for 6.70 m. at an angle of about 37°-35°,<sup>32</sup> whose entrance was blocked by three limestone blocks of various sizes.<sup>33</sup> At the end of the descending corridor, only 12 cm. from the end of the south wall, is a niche which measures 0.49 m.-0.62 m. in height, 1.19 m. long, and 0.62 m. deep. The walls of this niche were left rough and one of the upper corners was patched with plaster. In this niche were found the dismantled pieces of a small wooden box which had been tied with string.<sup>34</sup> After careful restoration,<sup>35</sup> the object was revealed as a frame for some sort of box or shrine, consisting of a base and four columns supporting

<sup>31</sup> Ibid; Maragioglio and Rinaldi, L'Architettura, V, 90, pl. 17, figs. 5,8; Lacovara and Lehner, "Enigmatic Object Explained," pp. 169-174.

<sup>32</sup> el-Al and Youssef, "Enigmatic Object Explained," pp. 103-120. pls. 1-15; Maragioglio and Rinaldi, L'Architettura, V, pl. 17, figs. 5 and 8.

<sup>33</sup> The corners of the passage are sharp and the walls are smoothed; chisel-marks can be seen on the surface of the rock; the end of the passage was left rough. Red lines were found on the ceiling and the upper corner of the north wall of the descending corridor (Maragioglio and Rinaldi, L'Architettura, V, 90-92).

<sup>34</sup> Ibid.

<sup>35</sup> Restoration was done by Ahmed Youssef; the box is now on display in Hall No. 42 of the Cairo Museum.

a cavetto cornice. The reconstructed object is 74 cm. long, 63 cm. wide, and 186 cm. high.<sup>36</sup>

Maragioglio and Rinaldi believe that, although the serdab entrance evidently lies outside the enclosure wall, the serdab is connected with the subsidiary pyramid of Khafra. They cite the facts that the serdab lies on the east-west axis of the pyramid is a storeroom, not a tomb, and should thus be associated with another structure. There are other instances, such as the boat pits connected with Khufu's main pyramid of structures which form part of an inner complex lying outside the inner temenos wall.<sup>37</sup>

Lacovara and Lehner find parallels to the shape of the wooden object found in the serdab in shrines portrayed in Old Kingdom tomb reliefs, such as in the chapel of Queen Meresankh III, where a similar object is used to transport a statue of the Queen,<sup>38</sup> and in the tomb of Ti at Sakkara, where it is used as a serdab shrine.<sup>39</sup> They also find a parallel from the Middle Kingdom, where a statue and shrine were found beside the

<sup>36</sup> Lacovara and Lehner, "Enigmatic Object Explained," p. 169; Maragioglio and Rinaldi, L'Architettura, V, 92.

<sup>37</sup> Maragioglio and Rinaldi, L'Architettura, V, 130, obs. 40.

<sup>38</sup> Lehner, Satellite Pyramid, p. 76; see Dunham and Simpson, Meresankh III, p. 12, pls. 3b and fig. 5, for scenes from the tomb of the queen.

<sup>39</sup> Lacovara and Lehner, "Enigmatic Object explained," p. 170.

mastaba of a Heliopolitan priest named Imhotep.<sup>40</sup> Lacovara and Lehner thus conclude that the subsidiary pyramid of Khafra was a cult pyramid for the ka statue of Khafra, and the shrine or wooden box found in the serdab was used to carry this statue.<sup>41</sup>

The explanation that the wooden object represents a shrine for the transport of a statue is plausible, but it may have been used for the statue of the queen that was buried in GII-a.

The parallels cited by Lacovara and Lehner are found in tombs of persons other than divine kings, and thus are limited in terms of their value in this case. A shrine for a statue of the king would be placed in the main tomb or the rooms of the upper temple. On the other hand, the burial place is reasonable, since there is no place for such a shrine in the chapel.

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40 Ibid., p. 174.

41 Ibid.

#### II.4: THE BOAT PITS

As in the pyramid complex of Khufu, five boat pits were found around Khafra's pyramid. However, in Khafra's complex, all five pits are located to the east of the pyramid: two on the north side of the upper temple, oriented east-west; three on the south side of the upper temple, two oriented east-west and the third running north-south (plan: 7B).<sup>1</sup> All of these are cut into the rock,<sup>2</sup> and two show evidence that they were roofed with limestone slabs.<sup>3</sup>

##### II.4.1: BOAT PIT #1

This pit is located to the southwest of the upper temple of Khafra, about 15-16 m. from its southern wall, and is oriented east-west.<sup>4</sup> The pit is well-preserved and when discovered, it was still roofed and almost all of the 30-40 cm. thick roofing slabs were intact.<sup>5</sup> The

<sup>1</sup> Maragioglio and Rinaldi, L'Architettura, V, 92, pl. 11.

<sup>2</sup> Ibid.; Edwards, The Pyramids of Egypt, pp. 147-48.

<sup>3</sup> Fakhry, The Pyramids, p. 136.

<sup>4</sup> Hassan, Giza, VI<sup>1</sup>, fig. 19, pl. I; Maragioglio and Rinaldi, L'Architettura, V, 92, pl. 11, Y; see also Thomas, "Solar barks," p. 67.

<sup>5</sup> Hassan, Giza, VI<sup>1</sup>, 59; Maragioglio and Rinaldi, L'Architettura, V, 92.

pit measures 25 m. in length, 3.70 m. in width, and 7.50 m. deep. It is cut into a vein of very fine white limestone.<sup>6</sup> There are ribbings on the bottom of the pit and holes bored into the walls.<sup>7</sup>

The cutting out of the boat pit was designed to represent a long, narrow boat which swelled out in the middle to accommodate a rectangular cabin, the shape of which is also evident in the way the pit was cut.<sup>8</sup> No remains of an actual boat were found, but two rectangular holes cut in the sides of the prow, or east end of the pit, may have served to hold beam ends placed across the hull.<sup>9</sup>

In spite of the relatively intact roofing, the following artefacts were found in the debris that filled the pit: the forelegs of a limestone sphinx, thought by Hassan to be a representation of the sun god from the Late Period;<sup>10</sup> two plates of red ware; and a roller of green basalt, thought to have been used in moving artefacts.<sup>11</sup>

<sup>6</sup> Hassan, Giza, VI<sup>1</sup>, 60.

<sup>7</sup> Maragioglio and Rinaldi, L'Architettura, V, 92.

<sup>8</sup> Ibid.

<sup>9</sup> Hassan, Giza, VI<sup>1</sup>, 60.

<sup>10</sup> Ibid.; see Reisner, Models of Ships and Boats, p. 97.

A model solar boat from the reign of Amenhotep II has a sphinx on its deck (Hassan, Giza, VI<sup>1</sup>, 60).

<sup>11</sup> Hassan, Giza, VI<sup>1</sup>, 60.

II.4.2: BOAT PIT #2

This pit is located southeast of Khafra's upper temple, in line with Pit #1.<sup>12</sup> It is in very poor condition, which has made it difficult to investigate.<sup>13</sup> According to Hassan, the pit measures 22 m. in length, 3.90 m. in width, and 6 m. in depth.<sup>14</sup> Nothing found inside the pit indicates that the boat pit had a cabin.<sup>15</sup> A sunken rebate, about 50 cm. deep, was found beside the upper edge of the pit; this is believed to be a wall erected around the boat for protection.<sup>16</sup> Thwarts cut into the rock are features of the night boat of Ra, and thus indicate that the pit was for a solar boat rather than a funerary boat.<sup>17</sup>

The artefacts found inside the pit include about 300-400 fragments of very fine royal statuary of diorite and alabaster.<sup>18</sup>

<sup>12</sup> Ibid., fig. 21; Maragioglio and Rinaldi, L'Architettura, V, pl. 11, Z.

<sup>13</sup> Maragioglio and Rinaldi, L'Architettura, V, 92.

<sup>14</sup> Hassan, Giza, VI<sup>1</sup>, 60.

<sup>15</sup> Ibid., p. 61; Maragioglio and Rinaldi, L'Architettura, V, 92.

<sup>16</sup> Hassan, Giza VI<sup>1</sup>, 61.

<sup>17</sup> Ibid.

<sup>18</sup> Ibid. These fragments came from the upper temple of Khafra and were deposited here after the destruction of the site which happened at the end of the Old Kingdom and during the First Intermediate Period. They provide us with evidence for the great quantity of statues placed in the upper temple.

A wall, 11 m. thick, of the living rock of the plateau was left between Pits #1 and #2.<sup>19</sup>

#### II.4.3: BOAT PIT #3

This pit is located to the northwest of the upper temple.<sup>20</sup> It is 27.50 m. long, 3.60 m. wide, and 7.0 m. deep.<sup>21</sup> It is identical in shape and style of cutting to Pit #1.<sup>22</sup> It was roofed with white limestone slabs, laid in two courses and placed one above the other, with a total thickness of 1 m.<sup>23</sup> It has a rectangular cabin, which led Hassan to compare it to archaic and Middle Kingdom boats, and to identify it as the pit for a solar boat.<sup>24</sup>

The artefacts found in this pit include: an 8 cm. long bead of blue faience;<sup>25</sup> a long-necked jar of red ware; an alabaster vase; a pottery vessel; a piece of an alabaster plate; an incense burner of red ware; the bones

<sup>19</sup> Hassan, Giza, VI<sup>1</sup>, 60.

<sup>20</sup> Ibid., p. 62, fig. 22; Maragioglio and Rinaldi, L'Architettura, V, 92, pl. 11, J.

<sup>21</sup> Hassan, Giza, VI<sup>1</sup>, 62.

<sup>22</sup> See Maragioglio and Rinaldi, L'Architettura, V, pl. 11, J.

<sup>23</sup> Hassan, Giza, VI<sup>1</sup>, 62; Maragioglio and Rinaldi, L'Architettura, V, 92-94.

<sup>24</sup> Hassan, Giza, VI<sup>1</sup>, 62.

<sup>25</sup> Ibid. .. p. 62. I suggest that this came from GII-a or from one of the tombs that surround Khafra's causeway.

of an ox; and a shell.<sup>26</sup> The alabaster and ceramic vessels may have come from the upper temple, where they could have been used for offerings.

#### II.4.4: BOAT PIT #4

This pit is located to the northeast of the upper temple.<sup>27</sup> It is now in very poor condition.<sup>28</sup> It is oriented east-west; its length is 23.50 m., its width 5 m., and its depth 5 m.<sup>29</sup> There is no evidence for a roof, but there is a sunken rebate around its upper edge.<sup>30</sup> A long cutting in the center of the side walls may represent a cabin or a sail.<sup>31</sup>

Objects found in this pit include: part of an alabaster statue including an uraeus; a small dish of green glazed pottery; a fragment of incised alabaster; many pieces of alabaster statues; an incense burner; and ox bones.<sup>32</sup> Again, since most of these artefacts are

<sup>26</sup> Ibid.

<sup>27</sup> Ibid., 63, fig. 19; Maragioglio and Rinaldi, L'Architettura, V, pl. 11, K.

<sup>28</sup> Hassan, Giza, VII, 63; Maragioglio and Rinaldi, L'Architettura, V, 92.

<sup>29</sup> Hassan, Giza, VII, 63.

<sup>30</sup> Ibid.

<sup>31</sup> Ibid., 63, fig. 19; Maragioglio and Rinaldi, L'Architettura, V, 94.

<sup>32</sup> Hassan, Giza, VII, 64.

from the late Old Kingdom, they must have been thrown into the pit after the destruction.

It was thought that there was another boat pit cut on the north side of the upper temple between the northwest boat and the northeast boat.<sup>33</sup> Hassan called this the sixth boat of Khafra.<sup>34</sup> Maragioglio and Rinaldi investigated this and found that it is only a natural crack in the rock.<sup>35</sup> It is possible that Pit #5 was originally meant to be put here, and that the location was changed for architectural or religious reasons. It is more likely that the crack is in a wall of solid rock carved to separate the two northern boat pits from each other, similar to that dividing the southern pits of Khufu.<sup>36</sup>

#### II.4.5: BOAT PIT #5

This pit is located on the southern side of the upper temple and runs parallel to the east face of the pyramid and about 31 m. from the pyramid's base.<sup>37</sup> It is

<sup>33</sup> Ibid., p. 56; Fakhry, The Pyramids, p. 136.

<sup>34</sup> Hassan, Giza, VII, 56.

<sup>35</sup> Maragioglio and Rinaldi, L'Architettura, V, 94.

<sup>36</sup> Hassan, Giza, VII, 60.

<sup>37</sup> Ibid., p. 64; Maragioglio and Rinaldi, L'Architettura, V, 92, pl. 11, K.

the largest of the pits, measuring 37.50 m. in length and 7 m. in depth.<sup>38</sup>

Most of the northern end and all of the walls are in poor condition. There is no evidence for roofing or a cabin.<sup>39</sup> No finds are listed for this boat pit.

#### II.4.6: FUNCTION

Very few scholars discuss the boat pits of Khafra. Edwards mentions them in his analysis of Khufu's boat pits, which he suggests might have held boats connected with the royal funeral or the journey of Ra, concluding that "until more is known about the religious beliefs of the period preceding the 5th Dynasty, the full significance of the boats is likely to remain conjectural".<sup>40</sup> Grinsell believes that the 4th Dynasty boat pits contained solar boats, but gives no reason for her opinion.<sup>41</sup>

<sup>38</sup> Hassan, Giza, VI<sup>1</sup>, 64. Maragioglio and Rinaldi give the length of the pit as 26 m. (Maragioglio and Rinaldi, L'Architettura, V, 92), but Hassan's measurements are more likely to be correct, as they were made when the pit was first discovered and cleared.

<sup>39</sup> Hassan, Giza, VI<sup>1</sup>, 64; see Thomas, "Solar barks," p. 67, notes 2 and 6, for the arguments on the direction of the prow.

<sup>40</sup> Edwards, The Pyramids of Egypt, pp. 147-48.

<sup>41</sup> Grinsell, Egyptian Pyramids, p. 29.

Černy compares these pits to the pits around Khufu's pyramid and speculates that Pits #1-4 were for boats used in the beyond, while Pit #5 contained the boat used in Khafra's funeral.<sup>42</sup> He also states that it was no longer thought necessary for the pits to face the four cardinal points.<sup>43</sup>

Hassan classifies these boat pits as receptacles for conventional solar boats. Pits #2 and 4 are for the night boats, as they were roofed to keep their interiors dark, and each contained a cabin. Pits #1 and 3 would then have been left unroofed, which helps to account for their poor condition, and would have contained the day boats of Ra.<sup>44</sup> The fact that each two boats are arranged prow to prow also supports this identification, as solar boats are often depicted in this way. Hassan equates the pairs of boats with the Upper/Lower Egypt duality seen so often in royal funerary material.<sup>45</sup>

The discovery of ox bones and incense burners in Pits #3 and 4 support their identification as solar boat pits, as these items were probably connected with offerings to the boats of the god. The titles of the priest Senhotep, who was inspector of the *msktt*, or

<sup>42</sup> Černy, "Recently Discovered Boat," pp. 77-78, fig. 2; see above, p. 67.

<sup>43</sup> Černy, "Recently Discovered Boat", p. 78.

<sup>44</sup> *Ibid.*, 56-7; Hassan, *Giza*, VI<sup>1</sup>, 57.

<sup>45</sup> Hassan, *Giza*, VII<sup>1</sup>, p. 57-8.

night, boat and the m(ndt, or day, boat, gives solid evidence that there were solar boats, and ceremonies connected with them, at Giza.<sup>46</sup>

There is no doubt in my mind that the four boats around the north and south sides of Khafra's upper temple are solar boats for the king Khafra and the god Ra (Khufu). The locations of the pits here are different from the locations of the pits in Khufu's complex, but the number of pits in the two complexes is the same. The layout of Khafra's complex was designed to accommodate the new cult begun by his father, who was considered the incarnation of Ra.<sup>47</sup> Khafra, as well as his brother Djedefra, according to the cult of Khufu, bore the title son of Ra.<sup>48</sup> It appears that the four boat pits located north and south of the upper temple of Khafra are two for boats connected with Khafra, Horus the king, and two as solar boats for Ra (Khufu) as the sun god.

Boat Pits #1 and 2 would be as Horus boats of Khafra, having the same function as those of Khufu.<sup>49</sup>

Boat Pits #3 and 4, located north of the upper temple towards the Horizon of Khufu, are the boats in which Ra (Khufu) can fly to the sky. Pit #3 is for the

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<sup>46</sup> Ibid., p. 63.

<sup>47</sup> Stadelmann, Pyramiden, p. 126.

<sup>48</sup> Ibid.

<sup>49</sup> See discussion above, pp. 81-85.

night boat, because it has the shape of a night boat, and Pit #4 is for the day boat.<sup>50</sup>

The fifth pit is directed north to south, and could be a funerary boat,<sup>51</sup> in which the king's body would journey to the north and south and then to the necropolis for burial, or it could be a boat of Hathor because of the existence of her cult at Giza.<sup>52</sup>

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<sup>50</sup> Hassan, Giza, VI<sup>1</sup>, 92; see also R. Anthes, "Die Sonnenboote in den Pyramiden Texten," ZAS 82 (1958), 77-89; see above, pp. 81-85.

<sup>51</sup> Cerny, "Recently Discovered Boat," p. 78.

<sup>52</sup> See discussion of Hathor cult in Chapter 5.

## II.5: OTHER STRUCTURES AROUND THE PYRAMID

### II.5.1: PETRIE'S "WORKMEN'S BARRACKS"

During the seasons from 1880-1882, Sir Flinders Petrie excavated a series of structures located west of the outer enclosure wall of the pyramid of Khafra (plan: 12).<sup>1</sup> He interpreted the groups of rooms which he found as a city for the workers who labored in the pyramid complex.<sup>2</sup>

The structures consist of long narrow rooms built backing onto a square courtyard.<sup>3</sup> The walls are of rough blocks of limestone cased with mud plaster, and measure on an average 1.30 m. thick; the roofs were of mud-brick, mats, beams, and argillaceous mud, and the floors were plastered with mud.<sup>4</sup>

Petrie, who only excavated a small part of the galleries, calculated that there were about 91 rooms, housing 400 men, on the entire site.<sup>5</sup> Of that number, 73 rooms ran east-west and measured about 26.90 m. long,

<sup>1</sup> Petrie, Pyramids and Temples, p. 101. This area had been partly excavated by Vyse in 1837 (Vyse, Operations, II, 88).

<sup>2</sup> Petrie, Pyramids and Temples, p. 102.

<sup>3</sup> Maragioglio and Rinaldi, L'Architettura, V, 96.

<sup>4</sup> Ibid.; Petrie, Pyramids and Temples, pp. 101-102.

<sup>5</sup> Petrie, The Pyramids and Temples, p. 102.

3.17 m. wide, and 2.13 m. high.<sup>6</sup> The other 18 rooms run north-south and were larger than those in the first group.<sup>7</sup> The entrances to the rooms measure from 2.28 m. to 2.54 m. wide.<sup>8</sup> Each room represents an entire house or building.<sup>9</sup> The rooms end to the east in wide limestone columns.<sup>10</sup>

Hölscher, working with the data collected by Petrie, calculated that there should have been 111 rooms, housing around 5,500 men.<sup>11</sup>

Petrie dated these structures to the reign of Khafra mainly on the strength of their orientation relative to his pyramid. Also supporting this date is the fact that this part of the site is removed from the actual construction area and the similarity of construction techniques between these walls and the temenos walls surrounding Khafra's pyramid.<sup>12</sup>

Several types of artefacts were found in the area of these rooms. Most prevalent are Old Kingdom pottery sherds, large pieces of quartzite, and damaged blocks of granite, some weighing up to 30 tons.<sup>13</sup> Also found were

<sup>6</sup> Maragioglio and Rinaldi, L'Architettura, V, 96.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

<sup>9</sup> Petrie, Pyramids and Temples, p. 102.

<sup>10</sup> Maragioglio and Rinaldi, L'Architettura, V, 96.

<sup>11</sup> Hölscher, Chephren, p. 36.

<sup>12</sup> Ibid.

<sup>13</sup> Ibid., p. 103; Maragioglio and Rinaldi, L'Architettura, V, 96.

fragments of statues of alabaster and diorite of Old Kingdom, especially 4th Dynasty, style.<sup>14</sup> One fragment of a life-size statue is mentioned as being an unusual type, but no further details are given.<sup>15</sup>

Petrie, in his analysis of the function of these rooms, dismisses the idea that these structures were built to house priests. He cites the poor quality of the materials and construction used, the large size of the complex, and the location of the site, to rule out this possibility. He feels that they could not be storerooms, as they are too far away from the pyramid and too large for this purpose. He concludes that the rooms represent workmen's barracks, and suggests that they housed the men who built Khafra's pyramid and complex.<sup>16</sup>

Most Egyptologists have simply accepted this explanation.<sup>17</sup> However, Maragioglio and Rinaldi suggest that these rooms could have been used for the storage of objects used in the maintenance of Khafra's cult in his upper and lower temples. They compare these structures to the houses at Kahun, which is a known pyramid city, and conclude that there is little similarity between the

<sup>14</sup> Petrie, The Pyramids and Temples, p. 103.

<sup>15</sup> Ibid.; Maragioglio and Rinaldi, L'Architettura, V, 96.

<sup>16</sup> Petrie, Pyramids and Temples, p. 102.

<sup>17</sup> Fakhry, The Pyramids, p. 137; Edwards, The Pyramids of Egypt, p. 155.

two sites.<sup>18</sup> They do not see the size and number of these rooms as proof against their identification as storerooms, comparing these structures with cult storerooms dating from the New Kingdom in the Ramesseum.<sup>19</sup>

Lehner discusses the alternate hypotheses of Petrie and Maragioglio and Rinaldi, and concludes that the structures are most likely cult storerooms. He points out the fact that no settlement debris, such as ash, bones, charcoal and fiber have been found in the area as proof of this identification.<sup>20</sup> However, it is important to note that very little of the site has been uncovered, and that the excavations carried out were not systematic, thus settlement debris may have been overlooked or may remain to be discovered. A final theory suggests that these rooms could have been used to store food for the people working in the pyramid complex.<sup>21</sup>

<sup>18</sup> Maragioglio and Rinaldi, L'Architettura, V, 132, obs. 45; cf. B. Kemp, "The Early Development of Towns in Egypt," Antiquity 51 (1977), pp. 185-200, B. Kemp, "An Incised Sherd from Kahun (Egypt)," JNES, 36 (1977), pp. 289-92; W. F. Petrie, Kahun, Gurob and Hawara (London: 1899); and W. F. Petrie, Illahun, Kahun and Gurob (London: 1890).

<sup>19</sup> Maragioglio and Rinaldi, L'Architettura, V, 132, obs. 45.

<sup>20</sup> Lehner, "Contextual Approach," pp. 32-34.

<sup>21</sup> Personal communication by Kemp to Lehner, cited in Ibid., p. 22; Lepsius, Denkmäler, II, 9.

That these rooms were used for the storage of cult objects and food seems appropriate. The construction of the houses, with mud-plastered floors, vaulted roofs, and no windows, is more appropriate for storerooms than residences. The discovery of diorite and alabaster statue fragments supports the theory that objects for the king's cult were stored here, as much statuary was needed in this cult. Some of the rooms might even have been workshops where the statuary was made. According to textual evidence from the time of Khafre,<sup>22</sup> a great deal of food was needed to support the building crews and funerary personnel. The location of these rooms in the higher desert and their vaulted ceilings would have aided preservation. This location would also have been chosen for reasons of security and ease of administration. Again, the lack of systematic excavations could account for the absence of food debris. Still, the function of these rooms cannot be settled entirely until scientific excavations are carried out on the site.

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<sup>22</sup> Lepsius, Denkmäler, II, 9.

### II.5.2: THE NORTH CHAPEL

There are no traces of a chapel on the north side of Khafra's pyramid.<sup>23</sup> Maragioglio and Rinaldi believe that one may have existed, but if so, it was entirely separate from the entrance to the pyramid, and probably consisted only of a single altar.<sup>24</sup> They are the only scholars to postulate its existence, but, in the absence of any evidence, it is most likely that there was never a north chapel connected with Khafra's pyramid.

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<sup>23</sup> Maragioglio and Rinaldi, L'Architettura, V, 62-64.

<sup>24</sup> Ibid., p. 118, obs. 28.

## II.6: THE CAUSEWAY

The causeway associated with the pyramid of Khafra is one of the few Old Kingdom causeways of which we have substantial remains (plan: 13). It is mentioned by Herodotus.<sup>1</sup> The foundation can be traced for most of its length, and some of the side walls, about 3 m. thick and built of large slabs of Tureh limestone, still stand to a height of four courses.<sup>2</sup>

The causeway runs at an angle of  $106^{\circ} 17'$  to the east of magnetic north<sup>3</sup> from the east entrance of Khafra's upper temple to the west entrance of his lower temple.<sup>4</sup> It is 494.60 m. long and 5 m. wide.<sup>5</sup> Its inclination is about  $5^{\circ} 17'$ ; the difference in height between the western and eastern ends is about 45.80 m.<sup>6</sup> The outside blocks slope at an inclination of about  $86^{\circ}$ ; the inner blocks are set vertically.<sup>7</sup> It is not certain if Khafra's causeway was roofed or painted, as no decoration has been found outside or inside the walls of

<sup>1</sup> Herodotus, The Histories, II, 429-431, paragraph 127.

<sup>2</sup> Maragioglio and Rinaldi, L'Architettura, V, 74; Grinsell, Egyptian Pyramids, pl. 3.

<sup>3</sup> Hölscher, Chephren, p. 50.

<sup>4</sup> Grinsell, Egyptian Pyramids, p. 23.

<sup>5</sup> Hölscher, Chephren, pp. 24 and 49; Maragioglio and Rinaldi, L'Architettura, V, 74.

<sup>6</sup> Hölscher, Chephren, p. 49; Maragioglio and Rinaldi, L'Architettura, V, 74.

<sup>7</sup> Maragioglio and Rinaldi, L'Architettura, V, 74.

the causeway.<sup>8</sup> Herodotus, however, stated that the causeway of Khufu was decorated.<sup>9</sup> Edwards believes that Khafra's causeway was roofed with flat slabs to protect these hypothetical wall reliefs.<sup>10</sup> The causeway may then have been lit by a narrow slit that ran along the center of the ceiling.<sup>11</sup> Evidence for this is a channel, which would have collected the water that entered the corridor through this slit and drained it away from the causeway.<sup>12</sup>

Some saddle-backed blocks found beside the upper temple were thought by Holscher to belong to the coping of the causeway; Maragioglio and Rinaldi, however, think otherwise, since some actual coping blocks, which were only partly rounded and not saddle-backed, were found at the lower end of the causeway.<sup>13</sup>

There were also two paved roads, each about 4-5 m. wide, running beside the covered corridor.<sup>14</sup> A passage

<sup>8</sup> Fakhry, The Pyramids, p. 135; Edwards, The Pyramids of Egypt, p. 147.

<sup>9</sup> Herodotus, The Histories, II, 427, paragraph 125.

<sup>10</sup> Edwards, The Pyramids of Egypt, p. 147.

<sup>11</sup> Holscher, Chephren, pp. 24, 49; Edwards, The Pyramids of Egypt, p. 147; Maragioglio and Rinaldi, L'Architettura, V, 74.

<sup>12</sup> Edwards, The Pyramids of Egypt, p. 147; Maragioglio and Rinaldi, L'Architettura, V, 74.

<sup>13</sup> Maragioglio and Rinaldi, L'Architettura, V, 74.

<sup>14</sup> Ibid.

or subway was dug under the causeway, but this does not seem to have been finished.<sup>15</sup>

#### II.6.1: DECORATION

Only one decorated block, found in the debris south of tomb GII, has been assigned to the causeway. This block is carved with a scene showing only a part of a goddess.<sup>16</sup> Some of the blocks found in the pyramid of Amenemhet I at Lisht may also belong to the causeway.<sup>17</sup>

Based on other Old Kingdom causeways, such as the causeways of Khufu and Unas, the causeway was almost certainly decorated. The ceiling probably was carved with stars, as is seen in the hallways of tombs and in the causeway of Unas at Saqqara, and the side walls perhaps were covered with ceremonial scenes, sacrificial scenes, and processions of personified estates.

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<sup>15</sup> Ibid.

<sup>16</sup> Porter and Moss, Bibliography, III<sup>1</sup>, 20; Junker, Giza, X, fig. 17, pp. 38-40. The block is now in Hildesheim Museum, No. 3185.

<sup>17</sup> Goedicke, Re-used Blocks, pp. 112, 118, 120, 121.

### II.6.2: FUNCTION

During the building of the pyramid, the causeway was used as a ramp to transport various building materials, such building materials were from a harbor on the river to the pyramid site.<sup>18</sup> After the pyramid was completed, the ramp would have been walled and roofed and then used to connect the lower and upper temples.<sup>19</sup>

### II.6.3: POST-4TH DYNASTY HISTORY

It is most likely that the destruction of the causeway took place at the end of the Old Kingdom or the beginning of the First Intermediate Period.<sup>20</sup>

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<sup>18</sup> Maragioglio and Rinaldi, L'Architettura, V, 74; Grinsell, Egyptian Pyramids, p. 23.

<sup>19</sup> Grinsell, Egyptian Pyramids, pp. 21-23.

<sup>20</sup> See Goedicke, Re-used Blocks, pp. 1-7.

## II.7: THE LOWER TEMPLE

The lower temple of Khafra is the best preserved temple known from the Old Kingdom.<sup>1</sup> It was discovered in 1853 by Auguste Mariette,<sup>2</sup> and then described in detail by Petrie, who believed it was the temple of the Sphinx.<sup>3</sup> The temple was re-excavated completely by Hölscher in 1909-1910, and identified as the lower temple of Khafra at this time.<sup>4</sup>

The temple stands to a height of 12.5-13.0 m. It was built of local limestone and cased with granite.<sup>5</sup> In the interior are huge pillars of red granite and floors of alabaster.<sup>6</sup>

There is a drop in the rock of the plateau just before the western entrance to the temple; thus about

<sup>1</sup> Grinsell, Egyptian Pyramids, p. 21.

<sup>2</sup> A. Mariette, Le Sérapéum de Memphis (Paris: 1882), pp. 93, 97-8; Edwards, The Pyramids of Egypt, 141; A. Mariette and M. de Rougé, "Fouilles dirigées par M. Mariette dans la vallée du Nil pendant la campagne d'hiver de 1859-60," Academie des Inscriptions et Belles Lettres: Comptes rendus des séances de l'année 1860 IV (Paris: 1862), 71-72; M. H. Wallon, Notice sur la Vie et les Travaux d'Auguste Ferdinand Mariette Pasha (Paris: 1883), p. 25.

<sup>3</sup> Petrie, Pyramids and Temples, p. 128.

<sup>4</sup> Hölscher, Chephren, pp. 15-23 and 37-49; Edwards, The Pyramids of Egypt, p. 141.

<sup>5</sup> Hölscher, Chephren, pp. 15 and 40; Maragioglio and Rinaldi, L'Architettura, V, 76.

<sup>6</sup> Maragioglio and Rinaldi, L'Architettura, V, 128, obs. 36.

half the height of the western façade was built against the vertical rock face.<sup>7</sup> It has been suggested that there was a granite-paved path, 75 cm. wide, between the western façade and the rock face,<sup>8</sup> but there is neither evidence nor space for such a path.<sup>9</sup>

The temple is connected directly with the eastern end of the causeway; the corridor of the causeway ends at the western entrance to the temple, which is located in the northern corner of its western wall.<sup>10</sup> A rock-cut passage along its northern side separates the lower temple from the Sphinx temple (plan: 13).<sup>11</sup>

The temple faces east, and there may have been a canal oriented north-south before it.<sup>12</sup> To the east of the temple is an 8.50 m. wide platform which was originally paved with slabs of limestone.<sup>13</sup> Two doorways built of local limestone cased with polished red granite were placed symmetrically in the east wall; these doorways were approached by short ramps leading from two paved roads.<sup>14</sup> The function of the roads is not known,

<sup>7</sup> Ibid., p. 76.

<sup>8</sup> Hölscher, Chephren, p. 40.

<sup>9</sup> Maragioglio and Rinaldi, L'Architettura, V, 76.

<sup>10</sup> Ibid., p. 76; Petrie, Pyramids and Temples, p. 129.

<sup>11</sup> Maragioglio and Rinaldi, L'Architettura, V, 78.

<sup>12</sup> Ibid., p. 78; Fakhry, The Pyramids, p. 132.

<sup>13</sup> Hölscher, Chephren, p. 39; Maragioglio and Rinaldi, L'Architettura, V, 78.

<sup>14</sup> Fakhry, The Pyramids, pp. 132-133, plan 5; Maragioglio and Rinaldi, L'Architettura, V, 76-78.

but it has been suggested that they are connected with the harbor or canal that may have fronted the temple; they were used during the construction of the pyramid complex and then later during the funeral or for other religious purposes.

In the center of the east face, Hölscher found a platform with a square hole in each corner which he interpreted as the base of a shrine or kiosk with four pillars.<sup>15</sup> Hölscher reconstructs the shrine with two-leaved doors and the inscription of the names and titles of Khafra around the doors. He postulates a raised platform in front on which offerings to the king might have been placed during certain feasts;<sup>16</sup> it is likely that a statue of Khafra was placed inside this shrine.<sup>17</sup>

Large granite blocks remain in the temple façade before the eastern entrances. Beside the north door was the inscription *mrj B3stt (ḥt dt*: "beloved of Bastet, giving life,"<sup>18</sup> which represents the first mention of this goddess in the funerary complexes of Giza.<sup>19</sup> Beside

<sup>15</sup> Hölscher, *Chephren*, pp. 37-39, 15-17, figs. 21, 22; see also Maragioglio and Rinaldi, *L'Architettura*, V, 78, pl. 14.

<sup>16</sup> Maragioglio and Rinaldi, *L'Architettura*, V, 78.

<sup>17</sup> Hölscher, *Chephren*, fig. 5; Maragioglio and Rinaldi, *L'Architettura*, V, 78; Edwards, *The Pyramids of Egypt*, p. 141.

<sup>18</sup> Hölscher, *Chephren*, p. 16, fig. 8.

<sup>19</sup> Personal communication from D. Silverman, citing B. Bothmer.

the south door was  $\text{mrj } \text{Ḥṯr}$ : "beloved of Hathor."<sup>20</sup> The name of the latter goddess occurs often in the titles of women from the time of Khufu and Khafra and later.<sup>21</sup> The titulary of Khafra may have been inscribed around these doorways, which would show that he was not considered a god but rather as a king "Horus."<sup>22</sup> There are shallow trenches on each side of each entrance; these trenches are in the form of semicircles on the north and straight on the other three sides. Hölscher suggests that these mark the placement of statues of sphinxes which would have flanked the entrances.<sup>23</sup>

Hölscher thought that there should be a wall surrounding the two sphinxes and the kiosk, but could find no traces of such a structure.<sup>24</sup> A wall, however, would have prevented access to those people unaffiliated with the activities of the temple, who would have come here to make offerings for the cult of the king. It is more likely that the temple façade, with the kiosk and sphinxes, was meant to be unobstructed to impress those

<sup>20</sup> Hölscher, Chephren, p. 16, fig. 7; see M. Talvin, "Priestesses of Hathor in the Old Kingdom and the First Intermediate Period," Doctoral Dissertation, (Brandeis University: 1985); cf. also discussion below, pp. 528-529, on the occurrence of the cult of Hathor at Giza.

<sup>21</sup> See appendix, nos. 9, 24, 37, 59, 60, 66, 81, 91, 99, 112, 117, 125, 132, 137, 140.

<sup>22</sup> Hölscher, Chephren, p. 17.

<sup>23</sup> Ibid., pp. 15-18; Maragioglio and Rinaldi, L'Architettura, V, 78; Fakhry, The Pyramids, p. 133.

<sup>24</sup> Hölscher, Chephren, pp. 14-18.

who came to pay tribute to their deceased ruler. At the southeast end of the temple façade is a washstand which was probably connected with the purification tent or the ceremonies carried out in the temple.<sup>25</sup>

The two eastern entrances are generally agreed to represent the two lands of Upper and Lower Egypt. This suggestion is supported by the names of the goddesses written above the doorways. As mentioned above, an inscription by the north door contains the name of Bastet,<sup>26</sup> who was associated with a site on the Delta called Tell-Basta from the Old Kingdom on.<sup>27</sup> This, then, should be the door for Lower Egypt. The name of the goddess Hathor, the principal goddess of Denderah in Upper Egypt from the Old Kingdom on,<sup>28</sup> is found by the southern entrance,<sup>29</sup> indicating that this is the door for Upper Egypt. One might then reconstruct three statues of the king along the east façade: one by the north entrance in the red crown of the Delta; one by the south

<sup>25</sup> Maragioglio and Rinaldi, L'Architettura, V, 78.

<sup>26</sup> Hölscher, Chephren, figs. 5 and 16; J. Vandier, Manuel, II, 51-53.

<sup>27</sup> See A. el Sawi, Excavations at Tell Basta (Charles University: 1979).

<sup>28</sup> H. Frankfort, Ancient Egyptian Religion: An Interpretation (New York: 1961), pp. 11, 12, 15, 110; S. Allam, Beiträge zum Hathorkult (bis zum Ende des Mittleren Reiches), MAS 4 (Berlin: 1963); F. Daumas, "Hathor," LA 15, II7, (1977), pp. 1024-1039.

<sup>29</sup> Hölscher, Chephren, figs. p. 5, 7.

entrance in the white crown of Upper Egypt; and one in the kiosk in the double crown.<sup>30</sup>

There are also several interesting structures on the the south side of the lower temple. First are the remains of a building surrounded on the west and south by blocks of local limestone. The building has a foundation of the same material topped by mud-brick walls; it appears to have been a storehouse.<sup>31</sup> Since the blocks on the west side rest on the granite casing of the temple,<sup>32</sup> it is probable that this building dates to a later period.

Hölscher found traces of a masonry forepart on the south side of the temple about 2.20 m. wide which was directed to the south and apparently held a two-leaved door which opened to the west. The function of this structure is not known, and it is of an uncertain date.<sup>33</sup>

As mentioned above, an exit from the north end of the west wall of the temple connects directly with the causeway. No traces of a door were found between the causeway and the lower temple. In the west façade were

<sup>30</sup> E.B. Smith, Egyptian Architecture as Cultural Expression, (New York: 1938), p. 123.

<sup>31</sup> Maragioglio and Rinaldi, L'Architettura, V, 80.

<sup>32</sup> Ibid.

<sup>33</sup> Hölscher dates it to the Old Kingdom, possibly before the 5th or 6th Dynasties (Chephren, 39); Maragioglio and Rinaldi, L'Architettura, V, 80.

found the holes for two gutters which would have served to drain rainwater from the roof.<sup>34</sup>

The interior of the temple is very well preserved. Each of the eastern entrances, which measure 2.80 m. wide and 6.0 m. high,<sup>35</sup> and were closed by wooden doors probably with hinges of copper,<sup>36</sup> leads to a short passage, which in turn leads to a small room.<sup>37</sup> In the west wall of each room is a niche measuring 2.5 m. high and 1.5 m. wide and deep. Based on their floors, which have the approximate shape and dimensions of a statue base, it has been suggested that each niche contained a statue of the king.<sup>38</sup> The statue of Khafra in the niche of the northern room should then wear the red crown and the statue in the south niche should wear the white crown.

Doorways in the the south wall of the north room and the north wall of the south room connect with short passages which lead toward a long north-south antechamber whose central axis is on the east-west axis of the temple. There is evidence for wooden doors separating

<sup>34</sup> Maragioglio and Rinaldi, L'Architettura, V, 80; see Ibid., pl. 14 for connection between causeway and temple.

<sup>35</sup> Hölscher, Chephren, p. 18.

<sup>36</sup> Maragioglio and Rinaldi, L'Architettura, V, 80.

<sup>37</sup> Ibid., p. 82.

<sup>38</sup> Ibid.; Edwards, The Pyramids of Egypt, p. 141; Hölscher, Chephren, pp. 15-17.

the small rooms from the antechamber.<sup>39</sup> The antechamber is 6.3 m. high. Near the entrance of this room is a rectangular pit measuring about 2.20 m. x 1.15 m.<sup>40</sup> The famous diorite statue of Khafra was found upside-down inside this pit.<sup>41</sup> This statue represents the king, wearing the nemes headdress with Horus above his head; the king sits on a throne whose sides are decorated with the sm3 t3wj sign for the unification of Upper and Lower Egypt.<sup>42</sup> Many fragments of other statues were found in this room, but none of these is complete.<sup>43</sup> This pit is thought to date to a period later than that of the temple.<sup>44</sup>

In the center of the west wall of the antechamber is the doorway to a passage which leads to a long north-south room which forms the bar of a large T-shaped area

<sup>39</sup> Maragioglio and Rinaldi, L'Architettura, V, 82, pl. 14; Hölscher, Chephren, fig. 6.

<sup>40</sup> Hölscher, Chephren, p. 19; Maragioglio and Rinaldi, L'Architettura, V, 82; Grinsell, Egyptian Pyramids, p. 108.

<sup>41</sup> Hölscher, Chephren, p. 19; Edwards, The Pyramids of Egypt, p. 142.

<sup>42</sup> Smith, Art and Architecture, pl. 107.

<sup>43</sup> Porter and Moss, Bibliography, III<sup>1</sup>, 21-25.

<sup>44</sup> Hölscher, Chephren, pp. 19-20; Maragioglio and Rinaldi, L'Architettura, V, 82; Edwards, The Pyramids of Egypt, p. 142; see below, pp. 204-205 for discussion of the post 4th Dynasty history of the temple.

which occupies the majority of the temple interior.<sup>45</sup> This room contains six square pillars arranged in a straight north-south line down the center of the room. Against the west wall of this room are six platforms for statue bases, three on each side. The stem of the T is oriented east-west and contains ten pillars in two east-west rows of five. There are seventeen platforms for statue bases in this room, seven each along the north and south walls, and three along the west wall.<sup>46</sup> All but two of these platforms are square; the two separating the two rooms are rectangular.<sup>47</sup> The pillars in both rooms are set deeply into the rock foundation, and were held together at the top and bottom with dove-tailed clamps of copper.<sup>48</sup> The platforms for statue bases are set about 10 cm. away from the walls and average 1.10 m. x 0.60 m.<sup>49</sup>

Fragments of statues of diorite, alabaster, and schist were found scattered around these two rooms,

<sup>45</sup> That this area is formed by two rooms is indicated by the fact that the ceiling of the bar of the T is 40 cm. higher than that of the eastern hall (Hölscher, Chephren, pp. 19-20; Maragioglio and Rinaldi L'Architettura, V, 82, pls. 14-16, I and P).

<sup>46</sup> See below, p. 205.

<sup>47</sup> Maragioglio and Rinaldi, L'Architettura, V, 82.

<sup>48</sup> Ibid.

<sup>49</sup> Ibid.

proving that statues did stand on these platforms.<sup>50</sup> It has been suggested that the ritual of the opening of the mouth would have been performed on these statues.<sup>51</sup> The roof of the hall was originally of red granite.<sup>52</sup>

The floors of the temple were paved with alabaster, the walls were cased with granite, and the ceiling was made of limestone and granite.<sup>53</sup> The entrance corridors were illuminated through the doors, and the antechamber may have had windows in its short sides.<sup>54</sup> Lighting in the T-shaped area was provided by longitudinal slits and vertical shafts cut into the ceiling of the T-shaped area which would have allowed light to enter and reflect off the alabaster floors.<sup>55</sup>

A doorway at the southern end of the west wall of the room which forms the bar of the T leads to a series of storerooms arranged in the shape of a comb with three teeth.<sup>56</sup> These storerooms were closed by two-leaved doors. Each contained two stories, the lower of which was

<sup>50</sup> Ibid., p. 82; Edwards, The Pyramids of Egypt, p. 142; Fakhry, The Pyramids, pp. 133-134; Hölscher, Chephren, pp. 92-5, figs. 80-1; Porter and Moss, Bibliography, III<sup>1</sup>, 21-25.

<sup>51</sup> Schott, Bemerkungen, II, 171ff.; see below, p. 590.

<sup>52</sup> Fakhry, The Pyramids, p. 134.

<sup>53</sup> Maragioglio and Rinaldi, L'Architettura, V, 80.

<sup>54</sup> Ibid., p. 82.

<sup>55</sup> Ibid., pp. 82 and 86; Hölscher, Chephren, p. 49, fig. 6; Edwards, The Pyramids of Egypt, p. 143; Fakhry, The Pyramids, p. 134.

<sup>56</sup> Hölscher, Chephren, pp. 44-49.

paved with alabaster, the upper with granite.<sup>57</sup> Ladders were probably used to provide access to the upper store.<sup>58</sup> The walls of all six rooms were cased with granite and alabaster, and the ceilings were of granite and limestone.<sup>59</sup> Three windows in the upper part of the east wall provided light for this area.<sup>60</sup> The storerooms most likely contained various cult objects, such as vases, lamps and jars.<sup>61</sup>

At the northern end of the western wall of the bar of the T is a corridor which is oriented north of due west, runs through the north-west quarter of the temple, and eventually connects with the causeway.<sup>62</sup> Several meters from the east end of this corridor, is a set of door jambs and some granite steps which mark a widening of the corridor; there is a corresponding narrowing at the western end.<sup>63</sup> The widened corridor has an upward slope of 1/6m. the height of the ceiling is 4.10 m. at the east end and 3.30 m. at the west end.<sup>64</sup> The floor of the corridor is alabaster and granite and the ceiling was originally decorated with granite beams.<sup>65</sup>

57 Maragioglio and Rinaldi, L'Architettura, V, 82-84.

58 Ibid., p. 84.

59 Ibid., p. 82.

60 Ibid., p. 84.

61 Smith, Architecture as Cultural Expression, p. 123.

62 Hölscher, Chephren, p. 21, fig. 12.

63 Maragioglio and Rinaldi, L'Architettura, V, 84.

64 Ibid., pl. 14.

65 Ibid.; Fahkry, The Pyramids, p. 135.

At approximately the center of the corridor, a doorway closed by a two-leaved door opens into a short passage which leads south to a rectangular east-west room<sup>66</sup> which has been tentatively identified as either a guard or store room.<sup>67</sup> The ceiling of this room was probably no higher than 2.5 m.; the floor is missing and the ceiling consists of one huge granite slab.<sup>68</sup> There is a window for lighting in the northern wall.<sup>69</sup>

In the north wall of the north-west corridor, across from the south door, is a second doorway, with no door. There are door jambs, a granite lintel,<sup>70</sup> and steps leading to the upper terrace of the temple.<sup>71</sup>

#### II.7.1: DECORATION

<sup>66</sup> Maragioglio and Rinaldi, L'Architettura, 84, pl. 14, g; Hölscher, Chephren, pp. 21-23, fig. 12.

<sup>67</sup> Following Hölscher, Maragioglio and Rinaldi (L'Architettura, V, 84) suggest that it was for the individuals who guarded the causeway entrance. B. Grdseloff (Das Ägyptische Reinigungszelt (Cairo: 1941), pp. 25ff.), among others, feels that this room was used to store food and objects needed for the three suggested ceremonies which were performed inside the temple.

<sup>68</sup> Maragioglio and Rinaldi, L'Architettura, V, 84.

<sup>69</sup> Ibid.

<sup>70</sup> Ibid.

<sup>71</sup> Ibid. For discussion of the roofing, see ibid., pp. 84-86 and 128-130, obs. 38.

The inscriptions found in situ on the eastern façade of the temple have been discussed above. Other evidence for the decoration of the temple is provided by fragments of two reliefs, one showing the legs of offering bearers and the other portraying a priest with a bound Asiatic. These were found in the debris to the east of the lower temple, and are dated to the Old Kingdom on the basis of style. It is not certain whether or not these belong to the lower temple, as other fragments were found in the area which bear inscriptions of a person named Thenti of the 6th Dynasty.<sup>72</sup>

#### II.7.2: POST 4TH DYNASTY HISTORY

The evidence from the lower temple supports the hypothesis that the monuments on the Giza plateau were destroyed at the end of the Old Kingdom. The temple was certainly robbed, and most of the statuary was smashed, as the many statue fragments found in the area testify. However, the careful burial of the diorite statue of Khafra found in the pit in the antechamber suggests that

<sup>72</sup> Steindorff in Hölscher, Chephren, pp. 110-112, figs. 162-63; Sethe, Urk. I, 1578; Porter and Moss, Bibliography, III<sup>1</sup>, 20; H. Goedicke, Die Privaten Rechtinschriften aus dem Alten Reich (Vienna: 1970), pp. 149-73.

someone was attempting to protect it from plunderers. This pit cannot date from the 4th Dynasty, as it has no function in the Old Kingdom plan of the temple. Therefore, it must have been dug by later priests of Khafra during the First Intermediate Period.<sup>73</sup>

A hole in the south wall of the small entrance passage to the six storerooms may have been used for the burial of common people in a later period.<sup>74</sup>

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<sup>73</sup> See Table 15.

<sup>74</sup> Petrie, Pyramids and Temples, p. 130. Petrie did not find any evidence of this himself, but was informed that mummies had been found in the area.

## II.8: THE SPHINX AND SPHINX TEMPLE

Since 1816, much work has been carried out in the vicinity of the Sphinx.<sup>1</sup> Objects dating to all periods of Egyptian history, from the Old Kingdom through the Greek and Roman eras, have been found in the area.<sup>2</sup> Recent excavations have been performed to determine the stratigraphy of the area and the research has resulted in detailed maps and elevations that greatly clarify the site.<sup>3</sup>

### II.8.1 THE SPHINX

The Sphinx itself is a representation of a lion with a king's head; the king wears the nemes headdress and a false beard. It lies on the site of an Old Kingdom quarry, and was carved out of a bedrock core that was

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<sup>1</sup> Porter and Moss, Bibliography, III<sup>1</sup>, 35-47.

<sup>2</sup> Ibid; S. Hassan, Giza, The Great Sphinx VIII (Cairo: 1953), 293, appendix III; S. Hassan, The Sphinx: Its History in the Light of Recent Excavations (Cairo: 1949), pp. 43-51.

<sup>3</sup> Z. Hawass and M. Lehner, Excavations in the Area of the Great Sphinx, unpublished manuscript.

left standing when the rock around it was cut away;<sup>4</sup>  
 additions and repairs were made in limestone and mortar.<sup>5</sup>  
 Recent investigations revealed two passages inside its  
 body, both of which were empty (plan: 13).<sup>6</sup>

A narrow courtyard, bounded by the walls of the old  
 quarry, was left clear around the Sphinx; this area is  
 generally referred to by scholars as the sanctuary.<sup>7</sup>

Excavations in this area have revealed many diagnostic

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<sup>4</sup> M. Lehner, et al. "The ARCE Sphinx Project: A preliminary Report," ARCE Newsletter 112 (Fall, 1980), p. 14. The excavations revealed that the cutting of the north line of the sanctuary, and the dressing and sheathing of the Sphinx temple core blocks was left uncompleted in the 4th Dynasty. The line marking the north limit of the Sphinx sanctuary actually begins as a cut through the bed rock to the east of the northeast corner of the Sphinx temple. This ledge runs to the west where it passes under the corner of the Amenhotep II temple. Just beyond the Amenhotep II temple, to the west, the part at which quarry work was abandoned on the ledge was laid bare. On the top of the uncut part of the ledge, running parallel to the north side of the Sphinx, quarry removal channels in the worked surface, up to 40 cm. deep, were cleared of hard-packed sand and gypsum. Quartzite, chert, and dolerite tool fragments were recovered from the ancient packing which filled these quarry channels (Hawass and Lehner, Excavations).

<sup>5</sup> K. Lal Gouri, "Deterioration of the Stone of the Great Sphinx," ARCE Newsletter, 114 (Spring, 1981), pp. 35-47.

<sup>6</sup> Z. Hawass and M. Lehner, "The passage under the Sphinx," in The Great Sphinx of Giza, ed. J. Allen, forthcoming.

<sup>7</sup> Recent investigations have revealed that the cutting of the north line of the sanctuary, and the dressing and sheathing of the sphinx temple coreblocks were left uncompleted in the 4th Dynasty. The line marking the north limit of the Sphinx sanctuary actually begins as a cut through the bedrock to the east of the north-east corner of the Sphinx temple. (Lehner et al. "Sphinx Project," p. 15).

sherds of Old Kingdom pottery, including carinated bowls and other vessels of red burnished Meidum ware, crude brown ware "bag jars," and crude red conical jars. Fragments of granite and alabaster found in quarry channels on the sanctuary floor probably come from the casing of the nearby Sphinx Temple, while chips of dolerite most likely come from typical ball-shaped pounding tools. Also found were faience beads, a flint blade, and a chert hammer stone bearing traces of copper.<sup>8</sup>

Also from the 4th Dynasty is the tomb of Khamerernebti II, daughter of Khafra and wife of Menkaura, which was partially cut into the bedrock substratum south of the Sphinx.<sup>9</sup>

### II.8.2: THE SPHINX TEMPLE

The Sphinx Temple was excavated by Baraize and Hassan.<sup>10</sup> Its plan is completely different from the

<sup>8</sup> Lehner *et al.*, "Sphinx Project," pp. 8-9, fig. 7; Hawass and Lehner, *Excavations*.

<sup>9</sup> A. B. Kamal, "Rapport sur les fouilles du Conte de Galarza," *ASAE* 10 (1910), pp. 116-21; G. Daressay, "La tombe de la mère de Chéphren," *ASAE* 10 (1910), pp. 41-49.

<sup>10</sup> Porter and Moss, *Bibliography*, III<sup>1</sup>, 38; Hassan, *Giza*, VIII, 25. It was excavated by Baraize in 1925-32, Hassan in 1935-36.

plans of the other Old Kingdom temples on the Giza plateau. The temple and the area surrounding it were called Setepet, translated by Hassan as "the elect" (plan: 13, 14).<sup>11</sup>

The Sphinx Temple lies to the north of Khafra's lower temple, in line with it and separated from it, by a narrow passage.<sup>12</sup> It is located directly in front of the Sphinx.<sup>13</sup> The temple was built of local limestone and cased on the inside with Tureh limestone, granite, and alabaster. On the exterior, only the portals were lined with granite.<sup>14</sup> The temple was never completed: a core block in situ in the north wall, which is abutted by Old Kingdom debris, had not yet been dressed to receive the granite sheathing which would have covered the wall had the temple been completed.<sup>15</sup> The main axis of the temple runs east-west.<sup>16</sup>

The temple has two entrances on the east, one entrance on the north and the other on the south.<sup>17</sup>

<sup>11</sup> This name was written as "Hor-em-aket presiding over the select place." Hassan, Giza, VIII, 25, 86, 246, fig. 68; also R. Faulkner, A Concise Dictionary of Middle Egyptian (Oxford: 1972), p. 254.

<sup>12</sup> Maragiolio and Rinaldi, L'Architettura, V, 134, pl.

<sup>14</sup> The Sphinx can only be reached from the eastern base of the plateau through this narrow passage.

<sup>13</sup> Hassan, The Sphinx, p. 28.

<sup>14</sup> Maragiolio and Rinaldi, L'Architettura, V, 134-136.

<sup>15</sup> Lehner, "Contextual Approach," pp. 11ff.

<sup>16</sup> Stadelmann, Pyramiden, p. 126.

<sup>17</sup> Maragiolio and Rinaldi, L'Architettura, V, 136; Hassan, The Sphinx, p. 39.

These may represent doorways for Upper and Lower Egypt.<sup>18</sup> Although there were no traces of hinges found, Maragioglio and Rinaldi have suggested that the doorways were closed with two-leaved doors.<sup>19</sup>

The northern doorway opens into a short corridor which leads to a long north-south room which extends to the north. To the south of this room is a small square room; to the west are two stepped niches. The system of rooms reached through the southern entrance is laid out as the mirror image of the northern system.<sup>20</sup> It has been suggested that these were guardrooms but no evidence exists in temples built earlier or later to support this hypothesis. However, there is textual evidence from the Old Kingdom for day and night guards.<sup>21</sup> It is also possible that the two niches each contained a stela or statue.<sup>22</sup>

From the northwest corner of the long north-south room in the northern system and from the southwest corner of the long north-south room in the southern system, run long east-west corridors that terminate in a large

<sup>18</sup> Hassan, The Sphinx, pp. 39ff. This duality is seen in the entrances to the lower temple, see above, pp. 194-195.

<sup>19</sup> Maragioglio and Rinaldi, L'Architettura, V, 136.

<sup>20</sup> Ibid., pl. 14, IN, AN, BN, and CN and IS, AS, BS, and CS. Cf. also Ricke, "Harmachistempel," fig. 6; and Hassan, Giza, VIII, pl. 16.

<sup>21</sup> Posener-Kriéger, Les Archives, II, 499.

<sup>22</sup> Hassan, Giza, VIII, 25.

courtyard that occupies most of the temple area. Two roofed hallways, each measuring about 21 m. long and 5 m. wide and containing six square granite pillars arranged in a single east-west row, run along the north and south sides of the courtyard.<sup>23</sup> Running north-south and spanning the east and west sides of the courtyard are two long roofed corridors. Centered along each of these corridors is a series of three stepped-back recesses, extending to the east from the east corridor and to the west from the west corridor.<sup>24</sup> There are six granite pillars in each front niche and two in the middle niches behind them.<sup>25</sup>

A thick wall of masonry divides the unroofed central court from the hallways and corridors around its sides; a series of openings, two each through the north and south walls and five each through the east and west walls, connect the roofed and unroofed areas.<sup>26</sup>

Two doorways in the west wall of the peripteral corridor, each lead to an east-west passage which are entered from a parallel series of two north-south rooms. The easternmost of these two rooms are about half as long as the westernmost; all four rooms have approximately the

<sup>23</sup> Maragioglio and Rinaldi, L'Architettura, V, pl. 14.

<sup>24</sup> Ibid., pp. 136-138.

<sup>25</sup> Ibid., p. 138.

<sup>26</sup> Ibid.

same width. The northern rooms are lined with granite, the southern rooms with alabaster.<sup>27</sup> These rooms could be interpreted as magazines built to hold precious objects needed for the temple cult.

Against the masonry bounding the central court, between the openings leading to the peripteral corridor, are a series of rectangular depressions cut into the rock floor. These may have held statues representing the king who built the temple,<sup>28</sup> small sphinxes,<sup>29</sup> or pillars.<sup>30</sup> Abundant fragments of alabaster indicate that the courtyard was paved with this material.<sup>31</sup>

Ricke and Schott, who studied the function of the temple, believe that the eastern set of stepped recesses are for a ritual to the rising sun, and that the western recesses are for the setting sun. They think that the twenty-four pillars around the hall (six on each side) represent the twelve hours of the day and the twelve hours of the night, and that the four pillars in front of the two innermost recesses represent the arms and legs of the goddess Nut. They believe that the open court is

<sup>27</sup> Ibid., pl. 14, Pn and Ps.

<sup>28</sup> Ibid.; Hassan, Giza, VIII, 26, note 1.

<sup>29</sup> Grinsell, Egyptian Pyramids, p. 109.

<sup>30</sup> Hassan, Giza, VIII, 26, note 1.

<sup>31</sup> Ibid., p. 138.

connected with a solar cult<sup>32</sup> or a temple to Ra. This open court is similar to the courts of the upper temple of Khufu and Khafra. Ricke interpreted this temple as the temple of Hor-em-Akhet.<sup>33</sup>

A long narrow trench runs under the south wall of the temple near its eastern end; it has been suggested that this represents a drain that served the lower terrace before the building of the temple.<sup>34</sup> Lehner suggests alternatively that it could represent a trench used during quarrying operations as a "lead" for dropping a reference point.<sup>35</sup> This suggests that the 4th Dynasty Egyptians worked with an economy of labor and material by using large core blocks extracted during the cutting of the sphinx sanctuary to build the Sphinx Temple immediately to the east.<sup>36</sup>

The location of this temple in front of the Sphinx's paws and its anomalous layout suggest that it was not a temple dedicated to the funerary cult of one of the kings

<sup>32</sup> Ricke, "Harmachistempel," pp. 1-43. Ricke and Schott support this hypothesis with scenes in the offering chapels of Hatshepsut and Thutmose III in Luxor and through parallels with the scenes of the offering chapel of Queen Hatshepsut and Thutmose III (cf E. Naville, The Temple of Deir el-Bahri, IV (London: 1895), pls. 124-26; S. Schott, "Ägyptischen Quellen zum Plan des Sphinxtempels," BABA 10 (1970), pp. 49-79).

<sup>33</sup> Ricke, "Harmachistempel," pp. 5-15.

<sup>34</sup> Ibid., p. 15.

<sup>35</sup> Lehner, "Contextural Approach," p. 11.

<sup>36</sup> Ibid.

buried at Giza, but was instead built to house the cult connected with the Sphinx.<sup>37</sup> It has also been suggested that it is a sun temple.<sup>38</sup>

### II.8.3: POST-4TH DYNASTY HISTORY

The Sphinx and its temple were abandoned and robbed in the First Intermediate Period or Middle Kingdom.<sup>39</sup> The only Middle Kingdom artefact found in the area of the Sphinx sanctuary was a faience scarab inscribed with the title  $\text{jmj-r3 mš(} : \text{"general."}^{\text{40}}$

The Sphinx was worshipped in the 18th Dynasty.<sup>41</sup> On the plateau above the northeast corner of the Sphinx sanctuary, Hassan found a mud-brick temple built by Amenhotep II and dedicated to Haroun Hor-em-akhet.<sup>42</sup> North-northeast of this temple, Hassan cleared another, more ruined mudbrick structure, a supposed "chapel of

<sup>37</sup> Hassan, The Sphinx, p. 32.

<sup>38</sup> R. Anthes, "Was veranlasste Chefred zum Bau des Tempels vor der Sphinx?" BABA 12 (1971), pp. 47-58.

<sup>39</sup> Lehner, et al. "Sphinx project," 18-19.

<sup>40</sup> Hawass and Lehner, Excavations. The scarab is dated to the 13th Dynasty.

<sup>41</sup> Ricke, "Harmachistempel," p. 25.

<sup>42</sup> Hassan, Giza, VIII, 32-50, pl. XXIV.

Thutmose I."<sup>43</sup> A granite stela, the "Dream Stela", which was set up between the paws of the Sphinx, relates that Thutmose IV cleared the sand around the statue and built a wall to protect it from the sand.<sup>44</sup> Also found in the area of the Sphinx sanctuary were 18th Dynasty mudbrick walls.<sup>45</sup>

The clearing operations supervised by Baraize from 1923 to 1936 uncovered what appears to be a general 18th Dynasty level of mudbrick architecture which, where it extended over the rubble completely filling the Sphinx Temple, was found at about the same absolute level as the Amenhotep II temple.<sup>46</sup>

The 18th Dynasty level also contained the foundations of what appear to be a villa attached to the

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43 Ibid., p. 67, fig. 60 and pl. 16. This structure is about 5.6 m. x 8.6 m. according to fig. 60, or 22.8 m. x 22.8 m. according to pl. 16. The ground plan also differs in the two plans (unless we are confusing two different structures; this is not clear in the report). Hassan adduces no evidence to indicate that this structure, which was denuded to within a few inches of the ground, was assigned to Thutmose I. To the east of this building lay another mud-brick structure, smaller and unidentified (ibid., p. 67, fig. 60 and pl. 16; Porter and Moss Bibliography, III<sup>1</sup>, pl. 6). Both it and the "Thutmose I chapel" have disappeared under the modern paved road. There is a good possibility that these structures occurred at different levels in the stratification of the immense deposit which covered this area. See also Hawass and Lehner, Excavations.

44 Porter and Moss, Bibliography, III<sup>1</sup>, 37.

45 A. B. Kamal, "Rapport sur les fouilles," pp. 116-21.

46 Hassan, Giza, VIII, 32-50, pl. XXIV.

front of the lower temple.<sup>47</sup> This was removed by Baraize. From the floor level of this house, a flight of mud-daub stairs led down near the ruined southwest corner of the Sphinx Temple to a walkway or small court.<sup>48</sup> Several meters behind the valley temple, and at a considerable height above the Old Kingdom rock floor, Baraize also cleared a block of apparently New Kingdom

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<sup>47</sup> Mariette and de Rougé, "Fouilles dirigées," pp. 71-72; Mariette, "Le Serapeum," pp. 91-100; Wallon, Notice, p. 25.

<sup>48</sup> Ricke, "Harmachistempel," pl. 3a-b. No plan of these features exists in the archives of Lacau, and to our knowledge the only plan which includes them is an unpublished one done by Borchardt in 1929, now in the archives of the Schweizerisches Institut für Ägyptischen Bauforschung und Altertumskunde in Kairo. Borchardt's initials with the year 29 appear in the lower right corner of the plan; since the 18th Dynasty structure was only partially cleared during the 1909 Hölscher excavations, and the Sphinx Temple then unknown, Borchardt must have completed the plan during the Baraize excavations, 20 years later. See Hawass and Lehner, Excavations.

structures which in whole or in part, have been labeled as the "Resthouse of Tutankhamen."<sup>49</sup>

A small shrine from the time of Ramses II, consisting of a granite altar flanked by two limestone stelai, lies between the paws of the Sphinx. Traces of fire were found on this altar.<sup>50</sup> A stela found by Hassan, and dated to the New Kingdom, shows worshippers presenting burnt offerings to the Sphinx, thus this altar presumably served for burnt sacrifices.<sup>51</sup> Vyse believed that this altar had a superstructure.<sup>52</sup>

Greek graffiti on the paws of the Sphinx indicate that the area was free of sand in this period. A staircase of 13 steps leading to a viewing platform and

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<sup>49</sup> The mud brick constructions are shown in Arch. Lacau photos CI 139-41, 143-44, 146-47, 156, 160, 177-78. They form a rectangular block of about 8 rooms about 15 m. due west of Khafra's lower temple and span an area from near the south wall of the lower temple to its causeway on the north. Arch. Lacau CI 146-47 shows a square limestone basin sunk in the floor of one of the small rooms which had white plastered walls. Tutankhamen's name was found in a limestone doorway found in situ in this small complex (Arch. Lacau CI 139, 140); the doorway was later usurped by Ramses II (Porter and Moss, Bibliography, III<sup>1</sup>, 41; Zivie, Giza, pp. 51, 176, 273 n.1; Hassan (Giza, VIII, 100) says that, "the building in question even contained a bath, and it must have given great pleasure to the royal hunter, coming in all hot from the chase, to plunge into this brimming basin, and scrub off the dust and grime." Hence the "Resthouse of Tutankhamen." See Hawass and Lehner, Excavations.

<sup>50</sup> Porter and Moss, Bibliography, III<sup>1</sup>, 35; Hassan, Giza, VIII, 13-15; Hassan, The Sphinx, p. 10.

<sup>51</sup> Hassan, Giza, VIII, 14, 56, 84-85, fig. 67.

<sup>52</sup> Vyse, Operations, III, 107-99.

surrounded by a wall made of mudbrick dated to the Roman period,<sup>53</sup> lay over the Amenhotep II temple and the surrounding mud-brick structures; these structures were destroyed during the clearing operations of Baraize.<sup>54</sup>

Of uncertain date are fragments of the Sphinx's beard, the head of a stone uraeus, and a stone lion. In 1853, Mariette recleared the forepaws and excavated westwards along the flanks of the statue and found stone built rooms attached to the body.<sup>55</sup>

#### II.8.4: DATE

Maspero was the first to describe the Sphinx as a representation of Khafra with the body of a lion, and suggested that it functioned as a guardian of the plateau.<sup>56</sup> Based on the Inventory Stela found in the

<sup>53</sup> Hawass and Lehner, Excavations.

<sup>54</sup> See Ricke, "Harmachistemple," pls. 1b, 4a-b, 5a where the stairs and the platform are shown. Pl. 6a (Arch. Lacau CI 226) is an excellent view of the non-stratigraphic excavation clearing at least 10 ms. of cultural debris, including Old Kingdom to Graeco-Roman architecture, vertically through all layers at once.

<sup>55</sup> Hassan, Giza, VIII, 13-15; A. Mariette and M. de Rougè, "Note sur les fouilles exécutées par Mariette autour du grand sphinx de Gizeh (Lettres de Mariette citées par M. de Rougè), L'Athenaeum français 3<sup>e</sup> année (28 janvier 1854); Mariette, Le serapeum, 91-100; Hawass and Lehner, Excavations.

<sup>56</sup> G. Maspero, The Dawn of Civilization (London: 1910), pp. 237 and 247.

Temple of Isis attached to GI-c,<sup>57</sup> Brugsch dates the Sphinx to before the time of Khufu.<sup>58</sup> If this inscription is to be believed, both the Isis Temple, the Sphinx, and the Sphinx temple antedate Khufu. However, the stela is thought to date from the Late Period,<sup>59</sup> and since it is certain that the Isis Temple was built long after the 4th Dynasty,<sup>60</sup> it seems appropriate to regard this text with caution. Some believe that it is a copy of an earlier text, although it is not explicitly labelled as such.<sup>61</sup>

Stadelmann believes that the Sphinx was carved in the time of Khufu to represent that king as a guardian figure.<sup>62</sup> He argues that the Sphinx was not carved from standing rock, but instead believes that the plan of the Sphinx goes back to Khufu's time and represents him as a guardian animal.<sup>63</sup> He states that the Sphinx is not a cult object of the temple and does not lie on its axis.

<sup>57</sup> See above, pp. 48-52.

<sup>58</sup> H. Brugsch, Egypt under the Pharaohs (London: 1891), p. 37; Hassan, Giza, VIII, 158. See translation above, pp. 48-49.

<sup>59</sup> W. F. Petrie, A History of Egypt from the Earliest Kings to the XVth Dynasty, I (London: 1924), 62; Daressy, "La stèle," pp. 1-10; see also Hawass, "Khufu Statuette," p. 382.

<sup>60</sup> See above, pp. 49-52.

<sup>61</sup> There are examples of copying, such as the granite stela of Shabaka, which states explicitly that it is a copy of an original found eaten by worms (Hassan, Giza, VIII, 117; Junge, "Fehldatierung").

<sup>62</sup> Stadelmann, Pyramiden, pp. 125ff.

<sup>63</sup> Ibid.

Furthermore, he adds that the Sphinx as a form of the sun god is known only from the New Kingdom and its name Hor-em-akhet: "Horus in the Horizon," is known from that period alone.<sup>64</sup>

In supporting his dating of the Sphinx, Stadelmann suggests that the Sphinx Temple was built by Khufu. He does not believe that it was built by Khafra, as its building style and technique differ from those used in Khafra's lower temple. He believes that the lower temple was built on the axis of the pre-existent Sphinx temple.<sup>65</sup>

As mentioned above, Stadelmann believes that Khufu was the incarnation of Ra.<sup>66</sup> Therefore, he argues that Khufu built this sun temple on the eastern border of his pyramid site, where it could be identified as the place where the sun rose and set. Thus, the Sphinx was the guardian of the Horizon of Khufu.<sup>67</sup>

Although the evidence discussed in the previous chapter supports the hypothesis that Khufu could represent Ra himself, Stadelmann's arguments for dating the Sphinx and Sphinx temple to the time of Khufu are not convincing. Most scholars agree to date the Sphinx to

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<sup>64</sup> Ibid., p. 126.

<sup>65</sup> Ibid.

<sup>66</sup> Ibid., p. 125; see also Müller, "Der gut Gott Radjedef," pp. 129ff.

<sup>67</sup> Stadelmann, Pyramiden, p. 125.

the time of Khafra, based on its location near and the similarity of its temple to his lower temple.<sup>68</sup>

Hassan cites the existence of a drainage trench running down the northern side of the causeway leading from the lower temple to the upper temple, which appears to divide Khufu's pyramid complex from that of Khafra, as proof that the Sphinx was carved after the causeway of Khafra.<sup>69</sup> More evidence showing that the Sphinx should be dated to Khafra is cited by Lehner:

However, the Khafra causeway is founded upon a bridge of bedrock separating this quarry from the quarry in the west part of the central field. It seems unlikely that Khufu would have reserved this rock for his successor's causeway, and so the more northerly quarry may have been exploited by Khafra.<sup>70</sup>

Fakhry points to similarities between the face of the Sphinx and the faces of statues of Khafra.<sup>71</sup> Also supporting the dating of the Sphinx to the time of Khafra is the quarry in which it stands, dated to the Old Kingdom, and most likely used by Khafra.<sup>72</sup> It would not have been used by Khufu; for topographical reasons, his quarry was to the south of his pyramid.<sup>73</sup> The existence

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<sup>68</sup> J. H. Breasted, A History of Ancient Egypt from the earliest times to the Persian Conquest (New York: 1905), pp. 110-111.

<sup>69</sup> Hassan, Giza, VIII, 161-162.

<sup>70</sup> Lehner, "Contextual Approach," p. 16.

<sup>71</sup> Fakhry, The Pyramids, p. 159.

<sup>72</sup> Lehner, "Contextual Approach," p. 25.

<sup>73</sup> See above, pp. 87-88.

of the tomb of Khamerernebti I proves that the quarry was used by the end of Khafra's reign; therefore, Khafra is the most likely king to have used it.

The bulk of the evidence dates the Sphinx to the time of Khafra. The Sphinx Temple is generally agreed to have been started in the time of Khafra, and finished after that king's death.<sup>74</sup> This dating is based primarily on parallels drawn between the plan and construction techniques of this temple and Khafra's upper and lower temples,<sup>75</sup> and on its close proximity to Khafra's lower temple.<sup>76</sup> It is, however, possible that this temple was built in the time of Khufu, but too few of his temples remain to make viable comparisons.

#### II.9.4: FUNCTION

The first known 4th Dynasty sphinx shape dates from the reign of Khufu's son and Khafra's predecessor Djedefra. The quartzite head and neck represents the king, but otherwise its function is unknown.<sup>77</sup> After the

<sup>74</sup> Ibid., pp. 218-219.

<sup>75</sup> Hassan, The Sphinx, p. 32.

<sup>76</sup> Ricke, "Harmachistempel," pp. 51-76.

<sup>77</sup> Smith, Art and Architecture, p. 116; Smith, HESPOK, pp. 31-32 (the curve on the back of the head of the statue suggest that it has the shape of a sphinx).

Old Kingdom, sphinxes were clearly guardians, often set up along processional ways or at the entrances to temples. Edwards, based on texts dated to the Late Period and the Heliopolitan belief that the king became Ra after his death, suggested that the Sphinx represented Khafra as Ra and acted as the guardian of the Giza necropolis.<sup>78</sup>

Ricke states that the Sphinx was the image of Harmachis in the 4th Dynasty, therefore he assigned it a solar function.<sup>79</sup> There are no attested priests or priestesses of the Sphinx temple from the Old Kingdom.<sup>80</sup> However, there is evidence to indicate Old Kingdom activity in this area. The range of pottery types from the Old Kingdom found in a recent excavation may suggest that services were carried on for some time in the temple.<sup>81</sup> The pottery was thrown out and turned over in the original construction debris during the plunder of the temple. Ricke suggests that the main temple service may have never been begun since the temple was never completed.<sup>82</sup> However, the existence of Old Kingdom pottery may indicate some cult activity at the temple.<sup>83</sup>

<sup>78</sup> C. M. Zivie, "Sphinx," LX 40 V 8 (1984), pp. 1139-1147.

<sup>79</sup> Ricke, "Harmachistempel," pp. 3-20.

<sup>80</sup> See appendix.

<sup>81</sup> Hawass and Lehner, Excavations.

<sup>82</sup> Ricke, "Harmachistempel," p. 32.

<sup>83</sup> Hawass and Lehner, Excavations.

Ricke also suggests that the lack of titles, from contemporary and later Old Kingdom sources, which clearly relate to service in this temple or which even mention the Sphinx in recognizable form; may be due to the possibility that another cult was practiced here, perhaps dedicated to the worship of Neith and Hathor, in the generally designated "House of Khafra."<sup>84</sup> However, the evidence shows that the interior of the temple was entirely finished with granite sheathing, and probably alabaster flooring. It would not be unexpected that a service was begun in the temple even if the exterior walls had not been cased, if indeed this was ever intended.<sup>85</sup> It is worth noting that Ricke saw the north corridor outside the north wall of the Sphinx temple as a storage area.<sup>86</sup> Our concentration of Old Kingdom pottery types were found at the west end of the north corridor and outside the north inner storage rooms; this supports the theory that the Old Kingdom pottery recovered was tossed out from the interior of the temple, perhaps from these storage areas.<sup>87</sup>

Anthes believes that the sphinx represents Khafra as Horus presenting offerings to the sun god Ra, who exists

<sup>84</sup> Ricke, "Harmachistempel," pp. 39ff.

<sup>85</sup> Ibid., p. 7.

<sup>86</sup> Ibid., pp. 19-20.

<sup>87</sup> Hawass and Lehner, Excavations.

in the temple court.<sup>88</sup> The link between Horus and Ra was very strong at least as early as the Old Kingdom. Horus was originally the national god of Lower Egypt, and was called Harakhty, "Horus of the two Horizons." In the Old Kingdom, he was identified with Ra, and a composite god, Ra-Horakhty, resulted from this fusion; "the king who had previously been identified with Horus (not Horakhty) was now declared to be the son of Ra."<sup>89</sup>

The divine nature of the Sphinx is indicated by the existence in the Late Period of priests of the Sphinx.<sup>90</sup> However, since the name of the Sphinx was Horemakhet in the New Kingdom, it seems reasonable to identify the statue with Horus rather than Ra.

The evidence discussed above indicates that Khafra carved the Sphinx and built its temple, as many Egyptologists have believed. However, a good explanation for the function of the Sphinx and Sphinx temple has not yet been suggested. It is likely that the Sphinx

<sup>88</sup> Anthes, "Bau des Tempels," pp. 47-58. See also F. el-Baz, ("Desert Builders Knew a Good Thing When They Saw It," Smithsonian (April 1981), pp. 116-22) who believes that all of the Sphinx except the head was situated in an artificial depression.

<sup>89</sup> J. Cerny, Ancient Egyptian Religion (London: 1951), pp. 32-33; W. Schenkel, "Horsemsu," LX 17 III<sup>1</sup> (1977), pp. 13-25.

<sup>90</sup> Mentioned on the Serapeum Stela is a man named Psametik who was a hm-ntr of Horemakhet (D. Wildung, Die Rolle Ägyptischer Königen im Bewusstsein ihrer Nachwelt, I (Berlin: 1969), 184-85).

represents Khafra as Horus giving offerings to his father Khufu, the incarnation of Ra who rises and sets on the temple (plan: 13).

This theory is supported by several points. First, the Old Kingdom pottery found in the area proves that the Sphinx temple was in use during the Old Kingdom. Second, there are no temples of Ra or any other gods dating to the 4th Dynasty.<sup>91</sup> The Sphinx temple is directed east-west, and contains a large open court, thus it is a solar temple.<sup>92</sup> There is much evidence identifying Khufu with Ra, thus it is reasonable to suggest that Khufu was worshipped as Ra in this temple. This would also account for the lack of priests of the Sphinx and its temple from the Old Kingdom and the great number of mortuary personnel associated with the cult of Khufu.<sup>93</sup>

Horus is often seen as the son of Ra; there is clearly a close connection between the two gods.<sup>94</sup> It is clear that the Sphinx represents Horus, as is shown by its later names. Sphinxes in general are closely

<sup>91</sup> Khufu did not even erect a chapel in the temple of Khenti-Amentiu at Abydos, where the kings of Egypt had worshipped for centuries (B. Kemp, "Osiris temple," p. 152); the one artefact found there which might date to his reign is probably a 26th Dynasty work (Hawass, "Khufu Statuette," p. 394). These points support Herodotus's statement that Khufu closed all the temples (Herodotus, The Histories, II, 431, paragraph 129).

<sup>92</sup> Stadelmann, Pyramiden, p. 126.

<sup>93</sup> Compare Table 1 to Tables 2 and 3.

<sup>94</sup> See above, pp. 180-181.

associated with the sun god, as can be seen in representations of sphinxes in the sacred boat of Ra from the New Kingdom.<sup>95</sup> The connection between Khafra and Horus can be seen in the diorite statue of the king which shows the hawk behind his head and shoulders and the generally accepted identification of all Egyptian kings with Horus, as shown by their titularies.<sup>96</sup>

Since Khafra was the son of Khufu and Horus was the son of Ra, it seems reasonable, once we have equated Khufu with Ra, to equate Khafra with Horus, and thus to identify Khafra with the Sphinx. Finally, the term 3ht-Hwfw was the name of Khufu's complex.<sup>97</sup> Thus the later name of the Sphinx, "Hor-em-akhet," can be interpreted as Horus in the horizon of Khufu.

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<sup>95</sup> Hassan, Giza, VIII, 225-26.

<sup>96</sup> Frankfort, Kingship and the Gods, pp. 36-40.

<sup>97</sup> Zivie, Giza, p. 34.

CHAPTER III  
THE PYRAMID COMPLEX OF MENKAURA

This pyramid and its surrounding complex were attributed to Menkaura by Herodotus and Diodorus Siculus; this identification was confirmed by Vyse's discovery of Menkaura's name in red ochre on the ceiling of the burial chamber of one of the subsidiary pyramids. Reisner's excavations in the area confirmed through inscribed artefacts that this complex belonged to Menkaura.<sup>1</sup> The name of this pyramid complex is Mn-k3w-R( ntrj: "Menkaura pyramid, the sacred."

This complex differs from the complexes of Khufu and Khafra in many ways. It was not finished during the reign of Menkaura, but was instead completed by his son and successor, Shepseskaf. Other architectural additions were made during the 5th and 6th Dynasties. Intact artefacts from various periods were found in the upper and lower temples and the chapels of the subsidiary pyramids. There is no evidence that the cult of Menkaura

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<sup>1</sup> Edwards, The Pyramids of Egypt, p. 156.

was practiced here in the Middle or New Kingdom, but it was revived in the 26th Dynasty.

The components of the complex which will be discussed below are:

1. the upper temple;
2. the enclosure walls and surrounding court;
3. the subsidiary pyramids;
4. the ritual pyramid;
5. the lack of boat pits;
6. the causeway;
7. the lower temple;
8. structures and settlements attached to the complex.

### III.1: THE UPPER TEMPLE

The upper temple of Menkaura stands before the center of the eastern face of his pyramid. It is rectangular in plan, with its longer axis running east to west, and is still fairly well preserved. Greaves, who visited the temple area in 1637, was the first to describe its ruins.<sup>1</sup> A plan of the temple was published by Lepsius.<sup>2</sup> The first excavations were conducted by Vyse in 1837; he dug in the temple and the area between the pyramid and the temple.<sup>3</sup> Reisner began his systematic excavations in the area of the third pyramid in 1906.<sup>4</sup>

The upper temple was begun during the reign of Menkaura and finished during the reign of his son Shepseskaf. Additions of rooms and walls were made in the 5th and 6th Dynasties,<sup>5</sup> which suggests that the cult of Menkaura was very important, and that the temple service was maintained until the end of the Old Kingdom.<sup>6</sup>

<sup>1</sup> Reisner, *Mycerinus*, p. 7.

<sup>2</sup> *Ibid.*, p. 8; Lepsius, *Denkmäler*, I, 29.

<sup>3</sup> Vyse, *Operations*, I, 150.

<sup>4</sup> Reisner, *Mycerinus*, pp. 8-9.

<sup>5</sup> *Ibid.*, p. 29. Reisner distinguished between building periods by means of both the artefacts found in the temple and the various architectural styles; see also discussion below, pp. 251-252.

<sup>6</sup> Kemp, "Old Kingdom," p. 92.

Menkaura built his temple of local limestone from the plateau and then cased it with granite;<sup>7</sup> Shesepeskaf completed the temple with Tureh limestone and mudbrick.<sup>8</sup> The temple is divided into two parts: the public part, which ends to the west of the pyramid's first enclosure wall; and the private part, which is situated between the pyramid's eastern face and the enclosure wall.<sup>9</sup>

#### III.1.1: GENERAL PLAN

The public part of the temple is square in shape and consists of a large open court bounded on the west by storerooms (plan: 15). The temple is entered in the center of its east face through a corridor which joined the causeway.<sup>10</sup> This corridor is built of mudbrick, plastered on both the inside and outside, and roofed with

<sup>7</sup> Badawy, Egyptian Architecture, I, 99.

<sup>8</sup> Maragioglio and Rinaldi, L'Architettura, VI, 48.

<sup>9</sup> Ibid.

<sup>10</sup> Reisner, Mycerinus, p. 25; Maragioglio and Rinaldi L'Architettura, VI, 50, 110, obs. 23. Due to the temple construction, which is better in the east than the west, Maragioglio and Rinaldi believe that this corridor is the upper end of the causeway and not actually part of the temple at all (Maragioglio and Rinaldi, L'Architettura, VI, 110). However, the simple fact that this corridor is wider than the causeway, along with the doorway separating the two, would seem to indicate that this corridor is part of the upper temple.

wood.<sup>11</sup> The crude brick entrance to the corridor is narrow and short and has a threshold made of limestone slabs. In the debris of the northwest corner of the corridor was found a limestone stela which Reisner believes may be a jamb from the temple doorway.<sup>12</sup> Reisner does not explain how the stela could have been used as a door jamb; perhaps it was re-used later in the Old Kingdom. Found outside was a rubbish heap consisting of Old Kingdom potsherds and offering vessels which seem to have been thrown out of the temple.<sup>13</sup> A block of stone in the center of the northern wall has a niche cut into it; a similar niche seems to have existed across from it in the southern wall. This had to have occurred in the Old Kingdom, since the cult of Menkaura ceased completely at the end of the Old Kingdom.<sup>14</sup> The function of these niches is not known.<sup>15</sup>

The entrance corridor narrows at its eastern end, but no evidence for a door has been found.<sup>16</sup> The corridor leads to a large open court, 44.60 m. north to south. The internal facing of this court was started in

<sup>11</sup> Reisner, Mycerinus, p. 25, plan I.1.

<sup>12</sup> Ibid., no. 2 in Plan I.

<sup>13</sup> Ibid.

<sup>14</sup> Kemp, "Old Kingdom," p. 94.

<sup>15</sup> Maragioglio and Rinaldi, L'Architettura, VI, 50; Reisner, Mycerinus, p. 25, plan I.3.

<sup>16</sup> Reisner, Mycerinus, p. 25, plan I.4.

granite and finished in mud brick.<sup>17</sup> The inside faces of the walls are decorated with niches in a repeating series of three simple niches and one complex niche.<sup>18</sup> The courtyard was leveled with mud and debris and then paved with slabs of limestone; a pathway of yellow limestone slabs, 1.31 m. wide, crosses the courtyard on its east-west axis.<sup>19</sup> The pavement of the court slopes from all sides towards the center, evidently to facilitate drainage. A small drainage trench running from north to south crosses the pathway.<sup>20</sup> It has been suggested that this was for the drainage of rainwater,<sup>21</sup> but I believe it was connected with the sacrifices that took place in the courtyard. There is a sunken area in the pavement north of the center of the court; this probably represents the location for a stone basin similar to that seen in the court yard of the temple of GIII-a.<sup>22</sup> Although there is no evidence for this, Ricke reconstructs pillars around the inside of the court: twelve each on the east and west and seven on the north

<sup>17</sup> Ibid., p. 25, plan 1.5; Maragioglio and Rinaldi, L'Architettura, VI, 50. pl. 9, cg.

<sup>18</sup> Reisner believes that these niches represent doorways, such as is seen in Ist Dynasty tombs (Reisner, Mycerinus, p. 25).

<sup>19</sup> Maragioglio and Rinaldi, L'Architettura, VI, 50; Reisner, Mycerinus, p. 25.

<sup>20</sup> Reisner, Mycerinus, pp. 25-26.

<sup>21</sup> Ibid.

<sup>22</sup> Ibid.

and south.<sup>23</sup> Fragments of stone vessels and stone statues, and potsherds from large mud pots, red polished bowls, and red jars were found in the court and the passage leading to it.<sup>24</sup>

The court opens into a portico to the west. Between the court proper and the portico is a screen wall with a doorway closed by a wooden door in its center.<sup>25</sup> The portico is in the form of a three-stepped recess, similar to the courtyard in the upper temple of Khufu and the antechamber in the upper temple of Khafra.<sup>26</sup> Its walls were cased with red granite. Sockets in the floor show that the portico roof, also of red granite, was supported by six pillars arranged in two rows: four to the east and two to the west. Based on the ground plan of Khufu's temple, Ricke has reconstructed a third row of eight pillars across the front of the portico, in the space now occupied by the screen wall.<sup>27</sup> He calls this area the "Tor der Nut," or "Gate of Nut," and suggests that statues of various gods were set up along the walls of it.<sup>28</sup> Although there is no archaeological evidence for this, the floor of the portico was probably of alabaster,

<sup>23</sup> Ricke, Bemerkungen, II, fig. 22.

<sup>24</sup> Reisner, Mycerinus, p. 12.

<sup>25</sup> Ibid., p. 26, plan I.6.

<sup>26</sup> Ricke, Bemerkungen, II, 48-49, 56-57.

<sup>27</sup> Ibid., pp. 55-60, fig. 22.

<sup>28</sup> Ibid., pp. 59-60.

as is seen in other Old Kingdom temples.<sup>29</sup> In the debris filling the portico were found: fragments of two stelae dated to the reign of Shepseskaf;<sup>30</sup> and two decrees in limestone, one bearing the Horus name of Menera.<sup>31</sup>

In the center of west wall of the portico, a door with granite jambs and lintel, probably closed with a two-leaved door, opens into a long east-west room. The walls of this room were faced with red granite and the ceiling was also of granite beams.<sup>32</sup> Many scholars have attempted to reconstruct the original object that was placed in this room.

Based on some traces in the west wall of this room, Reisner reconstructed a stela niche in the granite wall casing.<sup>33</sup> However, Maragioglio and Rinaldi interpret these traces as marks from the erection of the granite beams in the ceiling and they believe that this room did not contain a stela.<sup>34</sup> Smith believes that this long room was planned with one large statue niche, and believes that the seated alabaster statue of Menkaura in

<sup>29</sup> Ibid.; Maragioglio and Rinaldi, L'Architettura, VI, 50, obs. 114.

<sup>30</sup> Reisner, Mycerinus, pl. 19e. The more complete of these is discussed below, pp. 247-251.

<sup>31</sup> Ibid., p. 31.

<sup>32</sup> Maragioglio and Rinaldi, L'Architettura, VI, 52, pl. 9, sp.

<sup>33</sup> Reisner, Mycerinus, p. 26, Plan I.8.

<sup>34</sup> Maragioglio and Rinaldi, L'Architettura, VI, 52, obs. 112.

The Museum of Fine Arts, Boston, could be the statue that was originally placed in the room.<sup>35</sup> Grinsell also believes that this room may have contained a statue of the king.<sup>36</sup> Fakhry believes that this long hall is the sanctuary of the temple, comparing it to the upper temples of the 5th and 6th Dynasties.<sup>37</sup> Ricke believes that this room is a shrine which replaced the five statue niches seen in the upper temples of Khufu and Khafra.<sup>38</sup> Ricke believes that this hall did not contain a statue of Menkaura, but instead held a statue of the god Osiris.<sup>39</sup> It is likely that the hall contained a statue, but it is more probable that this statue was of the god Ra.<sup>40</sup>

There is no direct evidence for statues at all,<sup>41</sup> but if statues occurred in the recesses, they should be figures of the king wearing the crowns of Upper and Lower Egypt.

Hassan identifies the five rooms located in the northwest of the temple as five niches for statues of the king, but the shape and placement of these rooms does not justify this identification. However, Hassan's point that the upper temples of Menkaura and Khufu are

<sup>35</sup> Smith, Art and Architecture, p. 100.

<sup>36</sup> Grinsell, Egyptian Pyramids, p. 14.

<sup>37</sup> Fakhry, The Pyramids, p. 141.

<sup>38</sup> Ricke, Bemerkungen, II, 58-69, fig. 6.

<sup>39</sup> Ibid., 59.

<sup>40</sup> See below, pp.525-526.

<sup>41</sup> See below, p. 526.

generally similar in plan is valid. It seems that the similarity between the two temples is only in their general shape and not in detail and function. Ricke made a comparison of the temples of Khufu, Khafra and Menkaura in the three parts that were mentioned before: the open court, the portico, and the niches. He suggests that the portico is the Gate of Nut in the three temples,<sup>42</sup> and that the original plan of Menkaura's temple included almost all the rooms that existed in Khafra's temple. But whereas Khafra only added new rooms, expanding Khufu's basic plan in the form of a front temple, or "vortempel", Menkaura integrated his additions with the traditional form to create a new architectural entity,<sup>43</sup> and Ricke believes that the reason behind those changes was the struggle between the Osiris and the sun cults.<sup>44</sup>

A passage in the southern corner of the western wall of the first recess of the portico leads to a room cased with crude brick and a large unfinished area.<sup>45</sup> In the southeast corner was a rubble-walled chamber, perhaps a shelter for workmen.<sup>46</sup> Ricke reconstructs this area as it was planned in the time of Menkaura as follows: a long east-west passage opened from the portico; south of this

<sup>42</sup> Ricke, Bemerkungen, II, 60, fig. 23.

<sup>43</sup> Ibid., p. 59.

<sup>44</sup> Ibid.

<sup>45</sup> Reisner, Mycerinus, p. 26, plan I.9.

<sup>46</sup> Ibid., p. 26, plan I.11.

passage were five rooms and in the middle of the long passage to the north were two rooms.<sup>47</sup> There is no evidence for Ricke's reconstruction. Although there is no evidence surviving, it is likely on the principle of symmetry that there were five magazines planned for this area; they would have been arranged similarly to those on the north, and might have held cult objects used in the daily or monthly activity of the temple. The actual Old Kingdom finds from the area are: potsherds; alabaster offering tables; jars; model dishes; and fragments of statues made of copper, alabaster, and slate.<sup>48</sup>

A second east-west passage leads from the north corner of the west wall of the first recess of the portico to a system of rooms in the northwest corner of the temple. Three corridors open from the west end of this passage: one continuing to the west; a second leading to the north; a third leading to the south to another large open room.<sup>49</sup> The doorways to the north and south corridors were closed with walls of mudbrick; the doorway to the west was left open. Under Shepseskaf, all these areas were cased in mudbrick, and five chambers were built with free-standing walls of mudbrick in the open room in the northwest. These five rooms were

<sup>47</sup> Ricke, Bemerkungen, II, 57 fig. 22.

<sup>48</sup> Reisner, Mycerinus, pp. 15-16.

<sup>49</sup> Ibid., p. 26, Plan I.25, 14-22.

oriented north to south: the westernmost of these is the longest; the remaining four are the same size and were built with two stories.<sup>50</sup> These rooms are cased with plastered mud brick and their utilitarian appearance caused Reisner to call them magazines.<sup>51</sup>

The westernmost chamber had a shelf cut into the blocks of the north wall. Reisner found two fragments of a small statue and fragments of a head and left shoulder of a large statue of Menkaura in the debris. Reisner believed that treasure seekers attacked this room and dragged these statues from the long room outside through a drain-hole that existed in the room. He also believed that the statues were originally placed in front of this drain-hole; the two statues would fit exactly into the room. The statues were broken up by the robbers, who also tried to get into the other room located to the east. Thus, through comparison with the hall of niches in the chapel of pyramid GIII-a, where there was a libation basin for milk, blood and water, and which also should have contained a niche, Reisner believed that this was a libation room with a niche in the north wall.<sup>52</sup> Reisner argues that while this room was for libation, the other rooms did not have the same function. He later

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<sup>50</sup> Maragioglio and Rinaldi, L'Architettura, VI, 52.

<sup>51</sup> Reisner, Mycerinus, p. 26.

<sup>52</sup> Ibid., p. 24.

argues that there was only one statue put into this room by Shepseskaf, instead of the two that he had originally suggested; this statue was placed against the west wall, facing east, near the libation basin. Finally, Reisner hypothesizes that there was only one statue placed in the long room by Shepseskaf; the other large statue then would have been placed in the portico and transferred to this area later.

Maragioglio and Rinaldi suggest another alternative, namely that there was no niche in this long room as suggested by Reisner. They argue that the walls directed east-west are built in a continuation of the corresponding sides of the north wall, and they suggest that there was an altar instead of the niche.

The other four rooms to the east of the long rooms are of the same size and built in two stories. They are different in size and shape from the long room, which is about 128 cm. larger than the other four rooms. Reisner calls these four rooms magazines because of their similarity to each other. Many important Old Kingdom artefacts were found inside and outside these four rooms, including decayed wood in an Old Kingdom deposit; this may represent the remains of temple furniture.<sup>53</sup> Also found in these northern magazines and their related

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<sup>53</sup> Ibid., p. 11.

corridors were: fragments of pottery; flint flakes; flint knives; a fragment of the thigh from a large seated statue;<sup>54</sup> fragments of other statues, including some unfinished pieces; and various sealings. Among the sealings were: two impressions from a cylinder seal bearing the name of Menkaura; a mud sealing with the Horus name of Niuserra, Jst-jb-t3wj;<sup>55</sup> an official seal of Teti which reads Shtp-t3wy; and two other 6th Dynasty seals, one of Pepi I and the other of Isesi.<sup>56</sup>

From the previous discussion, it can be seen that Shepseskaf built these five rooms for two main purposes. The first room from the west, distinguished by the features described, should have contained one small statue of Menkaura, a basin, and a drainage channel; this was probably, as Reisner suggests, a libation or cult room. The other large statue found in the corridor in front of the room should be placed elsewhere.<sup>57</sup> The other four rooms were probably treasury rooms.

The later Old Kingdom seals show that the cult was maintained through Dynasties 5 and 6, and also could be

<sup>54</sup> Smith suggests that this statue originally stood in the long offering room (Art and Architecture, p. 100), but it is a statue of Menkaura, not a god, so this is unlikely. It may have been stored in one of the four magazines.

<sup>55</sup> Reisner, Mycerinus, p. 19, pl. 17 a,b.

<sup>56</sup> Ibid., p. 19, pl. 17a, 7, 17b, 6, 5, 4.

<sup>57</sup> See below, pp. 525-528.

connected with the limestone buildings of the inner temple. Furthermore, they suggest that various doorways of the temple were closed off by walls to guard precious objects to which there was limited access, such as cult equipment used for the opening of the mouth or papyrus rolls that contained records of the daily activity of the temples.<sup>58</sup> This could be paralleled by the location of the Abousir Papyri found in the temple of Neferirkara.<sup>59</sup>

It was suggested above that similar chambers were intended on the southern side, but Shepseskaf avoided building them for economical reasons. These southern chambers would have formed a treasury, while the northern rooms were for the cult of Menkaura. Instead, the two functions were combined in one room.

A doorway south of the long corridor gives access to a long east-west room located just north of the long hall west of the portico; a second small room also existed at the end of this doorway.<sup>60</sup> From the western end of the long room, a stairway led to the roof of the temple. This was probably used by priests who were in charge of watching the sun, moon, and stars in order to fix the time for various festivals and cult activities, and by

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<sup>58</sup> Reisner, Mycerinus, p. 19.

<sup>59</sup> Posener-Kriéger, Les Archives, I, IX.

<sup>60</sup> Reisner, Mycerinus, plan I.24-22-23.

guards who monitored the activities in the complex.<sup>61</sup> Reisner suggests that the roof might have been used for the housing of temple servants, or for storerooms.<sup>62</sup> The first of these suggestions is unlikely because the temple servants would have been housed in the pyramid city or the workmen's camp; the second is improbable because the temple storage areas were located elsewhere.

In its original plan, the inner temple, reached through the western doorway from the long statue room, was built on a granite platform. This platform was built against the center of the eastern face of the pyramid; a pit, which may have been dug in the 4th Dynasty, or later, perhaps by treasure seekers, occupies its western part.<sup>63</sup> An L-shaped offering room of red granite, measuring 7.35 m. from north to south and 6.30 m. from east to west, was built on the eastern part of the platform.<sup>64</sup> To the west, Reisner has reconstructed a stela of granite or alabaster.<sup>65</sup> Maragioglio and Rinaldi agree that a stela stood on the platform, but believe

<sup>61</sup> Posener-Kriéger, Les Archives, II, 510-511.

<sup>62</sup> Reisner, Mycerinus, p. 33.

<sup>63</sup> Reisner (Ibid., p. 28) suggests that this pit was dug by Arab treasure seekers, pointing to the marks of steel chisels as proof that it was not dug much earlier; Maragioglio and Rinaldi (L'Architettura, VI, 54) could find no traces of such marks, and believe instead that the pit was dug in the 4th Dynasty to hold a false door.

<sup>64</sup> Reisner, Mycerinus, p. 27, Plan I.29.

<sup>65</sup> Ibid., p. 28.

that it was made of fine white limestone. They suggest that it was embedded in the pit which occupies the western part of the platform.<sup>66</sup> Fakhry believes that a false door and an offering table could have been placed in this depression.<sup>67</sup> Brinks believes that a single stela signifies the main funerary sacrificial place.<sup>68</sup> I believe that the original offering place would have contained a limestone false door rather than a stela.<sup>69</sup>

At a later date, probably in the 5th or 6th Dynasty, a series of rooms were planned and built to the north of the offering platform.<sup>70</sup> These are as follows: From the long east-west corridor of the outer temple, a passage leads to an anteroom with one pillar in its center to support the roof.<sup>71</sup> North of this anteroom is another small room; a doorway in the north wall of this room leads directly to the pyramid enclosure.<sup>72</sup>

South of the anteroom is a long north-south room with a row of six pillars along its central axis; it is

<sup>66</sup> Maragioglio and Rinaldi, L'Architettura VI, 54, 112, obs. 24.

<sup>67</sup> Fakhry, The Pyramids, p. 141.

<sup>68</sup> Brinks, Entwicklung, p. 128.

<sup>69</sup> This belief is based on the theory that Menkaura's upper temple was more similar to the temples of the 5th and 6th Dynasties than to the other 4th Dynasty temples; this will be discussed further below, pp. 480-487.

<sup>70</sup> Reisner, Mycerinus, p. 26.

<sup>71</sup> Ibid., p. 26, Plan I.25, 26.

<sup>72</sup> Ibid., p. 26, Plan I.36.

surmised that this room may have held statues.<sup>73</sup> Northwest of the anteroom is a passage leading to a sloping corridor which runs south to the offering room.<sup>74</sup> To the west of the sloping corridor is a passage opposite the entrance from the anteroom. From this passage four doors, open and each leads to an unfinished room. These unfinished rooms were probably magazines: the two southern rooms contain stone shelves which could have been used for stone vessels and cult objects.<sup>75</sup> The floor of the shelves were level with the floor of an area just located behind the four rooms.<sup>76</sup> The Old Kingdom artefacts found in the area of the upper temple include diorite cups and bowls, and alabaster jars.<sup>77</sup>

It seems likely that the whole upper temple of Menkaura resembles 5th Dynasty upper temples rather than those of the 4th Dynasty. Ricke gave a summary on the most important changes in the layout of the temples built within the 5th Dynasty and compared them with the 4th Dynasty temples. In Menkaura's temple, an entrance corridor is seen which is not seen in the earlier 4th Dynasty temples, yet is seen in 5th Dynasty temples. In the general plan, the upper temple of Menkaura added to

<sup>73</sup> Ibid., p. 26, Plan I.27.

<sup>74</sup> Ibid., Plan I.28-29.

<sup>75</sup> Ibid., Plan I.30, 31-34.

<sup>76</sup> Ibid., p. 27, Plan I.35.

<sup>77</sup> Ibid., p. 20.

the traditional form to create a new architectural entity.<sup>78</sup> It was likely that the cult of Menkaura was different from that of Khufu and Khafra. The layout of his temple was built to maintain this new cult. Instead of a stela, as is reconstructed in the cult areas of Khufu and Khafra, a false door was substituted, such as is found in the 5th Dynasty temples.<sup>79</sup>

### III.1.2: THE TEMPLE IN THE TIME OF MENKAURA

The foundations of the upper temple were completed during the life of Menkaura (plan: 15).<sup>80</sup> In this period, the entrance corridor was completed and paved, the open court and portico were cased, the offering room was built, lined, and paved,<sup>81</sup> and the false door and altar were set up.<sup>82</sup>

It is interesting to note that Menkaura ruled for 28 years,<sup>83</sup> longer than either Khufu or Khafra, yet built a smaller pyramid and left an unfinished complex at his

<sup>78</sup> Ricke, Bemerkungen, II, 55-60, 65-83.

<sup>79</sup> Ibid., pp. 65ff; Brinks, Entwicklung, pp. 127-30.

<sup>80</sup> Fakhry, The Pyramids, p. 141.

<sup>81</sup> Reisner, Mycerinus, p. 29; Maragioglio and Rinaldi, L'Architettura, VI, 50.

<sup>82</sup> Maragioglio and Rinaldi, L'Architettura, VI, 114, obs. 25.

<sup>83</sup> I. E. S. Edwards, CAH, I2 (Cambridge: 1971) 3rd edition, 995.

death. It is possible that the economy of the country, as reflected in the size of the work force and the amount of funds available for the building of the king's funerary complex, had been greatly depleted by the previous monarchs.

### III.1.3: THE TEMPLE UNDER SHEPSESKAF

Shepseskaf completed the temple after the death of his father Menkaura.<sup>84</sup> He began his additions in Tureh limestone, and then finished them in crude brick, probably for reasons of economy.<sup>85</sup> A stela found in the temple portico may be used as evidence for work done at the site by Shepseskaf, since the text as reconstructed by Goedicke states: "He made as his monument for the king of Upper and Lower Egypt Menkaura as phr offering in the pyramid Mn-k3w-r( ntrj.<sup>86</sup> Reisner believes that this

<sup>84</sup> Reisner, Mycerinus, pl. 9, fig. 6.

<sup>85</sup> Ibid., p. 30.

<sup>86</sup> Maragioglio and Rinaldi, L'Architettura, VI, 56. Maragioglio and Rinaldi state that this stela was found outside the door to the temple; see also Reisner, Mycerinus, p. 31. The name of Menkaura was damaged, but Reisner restored it based on other fragments that belong to the same stela which contain the name of Menkaura's pyramid: Mn-k3w-r( ntrj (ibid., and pl. 19); Sethe, Urk, I, 160; H. Goedicke, Königliche Dokumente aus dem alten Reich (Wiesbaden: 1967), pp. 16-21, fig. I; G. Daressy, "Fragments de décrets de l'ancien empire," ASAE 13 (1913) pp. 109-111.

was originally set up at the entrance to the public part of the temple;<sup>87</sup> at any rate, it provides documentary evidence that it was Shepseskaf who completed the temple.

Shepseskaf paved the entrance corridor and put the niches into the north and south walls. He plastered the inside walls of the courtyard with a facade of niched mud brick,<sup>88</sup> and cased the outer walls of the temple with mud brick as well.<sup>89</sup> Found also in this period are: the drainage channel in the courtyard; the room to the south beside the unfinished area; the brick facing on the walls at the north and south ends of the courtyard; the corridor which opens at the north of the pillared hall; the corridor on the north of the long corridor with the five rooms at the end; and the stairway leading to the roof of the temple.<sup>90</sup>

According to Reisner's interpretation, Shepseskaf followed the lines of the original plan of the outer temple as it was designed in Menkaura's time; the only possible additions are the five rooms on the north side of the temple.<sup>91</sup> There is no doubt that the architect of Menkaura's temple had a plan which accorded with the cult of the deceased king, and it is very likely that this

<sup>87</sup> Reisner, Mycerinus, p. 31.

<sup>88</sup> Maragioglio and Rinaldi, L'Architettura, VI, 56.

<sup>89</sup> Reisner, Mycerinus, p. 30.

<sup>90</sup> Ibid., p. 31.

<sup>91</sup> Ibid.

architect oversaw the completion of the temple under Shepseskaf. I agree that Shepseskaf kept to his father's plan, probably adding nothing original but the stela which records his efforts.

Maragioglio and Rinaldi believe that the inner temple, or the private part which is between the base of the pyramid and the temple wall, was used and rebuilt several times in different periods. They state that in this area, Shepseskaf built in this area storehouses and rooms made of crude bricks, but in later periods the platform continued to support a building made of limestone that may be from the 5th-6th Dynasties. In Maragioglio and Rinaldi's final arguments the platform or the chapel which is built of white limestone is dated to a time later than Shepseskaf.<sup>92</sup>

Reisner attributed the construction in the inner temple which was made of mudbrick to Shepseskaf<sup>93</sup> and the limestone rooms in the inner temple to Dynasty 6, which may follow the plan of Shepseskaf. The difficulty in establishing the plan of this area may be because it was originally built of mudbrick. The rain, as well as treasure seekers, could have caused damage. It seems that Menkaura simply built the platform, in which I have

<sup>92</sup> Maragioglio and Rinaldi, L'Architettura VI, 120, obs. 29.

<sup>93</sup> Reisner, Mycerinus, p. 31.

reconstructed a false door. Afterwards it was in the original plan for Shepseskaf to build this area of mudbrick in order to store the objects for the cult; after that, in the 5th and 6th Dynasties, the area was destroyed and rebuilt, as shown by the seals found in the northern five rooms. Finally, it is likely that Shepseskaf did not add any more buildings to those that were planned, and used mudbrick to complete the monuments of his father. There are perhaps two reasons for this so that the cult for the dead king could be established as quickly as possible; and so as not to damage further the declining economy of the country.<sup>94</sup> The second of these reasons is more likely, since Shepseskaf could not build a pyramid for himself, but instead built a rectangular, flat-topped mastaba which has many of the characteristics of a pyramid.<sup>95</sup>

#### III.1.4: ADDITIONS FROM THE 5TH AND 6TH DYNASTIES

Several additions were made to the temple during the 5th and 6th Dynasties. These additions were made in the inner temple, to the north of the platform built by

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<sup>94</sup> Kemp, "Old Kingdom," p. 88.

<sup>95</sup> Grinsell, Egyptian Pyramids, p. 151.

Menkaura, and consist of a series of rooms built of nummulitic limestone.<sup>96</sup> The additional rooms give the temple a plan unique in the Old Kingdom, and prove that Menkaura's cult was maintained to the end of the 6th Dynasty. The dating of this area is based on three decrees, one of which bears the name of the 6th Dynasty King Mernera.<sup>97</sup> These decrees were found in the debris of the temple portico and consist of 41 fragments, restored by Reisner.<sup>98</sup> Reisner stated that these decrees have to do with the pyramid or the pyramid temple, rather than the pyramid city.<sup>99</sup> However, Goedicke states that the fragment which bears Mernera's name does not belong with the other fragments.<sup>100</sup>

The area assigned to the 6th Dynasty was never finished; only the anteroom with one pillar and the room to its west which leads to the platform were completed.<sup>101</sup> The rooms attached to the base of the pyramid were left rough.<sup>102</sup> I believe that these unfinished rooms can be assigned to Pepi I or Pepi II of

<sup>96</sup> Reisner, Mycerinus, p. 31, Plan I.26-28 and pp. 30-35.

<sup>97</sup> Ibid., p. 31, pl. 19e-i; Maragioglio and Rinaldi, L'Architettura, VI, 62.

<sup>98</sup> Daressy, "Fragments," pp. 111-114; Sethe, Urk, I, 274-276; Goedicke, Königliche, pp. 78-80.

<sup>99</sup> Reisner, Mycerinus, p. 279; see also Daressy, "Fragments," pp. 111-114.

<sup>100</sup> Goedicke, Königliche, pp. 78-80.

<sup>101</sup> Reisner, Mycerinus, plan I, Room 26-28-29.

<sup>102</sup> Ibid., p. 32, Plan I.24 and 30-34.

the 6th Dynasty. A decree of Pepi II found in the lower temple, granting privileges to Menkaura's priests,<sup>103</sup> indicates that Pepi II was interested in Menkaura's cult, as probably were earlier Dynasty 6 kings, to judge from the sealings found in the northern magazines. But it is more likely that Pepi II built these rooms, or, if the rooms had been started before he came to power, he could have finished them during his reign. Since he was the last king of the Old Kingdom, any rooms left unfinished by him would not have been finished by his successors.

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<sup>103</sup> Smith, "Old Kingdom," p. 195.

### III.1.5: POST-OLD KINGDOM HISTORY

No artefacts dated from the Middle Kingdom were found in the upper temple. The temples of Menkaura were not decorated with scenes as were the temples of Khufu and Khafra. The reason for this may be that the walls were not ready for reliefs when Menkaura died, and Shepseskaf simply finished them off in mudbrick. Indeed, unlike the temples of Khufu and Khafra, the 5th and 6th Dynasty kings continued to pay attention to the Menkaura temples, judging from the names of Niuserra, Djedkara Iseai, Teti Mernera, and Pepi I, found on mud seals in the temple and the decree of Mernera found in the portico debris. This suggests that no damage was done to the temple in the First Intermediate Period and the Middle Kingdom. There is also very little from the New Kingdom; the only artefacts from this period are decorated pots.<sup>1</sup> These sherds indicate only that the temple was visited during the New Kingdom; they do not provide any evidence of cult activity. There is also evidence that some of the granite blocks and pillars were removed during the reign of Ramses II; thus the potsherds may be Ramesside.<sup>2</sup>

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<sup>1</sup> Reisner, Mycerinus, p. 22, Plan I, Room 37.

<sup>2</sup> Ibid., p. 33; Hölscher, Chephren, p. 67.

Objects from the Roman period include: about 87 badly preserved mummified bodies, some in anthropoid coffins, found under the first layer of sand in the area of the inner temple; amulets, such as sacred eyes of faience, Bes figures, and menat amulets; coins; jars and bowls.<sup>3</sup> From the Arab period come bronze coins;<sup>4</sup> there is green-glazed pottery from the 12th and 13th centuries A.D.<sup>5</sup>

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<sup>3</sup> Reisner, Mycerinus, pp. 12-13, 19-20.

<sup>4</sup> Ibid., p. 21, Room 26 in Plan I .

<sup>5</sup> Ibid.

### III.2: THE ENCLOSURE WALLS AND THE SURROUNDING COURT

There are remains of two enclosure walls around Menkaura's pyramid (plan: 5): one which encloses the inner court of the pyramid; a second which encloses the entire pyramid complex on three sides.<sup>1</sup> The inner enclosure wall is still visible on the east side of the pyramid. The wall lies about 10 m. from the base of the pyramid on all sides.<sup>2</sup> It is built of mud brick on a foundation of fine limestone.<sup>3</sup> Old photographs of the site show that its faces were sloping and plastered white.<sup>4</sup> It is likely that the foundation was built by Menkaura and the brick on top was added by Shepseskaf; the fact that the wall was completed may indicate that it was an important element of the complex.

The only access to the inner court bounded by this wall was through the upper temple. The original entrance would have been through the western end of the long east-

<sup>1</sup> Maragioglio and Rinaldi, L'Architettura, VI, pl. 9, fig. 1, 62-64, 78; Lehner, "Contextual Approach," pp. 31-32.

<sup>2</sup> Reisner, Mycerinus, p. 32; Maragioglio and Rinaldi, L'Architettura, VI, 62-64, pl. 4, fig. 1; Grinsell (Egyptian Pyramids, p. 116) noted the existence of the temenos wall.

<sup>3</sup> Reisner, Mycerinus, p. 29; Maragioglio and Rinaldi, L'Architettura, VI, 62.

<sup>4</sup> Maragioglio and Rinaldi, L'Architettura, VI, 64.

west corridor.<sup>5</sup> In the 5th or 6th Dynasty this entrance was replaced by the northwest room and door. There was also an exit into the court from the southern part of the temple which was also closed off later in the Old Kingdom.<sup>6</sup> It is likely that only certain personnel were allowed inside the enclosure.

The surrounding courtyard would have been paved with limestone slabs, but was left unfinished at Menkaura's death.<sup>7</sup> Reisner discovered remains of a stone rubble ramp in the southern side of the surrounding courtyard. This is believed to be the ramp that was used to transport the local limestone to the temple during its construction.<sup>8</sup>

The outermost enclosure wall is visible to the north, west, and south of the complex. This outer wall was built of stone rubble and mud mortar.<sup>9</sup> The east ends of the southern and northern walls have not been located. The remains of the western wall adjoin a large rectangular area whose function is not known. It is in a comparable position, with regard to Menkaura's complex,

<sup>5</sup> Ibid., p. 64.

<sup>6</sup> Reisner, Mycerinus, p. 29, pl. 9e and f, shows the northern rooms of the exit to the courtyard; Maragioglio and Rinaldi, L'Architettura, VI, 64, pl. 9, fig. 6.

<sup>7</sup> Maragioglio and Rinaldi, L'Architettura, VI, 64.

<sup>8</sup> It is not clear whether this ramp was used in the time of Menkaura or later, during the building of the limestone addition.

<sup>9</sup> Maragioglio and Rinaldi, L'Architettura, VI, 78.

as the workmen's barracks to Khafra's complex.<sup>10</sup> The north wall separates Menkaura's complex from Khafra's; an elbow joins the two complexes.<sup>11</sup> The south wall does not run in a straight line; this is said to be for topographical reasons.<sup>12</sup> Another wall, which at first runs north and then turns slightly to the east, was built against the southern wall. The enclosure bounded by the wall measures about 240 m. x 160 m.<sup>13</sup>

Petrie suggests that the outer northern boundary wall of Menkaura's complex, actually represents the northern boundary wall for the entire Giza complex. The outer boundary walls enclose the pyramid, the inner court, the subsidiary pyramids, the upper temple, and part of the causeway. It was probably not built during the reign of Menkaura, as he did not even finish his inner wall; it is also unlikely that it was built in the time of Shepseskaf.<sup>14</sup>

<sup>10</sup> Petrie, Pyramids and Temples, p. 114.

<sup>11</sup> Maragioglio and Rinaldi, L'Architettura, VI, 78.

<sup>12</sup> Ibid.

<sup>13</sup> Lehner, "Contextual Approach," p. 32, fig. 14; Maragioglio and Rinaldi, L'Architettura, VI, 78, pl. 4, fig. 1.

<sup>14</sup> Lehner, "Contextual Approach," p. 36. The boundary walls of the Giza plateau will be discussed in Chapter 4, pp. 416-418.

### III.3: THE SUBSIDIARY PYRAMIDS

To the south of the pyramid of Menkaura are three subsidiary pyramids; they are located just outside the inner enclosure wall and within the outer enclosure wall of Menkaura's complex.<sup>1</sup> The three pyramids were first recorded by Lepsius,<sup>2</sup> and then investigated by Vyse.<sup>3</sup> Reisner was the last to enter and describe them.<sup>4</sup>

The three pyramids lie on the same east-west axis. GIII-b lies 10.15 m. west of GIII-a; GIII-c lies 13.6 m. west of GIII-b.<sup>5</sup> On the east side of each is a mudbrick temple. According to Reisner, an 80 cm. thick wall of stone rubble surrounds the three pyramids; this wall can be entered via the northeast corner of the temple of

1 Maragioglio and Rinaldi, L'Architettura, VI, 80, pl. 2; Reisner, Mycerinus, p. 56; Fakhry, The Pyramids, p. 145; Edwards, The Pyramids of Egypt, p. 163; Grinsell, Egyptian Pyramids, p. 29; Porter and Moss, Topographical Bibliography, III<sup>1</sup>, 34-35; Vyse, Operations, I, 183, and II, 38; Perring, The Pyramids, II, 5ff; Brinks, Entwicklung, pl. 9.

2 Porter and Moss, Topographical Bibliography, III<sup>1</sup>, 34-35. Lepsius labels them XII, XI, and X.

3 Vyse, Operations, II, 41, 183. He labels them from east to west as 5, 4, and 6 of Giza.

4 Reisner, Giza, I, 132-36. I will follow his designations of GIII-a, GIII-b, and GIII-c from east to west.

5 Maragioglio and Rinaldi, L'Architettura, VI, 80, pl. 2.

GIII-a by a road lined on either side by a thick wall which connects to the inner temple of Menkaura.<sup>6</sup> However, Maragioglio and Rinaldi state that no remains of this wall could be found around GIII-c, they suggest, therefore, that the wall was built specifically for GIII-a and its temple.<sup>7</sup> I believe that the wall surrounded all three pyramids, and that access to them was only through the upper temple of Menkaura, because of the direction of the walled path leading into the subsidiary pyramid enclosure. This suggests that the priests who performed the daily rites for Menkaura also performed them for the occupants of the small pyramids.

### III.3.1: GIII-A AND ITS CHAPEL

This pyramid is the largest of the three and is the only one built as a true pyramid; it is sometimes referred to as the fourth pyramid on the Giza plateau.<sup>8</sup> The pyramid was built of local limestone and the lowermost course was cased with granite.<sup>9</sup> It is thought

<sup>6</sup> Reisner, Mycerinus, pp. 56-57.

<sup>7</sup> Maragioglio and Rinaldi, L'Architettura, VI,, 80. A description of the wall is provided below, pp. 276.

<sup>8</sup> Edwards, The Pyramids of Egypt, p. 163; Porter and Moss, Topographical Bibliography, III<sup>1</sup>, 34.

<sup>9</sup> Fakhry, The Pyramids, p. 146.

that the rest of the pyramid was cased with Tureh limestone, but there is no evidence for this; the casing could have been constructed completely in granite.<sup>10</sup>

GIII-a measures 44 m. a side; the angle of the faces is 52° 15'. It originally stood to a height of 28.4 m.; it now stands 25.4 m. high.<sup>11</sup> The main entrance to the interior chambers is located in the north face. The subterranean apartments consist of a descending corridor cased with limestone, which opens into a roughly square area which contains a portcullis;<sup>12</sup> and a short corridor leading to the burial chamber. The burial chamber measures 2.61 m. high, 3.17 m. wide and 7.72 m. long. It was unlined, and a granite sarcophagus was found embedded in a hole in the western side of the floor. This sarcophagus contained fragments of red pottery, pottery with green glaze and remains of burnt wood and reeds.<sup>13</sup> The name of Menkaure was written in red ink on the ceiling of the burial chamber.

The temple attached to GIII-a is located to the east. It was built of mud brick on a platform of local

<sup>10</sup> Maragioglio and Rinaldi, L'Architettura, VI, 82, pls. 11-12; the occurrence of granite in the casing of both this pyramid and the main pyramid of Menkaure suggests that the two were built at the same time.

<sup>11</sup> Ibid., 82; Vyse, Operations, II, 38.

<sup>12</sup> Maragioglio and Rinaldi, L'Architettura, VI, 82, pl. 12 fig. 3-4; Vyse, Operation, II, 38-39.

<sup>13</sup> Reisner, Giza, I, 132; Maragioglio and Rinaldi, L'Architettura, VI, 82.

limestone, which suggests that it was planned by Menkaura and built by Shepseskaf.<sup>14</sup> The temple was built in two parts: the west part, which is the ceremonial area for the funerary establishment of the buried queen; and the east, or forepart, which consists of the courtyard where sacrifices and other rituals would have been carried out.<sup>15</sup> The facade of the western part of the temple was plastered and whitewashed. According to Reisner, the two parts were built at different times, but within days or months of each other.<sup>16</sup> He therefore reconstructs the history of the temple as follows: Menkaura built the temple platform, and then died before starting the temple. The queen who was buried inside then died, and Shepseskaf started the western part in order to maintain the cult of the queen while the rest of the temple was built. Restoration was done in the temple in the 5th and 6th Dynasties, indicating that the cult of the queen practiced at least to the end of the Old Kingdom.<sup>17</sup>

The entrance to the temple is the northeast corner. It consists of a doorway built with a paving of five slabs of stone, one sloping outwards, three laid horizontally, and one placed inside the temple at a lower

<sup>14</sup> Reisner, Mycerinus, p. 56; Maragioglio and Rinaldi, L'Architettura, VI, 83-84.

<sup>15</sup> Maragioglio and Rinaldi, L'Architettura, VI, 84.

<sup>16</sup> Reisner, Mycerinus, p. 56.

<sup>17</sup> Ibid.

level. This doorway was plastered with mud and closed with a two-leaved door.<sup>18</sup> It opens into a long east-west entrance corridor whose north and south walls were plastered white. A doorway in the southwest corner of this corridor gives access to a portico which borders the west side of an open courtyard.<sup>19</sup>

The portico measures 2.8 m. x 9 m. and was paved with mud plaster. It was supported by four pillars made of wood on stone bases; the stone bases survive. A screen wall with a door in its center was built later, perhaps in the 5th or 6th Dynasties, to divide the courtyard from the portico.

The court is 10.5 m. long from east to west and 9 m. wide from north to south. It is paved with yellow limestone slabs. Just south of its center is a stone basin sunk into the pavement.<sup>20</sup> The north wall of the courtyard is decorated with niches similar to those found in the court of Menkaura's upper temple; these are in series of three simple and one complex.<sup>21</sup> Reisner suggests that the south wall was also decorated with

<sup>18</sup> Ibid., pp. 57-58; Maragioglio and Rinaldi, L'Architettura, VI, 84, pl. 12 fig. 7.

<sup>19</sup> Reisner, Mycerinus, p. 58, plan IV, 8; Maragioglio and Rinaldi, L'Architettura, VI, pl. 12 fig. 7 ai, and p. 84.

<sup>20</sup> Reisner, Mycerinus, p. 58.

<sup>21</sup> Ibid., plan IV, 1, 58; Maragioglio and Rinaldi, L'Architettura, VI, pl. 12, fig. 7 cg, p. 84.

these niches,<sup>22</sup> while Maragioglio and Rinaldi add the east wall to this list.<sup>23</sup>

At the south end of the portico is a doorway, originally closed with a single leaved door, which opens into a long hall running east west, parallel to the entrance corridor and similar to it in size and shape. It measures 10.5 m. in length and 2.35 m. in width, and was divided later, perhaps in the 5th or 6th Dynasty, into two rooms by a stone wall.<sup>24</sup> These two rooms were paved with white limestone.<sup>25</sup> The remains of an altar of stone slabs was found in the western room; coal and ashes were found in the eastern room. Also found in one of these rooms were eight offering jars. Reisner believes that these two rooms were used as kitchens, and that the ash and coal represent cooking remains;<sup>26</sup> Maragioglio and Rinaldi almost agree, and suggest that the animals used for sacrifice in the courtyard were cooked in this area.<sup>27</sup> However, if these rooms were used as kitchens during the 4th Dynasty, they should not have been paved with limestone, as most kitchens are left unpaved. It

22 Reisner, Mycerinus, plan IV.

23 Maragioglio and Rinaldi, L'Architettura, VI, 84.

24 Reisner, Mycerinus, p. 59 plan IV, 6, 7; Maragioglio and Rinaldi, L'Architettura, VI, pl. 12 fig. 7 sd, sc.

25 Maragioglio and Rinaldi, L'Architettura, VI, 84.

Reisner (Mycerinus, p. 59) says that one room was paved with limestone and the other was paved with mud plaster.

26 Reisner, Mycerinus, p. 59.

27 Maragioglio and Rinaldi, L'Architettura, VI, 84.

also seems to me inappropriate to place a kitchen inside the temple itself; the cooking should have been done in the pyramid city or elsewhere and we do not have any parallels for this in the Old Kingdom. I believe instead that this room was used as a magazine during the Old Kingdom and that it was not converted into a kitchen until the Roman period. The only possible time that this temple can be used by the Romans or at the beginning of Christianity in Egypt, as many tombs and temples in Egypt were used in this period for the same purpose.???

The entrance to the private part of the temple is located in the center of the west wall of the portico; the doorway has two limestone slabs for the threshold and was closed by a two-leaved door.<sup>28</sup> This door opens into the anteroom, which measures 3.15 m. from east to west and 6.20 m. from north to south. The western wall was later thickened, reducing the east-west dimension to 2.60 m.<sup>29</sup> At the western end of the southern wall, a doorway, closed with a single-leaved door, led to a L-shaped chamber which served only as a passage to the stairway which lay through a door in its western wall.<sup>30</sup> A flint

<sup>28</sup> Ibid., pp. 84-86; Reisner, Mycerinus, p. 59.

<sup>29</sup> Reisner, Mycerinus, plan IV, 3; Maragioglio and Rinaldi, L'Architettura, VI, pl. 12, fig. 7 sa.

<sup>30</sup> Reisner, Mycerinus, p. 59, plan IV, 4; Maragioglio and Rinaldi, L'Architettura, VI, 86, pl. 12 fig. 7 sb.

knife was found in this room.<sup>31</sup> The stairway led first west, and then turned north, consisted of 17 steps, and ended on the roof of the temple. A western addition was made to this stairway during the later Old Kingdom. A doorway in the southern wall of the stairwell, just west of the entrance, leads to the outside of the temple. This may have been used during the building of the temple, or by the priests who worked in the inner temple.<sup>32</sup>

A doorway in the center of the western wall of the anteroom had a threshold made of mud and was closed with two leaved door.<sup>33</sup> It opens to a long hall called the hall of niches, which measures 1.90 m. from east to west and 10.50 m. from north to south. A doorway in the center of the west wall of this room leads to a small room which has been labelled the sanctuary. The west wall of the hall of the niches is decorated with two large complex niches, one to each side of the door leading to the sanctuary, each flanked by a total of six smaller niches. In the northwest corner of this room an offering place, consisting of seven slabs of stone, was

<sup>31</sup> Reisner, Mycerinus, plan IV, room 11, 9, ashes and marks of fire found in room 6-7 suggest that this rooms used as kitchen.

<sup>32</sup> Ibid., pp. 59-60, plan IV, 5; Maragioglio and Rinaldi, L'Architettura, VI, 86, pl. 12, fig. 7 ss.

<sup>33</sup> Reisner, Mycerinus, p. 60; Maragioglio and Rinaldi, L'Architettura, VI, 68.

set into the floor. In one of the horizontal slabs is a small depression which could hold a small stone or pottery bowl. A rectangular basin rested on the floor beside the offering bench. In the debris before the bench was found about 50 to 60 small offering jars and red brown pottery saucers.<sup>34</sup>

A rectangular slab on a mud foundation was set in front of the northern large compound niche, and there was a mud brick base built against the western wall just north of the doorway. This base is about 30 cm. x 30 cm. and 30 cm. high, its outer part was rounded and it was plastered. Reisner believes that this is a base for a small obelisk, but does not know what such an object would be doing in the area.<sup>35</sup> If there were an obelisk here, it might be seen to connect to the worship of Ra which became very important in the 5th Dynasty, as seen in their sun temples at Abousir. Also, we know that the entrance of some private tombs in Dynasty 5 were marked with an obelisk,<sup>36</sup> thus it is likely that Reisner's suggestion that an obelisk was placed in this area would be correct.

<sup>34</sup> Reisner, *Mycerinus*, p. 60; Maragioglio and Rinaldi, *L'Architettura*, VI, 86.

<sup>35</sup> Reisner, *Mycerinus*, pp. 60-61.

<sup>36</sup> L. Habachi, *The Obelisks of Egypt: Skyscrapers of the Past* (New York: 1977), p. 45; U. Rosaler-Köhler, "Obelisk," *LX* 28, IV 4 (1981), pp. 542-550.

It is thought that these offering places were added to the room during the 5th and 6th Dynasties.<sup>37</sup>

Fragments of an alabaster statue of a queen, fragments of other statues, and a small pot containing five alabaster model cups bearing the name of the "King's son Kay" and a slate cup with no inscription, were found in this hall.<sup>38</sup>

Reisner considers the room west of the hall of the niches to be part of the hall of the niches, the whole being the sanctuary.<sup>39</sup> I believe that this room was the sanctuary of the temple. There is a niche in the center of the western wall. I suggest that a statue of Hathor or Neith should be placed in this room. Another possibility is that the niche contained a false door for the queen, and that an altar was placed in front.

A doorway in the north wall of the hall of niche leads to an L-shaped room which parallels the stairwell on the south.<sup>40</sup> An offering table made of stone slabs with a place for a bowl was set against the south wall. There is evidence that there was a niche in its western wall; in front of the niche there was a limestone slab in the floor which may have been an offering stone or a basin. North of this stone was a third offering place

<sup>37</sup> Reisner, *Mycerinus*, pp. 60-61.

<sup>38</sup> *Ibid.*, plan IV no. 9.

<sup>39</sup> *Ibid.*, plan IV, 12.

<sup>40</sup> *Ibid.*, pp. 60-61.

which was probably a table.<sup>41</sup> This room may be a second offering hall.

There is a doorway in the east wall of the L-shaped room which leads to a square room which measures 3.65 m. from north to south and 3.13 m. from east to west. This was closed by a single door, and probably functioned as a magazine used to store precious temple objects that were used in the daily funerary establishment of the temple.<sup>42</sup> There was a base of crude brick in the southeast corner of this room and two perpendicular walls, each about 1 m. high, enclosing a square shelf in the northeastern corner. Reisner believes that a low butress found was used to form a step to reach the shelf.<sup>43</sup> This supports the theory that this room was a magazine for the inner part of the temple.

Miscellaneous fragments of pottery, stone vessels, flint flakes, and small pottery vessels were found in the temple debris.<sup>44</sup>

A low wall partly of stone rubble and mudbrick was built at a distance of 30 cm. from the south face and of brick and stone 60 cm. from the east face of the temple; it continues along the northern face. It is about 32 cm.

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41 Ibid., p. 61, plan IV, 10.

42 Ibid., plan IV, 11.

43 Ibid., p. 61.

44 Ibid., p. 56.

thick. Three drainage holes run under the east side of this wall, near the southern end. A second wall, this time of stone rubble, lies outside the inner wall. A gap in the north side of this wall, opposite the temple entrance, connects to the road leading to the upper temple of Menkaura. The road is bounded by walls of stone rubble which adjoin the wall around the temple.<sup>45</sup>

The following reasons suggest that these walls were built in the 5th or 6th Dynasties: Menkaura would not have built them before completing the temple, which he never finished; and Shepseskaf would have used mudbrick. No other 15th Dynasty subsidiary pyramid is surrounded by a similar wall. Yet the wall is clearly connected with the cult, so it must have been built in the later Old Kingdom, when the cult was still being maintained.<sup>46</sup>

### III.3.2: G-IIIB AND ITS TEMPLE

<sup>45</sup> Maragioglio and Rinaldi, *L'Architettura*, VI, 84, pl. 2 fig. 7; Reisner, *Mycerinus*, plan 4. This road was mentioned above, p. 258-259; it may originally have surrounded all three pyramids.

<sup>46</sup> Reisner, *Mycerinus*, p. 62. Several graffiti were found on blocks of the pyramid and its temple. One was on a block in the lower course of the southern face of the pyramid, on this, the word *wmt* is written between two *ga*. Another block, on the north side of the pyramid, bears the word *ga*, and a third block, in the sanctuary of the temple reads *gs mht*; (*ibid.*, p. 275, studied and collected by A. Rowe).

This pyramid is located about 10.15 m. west of GIII-a.<sup>47</sup> It is a stepped pyramid with four stages, built of local limestone. It measures 36 m. square and now stands to a height of 9 m.<sup>48</sup> No casing blocks have been found, but it has been suggested that it was cased with fine limestone in such a way that the casing would have converted it into a straight-sided pyramid.<sup>49</sup>

The entrance to the underground chambers is located on the north side. From the entrance, a rock-cut passage leads to an antechamber, in which was found an inscribed stone fragment reading dj (nh: "giving life."<sup>50</sup> This epithet usually follows a royal cartouche, which indicates that the person buried here was from the royal family. In the anteroom were also found pottery fragments, a piece of a green statuette, and a stick of uncertain date.<sup>51</sup>

The anteroom led to the lined burial chamber which measures 3.15 m. high and 5.84 m. x 2.66 m. In this

47 Ibid., p. 62; Maragioglio and Rinaldi, L'Architettura, VI, 62, pls. 12-13.

48 Fakhry, The Pyramids, p. 145; Reisner, Mycerinus, pp. 62-63 gave the measurements of all the base side and the stages of GII-b and c.

49 Vyse, Operations, II, 46-49; Reisner, Mycerinus, p. 63.

50 Reisner, Mycerinus, p. 63; Maragioglio and Rinaldi, L'Architettura, VI, 88; Vyse, Operations, II, 48.

51 Maragioglio and Rinaldi, L'Architettura, VI, 88.

chamber was found an undecorated sarcophagus with no decoration or inscription situated similarly to the sarcophagus in GIII-a. It measures 0.79 m. high, 2.04 m. long, and 0.79 m. wide, a size suitable for a fairly small person.<sup>52</sup> Quarry marks in red ink on the roof contain the name of Menkaura in a cartouche.<sup>53</sup> Inside the sarcophagus were some bones and teeth of a young woman.<sup>54</sup>

The temple east of GIII-b was filled with debris of decayed mudbrick mixed with sand, ashes, dust and coals.<sup>55</sup> The temple foundation was built of massive stones; the temple was completed, presumably by Shepseskaf, in mudbrick. Reisner thought that Menkaura planned to build this temple in stone and cased it with granite. It is important to note that work was proceeding simultaneously on the upper temple of Menkaura and the temples of GIII-a and GIII-b.<sup>56</sup> Maragioglio and Rinaldi

<sup>52</sup> Reisner, Giza, I, 133; Edwards, The Pyramids of Egypt, p. 162.

<sup>53</sup> Reisner, Mycerinus, p. 63; Vyse, Operations, II, 48, the name of the crew of Menkaura found in the pyramid GIII-a description of the crew will be discussed in Chapter 4. The name of the crew is thought to read "Mycerinus is drunk."

<sup>54</sup> Reisner, Mycerinus, p. 63.

<sup>55</sup> Ibid., p. 64, plan VI; Maragioglio and Rinaldi, L'Architettura, VI, pl. 13, fig. 4. detail of the temple plan.

<sup>56</sup> Reisner, Mycerinus, p. 64.

note that the foundations are of stone rubble rather than dressed limestone.<sup>57</sup>

The temple is not as large as the temple of GIII-a, it is instead comparable in size to the crude brick chapels of the mastabas in Khufu's Western Cemetery.<sup>58</sup> The temple entrance is just east of the center of the north side, and is entered via the road from Menkaura's upper temple.<sup>59</sup> The entrance threshold is made of a single limestone slab. The entrance leads to a rectangular room east of the temple axis. This room is thought to be a kitchen, magazine, or anteroom. A doorway in the west wall of this room leads to a square chamber, thought by Reisner to be a guard room;<sup>60</sup> I believe it held temple equipment. In the eastern corner of the southern wall of the anteroom, a doorway lead to an open court, the floor and walls of which were plastered with mud.<sup>61</sup>

A doorway in the sothern wall of the court leads to a long north-south hall labelled by Reisner as being the wide outer offering room. In its northeast corner is an

57 Maragioglio and Rinaldi, L'Architettura, VI, 132, obs. 48.

58 Reisner, Mycerinus, p. 64.

59 Ibid.

60 Ibid., plan VI, p. 64; Maragioglio and Rinaldi, L'Architettura, VI, 90, pl. 13, fig. 4 sg, ai.

61 Reisner, Mycerinus, p. 64; Maragioglio and Rinaldi, L'Architettura, VI, 90. In Reisner plan courtyard marked 5 and in Maragioglio and Rinaldi marked eg.

altar built of limestone slabs under which is a basin; the altar is of the sort seen in the temple of GIII-a.<sup>62</sup> Sacrifices were probably performed in front of the altar and the basin.

Two doorways in the western wall of this hall lead to rectangular rooms. The southern of these rooms had walls covered with thick plaster, this room was probably a magazine.<sup>63</sup> I believe that the precious objects of the temple were stored here, and that it would have been closed and sealed with official seals. Reisner labelled the northern room as the inner offering room.<sup>64</sup> There is a compound niche in the southeast corner of the room; there may have been more niches, but the walls have been so damaged that there is no evidence for them.<sup>65</sup> There was probably a matching niche on the north side, and a base or niche in the center on which a statue of Hathor or Neith, would have stood to represent the queen who was buried in the pyramid for eternity. The room is plastered with mud and coated with white plaster. This room is opposite the burial chamber,<sup>66</sup> thus I believe that this room functioned as the temple sanctuary.

62 Reisner, Mycerinus, plan VI, 4; Maragioglio and Rinaldi, L'Architettura, VI, 90, pl. 13, fig. 4 sa.

63 Reisner, Mycerinus, plan VI, 6; Maragioglio and Rinaldi, L'Architettura, VI, 90, pl. 13, fig. 4 sb.

64 Reisner, Mycerinus, p. 64.

65 Ibid., p. 65, plan VI, 5.

66 Ibid.

### III.3.3: GIII-C AND ITS TEMPLE

This is the westernmost of the subsidiary pyramids, and lies about 13.60 m. from GIII-b.<sup>67</sup> It was built as a step pyramid in four stages, and, as in the case of GIII-b, may have been intended to be cased so that it formed a true pyramid. It is in very poor condition, and only three of the stages are now visible. It is made of local limestone and there is no evidence for casing.<sup>68</sup> It is 36 m. square and stands to a height of 9 m.<sup>69</sup>

The entrance, which is in the north face, leads through a descending corridor to an unfinished antechamber and then through a short passage to the burial chamber, 7.92 m. x 3.45 m. and 2.89 m. high, which was also not finished. Decayed wood, shown not to belong to a coffin, and stones were found in all of the subterranean apartments, but no sarcophagus was found in the burial chamber.<sup>70</sup>

<sup>67</sup> Ibid., p. 65; Maragioglio and Rinaldi, L'Architettura, VI, 90, pl. 11-14.

<sup>68</sup> Grinsell, Egyptian Pyramids, p. 115; Maragioglio and Rinaldi, L'Architettura, VI, 90.

<sup>69</sup> Fakhry, The Pyramids, p. 145; Maragioglio and Rinaldi, L'Architettura, VI, 92.

<sup>70</sup> Reisner, Giza, I, 133; Maragioglio and Rinaldi, L'Architettura, VI, 92.

Vyse states that GIII-c was never used in the 4th Dynasty as a tomb. However, his excavations in the pyramid and its temple convinced Reisner that a 4th Dynasty burial was made in GIII-c.<sup>71</sup>

Maragioglio and Rinaldi add that the temple of GIII-c found by Reisner was replastered many times in the Old Kingdom, as was its floor, and this indicates that the temple was kept in use for cult purposes over a considerable amount of time. They add that even if the temple was not completed, the pyramid could have been used for a burial.<sup>72</sup> This hypothesis is not convincing, since the temple could have been used for something other than the cult of a queen buried in the pyramid. The fact that the burial chamber was found empty and unfinished supports Vyse's contention that the pyramid was never used as a tomb by anyone.<sup>73</sup> The owner of the pyramid has not been identified, and nothing was found inside or outside the pyramid or inside the temple of GIII-c to indicate the name or the rank of the owner of this

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71 Vyse, Operations, II, 44ff.; Reisner, Mycerinus, p. 65.

72 Maragioglio and Rinaldi, L'Architettura, VI, 132, obs. 49.

73 cf. discussion under cult pyramid.

pyramid.<sup>74</sup> We have no records giving us the name of a third queen of Menkaura.<sup>75</sup>

The temple against the east face of GIII-c was built of mud brick walls embedded in trenches in the rock of the plateau. The temple walls were plastered and white washed and the floor was made of gravel and paved with mud.<sup>76</sup>

The temple entrance is located on the north side and consists of a doorway made of three limestone slabs. The entrance was closed by a two-leaved door.<sup>77</sup> The entrance doorway led to a room east of the temple axis. A door in a cross wall of brick on the west side of the room gives access to a smaller room to the west. An offering jar; four rude trays; six small model jars; two model bowls; and part of the neck of a jar were found in this room, suggesting that this room served for storage.<sup>78</sup> The east room may have been a guard room.<sup>79</sup>

In the southwest corner of the first room, which could be considered an antechamber, a doorway leads to a

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74 Reisner, Mycerinus, p. 65; Edwards, The Pyramids of Egypt, p. 163.

75 Smith, "Old Kingdom," p. 67.

76 Reisner, Mycerinus, p. 66; Maragioglio and Rinaldi, L'Architettura, VI, 92, pl. 14, fig. 2.

77 Reisner, Mycerinus, p. 66, plan VI; Maragioglio and Rinaldi, L'Architettura, VI, 92, pl. 14 fig. 2.

78 Reisner, Mycerinus, p. 66.

79 Ibid., plan VI, 2, 1; Maragioglio and Rinaldi, L'Architettura, VI, 92, pl. 14, fig. 2, ai, sg.

large open court. The east, west, and north walls of this court are decorated with a series of simple and compound niches: two compound and nine simple in the east and west walls; one compound and six simple in the north wall.<sup>80</sup> The southern side of the court is occupied by a portico which was held up by three wooden pillars on three circular limestone bases. There are rectangular antae at the east and west sides of the portico, and a large round limestone basin, 1.05 m. in diameter and 0.8 m. deep, was placed against the south wall. In the area of the portico was found a great number of objects, including 620 small model offering bowls, 278 small offering models of various types, the lower part of the stand of a low bowl, fragments of the side of a bowl, fragments of an offering bowl, and fragments of the rim of a bowl.<sup>81</sup>

In the southwest corner of the portico, there are the remains of a door leading to a room to the south. This door was plastered over before the temple was completed, indicating that the temple underwent a change of plan.<sup>82</sup>

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<sup>80</sup> Reisner, *Mycerinus*, p. 67, plan VI, 3; Maragioglio and Rinaldi, *L'Architettura*, VI, 92, pl. 14, fig. 2, cg.

<sup>81</sup> Reisner, *Mycerinus*, p. 66.

<sup>82</sup> *Ibid.*, p. 67, plan VI, 4; Maragioglio and Rinaldi, *L'Architettura*, VI, 92, pl. 14, fig. 2. in front of cg.

A doorway located at the eastern corner of the south wall of the portico gives access to a long north-south room.<sup>83</sup> Reisner states that a doorway in the west wall of this room leads to the hall of niches.<sup>84</sup> Maragioglio and Rinaldi do not agree that an examination of the published plans and photographs showed no door in this area.<sup>85</sup> A doorway in the south wall corner of this room leads to another, longer, north-south room. A doorway at the south end of the west wall of this room gives access to a small square room, and a door in the west side of the north wall of this room leads to the hall of the niches.<sup>86</sup> The hall of niches is decorated along its west wall with a series of complex and simple niches, arranged as one compound and six simple, on either side of a door in the center. A rectangular base of mudbrick lies on the floor in the southwest corner of the hall; in front of this is an uninscribed basin of limestone.<sup>87</sup> Among the finds from this hall were: a small bag jar without a neck; 34 model offering jars; and 76 model offering bowls. These finds indicate that the

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83 Maragioglio and Rinaldi, L'Architettura, VI, 92.

84 Reisner, Mycerinus, 67, plan VI, 5 and show the doorway with the passage led to the room of niches.

85 Maragioglio and Rinaldi, L'Architettura, VI, 92, pl. 14, fig. 2 room sa.

86 Ibid., p. 92, pl. 14, fig. 2, room sc and sn the hall of niches.

87 Ibid., pp. 92-94; Reisner, Mycerinus, p. 67.

hall of the niches was the sanctuary of the temple. The door in the west wall leads through a single-leaved door to another long hall, which may have functioned as the inner offering room; or possibly as a magazine for the precious objects of the cult.

From the small square room that gives access to the hall of the niches, a doorway in the west wall leads to an L-shaped room to the west. This probably served as a magazine for the inner area of the temple.<sup>88</sup>

Many of the offering vessels found in the portico of the temple may have come from the inner magazines. These objects would have been used in the hall of the niches.

The artefacts in the temple prove that a cult was maintained in the temple of GIII-c, but there is nothing to indicate the type of cult it was.

A comparison between the three temples, which have no parallels in the 4th Dynasty, is interesting. GIII-a and GIII-c are the same, except that GIII-c is missing the stairway to the roof and anteroom to this stairway seen in GIII-a. Thus both of these temples have all, or almost all, of the traditional elements of a funerary

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<sup>88</sup> Reisner, *Mycerinus*, p. 67, plan VI, room 5, 8, 9-10; Maragioglio and Rinaldi, *L'Architettura*, VI, 92, pl. 14, fig. 2 rooms sa, sb, sc, sd.

temple. GIII-b, on the other hand, is missing many of the elements of GIII-a and c.<sup>89</sup>

#### III.3.4: ATTRIBUTION OF THE SUBSIDIARY PYRAMIDS

There is little doubt that GIII-a was used for burial. This is indicated by the sarcophagus found in the burial chamber. That the owner was a queen is strongly suggested by the fragments of an alabaster statue of a queen found in the temple,<sup>90</sup> and by the arrangement of the compound niches in the inner offering room, which parallels the arrangement found in private chapels of the 4th Dynasty. In the private chapels, there are usually two niches, one for the tomb owner and one for his or her spouse. In the temple of GIII-a, the niches should be for the queen and Menkaura.

Reisner has suggested that GIII-a belonged to Khamerernebty II, the main queen of Menkaura who is portrayed with him in several of the group statues found in the lower temple.<sup>91</sup> He suggests that "Kay," whose name was found on five model cups, was the son of the

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<sup>89</sup> Reisner, Mycerinus, p. 68.

<sup>90</sup> Ibid., p. 55.

<sup>91</sup> Ibid.

queen who was buried here.<sup>92</sup> Several other scholars agree with this identification.<sup>93</sup> This does seem the most likely attribution, as Khamerernebty II was the main queen of Menkaura. However, both Ricke and Stadelmann believe that this pyramid was originally built as the cult pyramid of Menkaura.<sup>94</sup>

Since skeletal remains of a young woman were found buried in a sarcophagus in GIII-b, its designation as a queen's pyramid seems fully justifiable. This attribution is also supported by the fragments of a statue found inside the temple and the royal epithet dj (nh, found in the anteroom of the pyramid.<sup>95</sup> The many offering jars found inside the temple show that the cult was kept up after the queen's death.<sup>96</sup> The name of Menkaura found in a cartouche inside the pyramid supports the theory that the queen was related to Menkaura, a

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92 Ibid.

93 Edwards, The Pyramids of Egypt, p. 163; Grinsell, Egyptian Pyramids, p. 116.

94 Ricke (Bemerkungen, II, 126) creates a scenario whereby GIII-a was originally planned and built as the ka pyramid of Menkaura. However, Menkaura died before his own pyramid was ready for occupation, and Shepseskaf hurriedly built a temple against the east face of GIII-a and temporarily buried his father there. After Menkaura had been moved to his own pyramid, GIII-a, since it now had a cult temple attached to it, was used for the burial of a queen.;[] Lauer, "Sur le dualisme," pp. 168-169; Stadelmann, "Pyramiden," pp. 1237-38. See below, pp. 283-285 for further discussion of this theory. Stadelmann, Pyramiden, pp. 146-147.

95 Reisner, Mycerinus, p. 63.

96 Ibid., pp. 63-65.

theory that is already proven by the fact that she is buried in his complex. It is likely that this queen was the mother of Shepseskaf. However, Reisner suggests that the queen who was buried in this pyramid was a secondary wife of Menkaura who died after the king.<sup>97</sup>

The attribution of GIII-c is very difficult, as there is no evidence of a burial.<sup>98</sup> The burial chamber was not lined, and there is no sarcophagus.<sup>99</sup> Some believe that it was built for a queen.<sup>100</sup> Reisner, for example, believes that the statue fragments found in the temple and the fact that the temple was kept up after the 4th Dynasty, prove that the pyramid was used for burial.<sup>101</sup> However, this only proves that there was a cult active here. I suggest that this represents the cult pyramid of Menkaura, and that the cult here was a cult of Menkaura himself.

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97 Ibid., p. 63.

98 Vyse, Operations., II, 41ff.

99 Reisner, Giza, I, 133.

100 Reisner, Mycerinus, p. 65; Maragioglio and Rinaldi, L'Architettura, VI, 92-94; Edwards, The Pyramids of Egypt, p. 163.

101 Reisner, Mycerinus, p. 65.

### III.5 THE RITUAL PYRAMID

We have argued in previous chapters that Khufu and Khafra, for cultic reasons, did not need ritual pyramids.<sup>1</sup> However, it seems evident, both from the layout of his complex and his reputation in later sources, that Menkaura returned to the dogma that had been current before the reign of Khufu and developed further in the 5th and 6th Dynasties.<sup>2</sup> Menkaura created a new architectural entity.<sup>3</sup> Thus, although Reisner,<sup>4</sup> Maragioglio and Rinaldi,<sup>5</sup> and Grinsell,<sup>6</sup> believe that all three of the subsidiary pyramids of Menkaura were built for queens, it seems reasonable to expect that Menkaura would have a ritual pyramid, in keeping with the cult

1 See above, pp. 112-123; Brinks, Entwicklung, pp. 76-94.

2 For the differences in the layouts of the pyramid complexes of the three kings at Giza, see above, pp. 112-123. An Old Kingdom text from the tomb of a 4th Dynasty official relates the kindness and generosity of Menkaura to his courtier (Sethe, Urk., I, 18-21; Breasted, Ancient Records, I, 94; Reisner, Mycerinus, pp. 257-58), which portrayal of the king corresponds with that given later by Herodotus (The Histories, II, 431, paragraphs 128-29. Herodotus also states that Menkaura re-opened the temples and made sacrifices to the gods, in contrast with Khufu and Khafra, whom he regards as wicked kings. The differences between Menkaura and his predecessors is also seen in the art of this period (see Smith, HESPOK, pp. 33-43).

3 Ricke, Bemerkungen, II, 55-60.

4 Reisner, Mycerinus, pp. 55-68.

5 Maragioglio and Rinaldi, L'Architettura, VI, 80-84.

6 Grinsell, Egyptian Pyramids, p. 29.

layouts of Huni and Sneferu and the 3rd, 5th, and 6th Dynasties. This ritual pyramid should be connected with the sed festival.<sup>7</sup>

Scholars generally assign this function of ritual pyramid to GIII-a, since it the only true pyramid of the three, was cased with granite, as was the main pyramid, and lies on the north-south axis of the main pyramid. They suggest that it was used afterward for burial.<sup>8</sup>

This reasoning is not convincing for several reasons. First, there is cause to believe that both GIII-b and c would have been planned to be cased so that they acquired the forms of true pyramids.<sup>9</sup> The part granite casing could reflect the importance of the tomb's owner rather than a ritual function. The fact that GIII-a is on the north-south axis of the main pyramid does not indicate that it is the ritual pyramid. The ritual pyramids of the 5th and 6th Dynasties are located east of the main pyramids' axes and Menkaura's complex contains many parallels to 5th and 6th Dynasty complexes.

The fact that GIII-a was undoubtedly used for a burial shows good evidence that it was not the ritual pyramid.

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7 Brinks, Entwicklung, pp. 76-94.

8 Ricke, Bemerkungen, II, 126; Lauer, "Sur le dualisme," pp. 168-69; Stadelmann, Pyramiden, pp. 146-47.

9 See above, pp. 270, 274.

GIII-c is the only one of the three pyramids which did not contain a burial. Thus, it is the most likely candidate for ritual pyramid. However, the fact that it has a temple associated with it is a problem, since none of the known ritual pyramids have temples.<sup>10</sup> Despite this difficulty, GIII-c remains the best possibility for the ritual pyramid of Menkaure.

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<sup>10</sup> Firth, "Excavations," p. 67; Jéquier, Pepi II, I, 9.

### III.5: THE LACK OF BOAT PITS

No boat pits have yet to be discovered in the complex of Menkaura. However, much of the area remains unexcavated and debris still surrounds much of the pyramid.<sup>1</sup> How many pits should we expect to discover?

Khufu and Khafra each had five boat pits in their complexes. As it has already been suggested, these may represent two boats for the king as Horus, two boats for the god Ra, and one funerary or Hathor boat. According to Herodotus, Menkaura was a good king who returned the worship of the gods to their own temples. He seems to have given power back to the priests of Ra at Heliopolis. In many respects, Menkaura's complex differs from the complexes of Khufu and Khafra,<sup>2</sup> supporting the theory that his cult was different from that of his immediate predecessors. Thus it is unlikely that there are five boat pits around Menkaura's pyramid. It is more probable, in view of the many parallels between the complex of Menkaura and the complexes of the 5th and 6th Dynasties, that the number of pits would be the same as those found in these later monuments.

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<sup>1</sup> Abubakr and Mustafa, "Funerary Boat," p. 15.

<sup>2</sup> Vyse, Operations, II, 15.

Therefore, it is likely that three boat pits were dug on the east side of Menkaura's pyramid, or elsewhere, if there were topographical problems in the east. One of these would be located north of the upper temple, and a second south; these two pits should be for the boats of the king as Horus. The third pit, also in the area of the upper temple, would be for the funerary or Hathor boat.

Actual evidence for boats around Menkaura's pyramid is scarce. Saleh cleared the east side of Menkaura's pyramid, an area in which he expected to find boats. He found that the brick pavement to the north of the upper temple overlay a bed of gravel which was in turn above a layer of megalithic limestone blocks which were joined with mortar. This arrangement was not repeated to the south. Among the quarry marks on these blocks were four elaborate drawings of boats. Although partial removal of these blocks revealed nothing, Saleh believes that Menkaura's boats may lie below this pavement.<sup>3</sup> The type of boats drawn by the quarrymen may depict the boats used when they transported the pyramid stones.

A paved rectangular pit, with stone masonry to the west and south, was found cut into the foundation

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<sup>3</sup> Saleh, "Excavations around the Mycerinus Pyramid Complex," MDAIK 30 (1974), pp. 153-54.

terracing north of the pyramid, outside the inner enclosure wall.<sup>4</sup> Neither the date nor the function of this pit is known;<sup>5</sup> it is not likely that this is a boat pit, as it is the wrong size and shape and contains no evidence for a boat. It more likely belongs to the Graeco-Roman period, at which time there was a village around the pyramids at Giza.<sup>6</sup>

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<sup>4</sup> Maragiolio and Rinaldi, L'Architettura, VI, 78.

<sup>5</sup> Ibid.; Kemp, "Old Kingdom," p. 94.

<sup>6</sup> Petrie, Pyramids and Temples, p. 116.

### III.6: THE CAUSEWAY

The causeway of Menkaura runs due east from the upper temple to the lower temple (plan: 20),<sup>1</sup> a distance of about 608 m.<sup>2</sup> The foundations, which are of local limestone, can be traced for about 250 m.<sup>3</sup> These foundations were laid in the time of Menkaura; the 2 meter thick side walls, which are of white-plastered crude brick, were built by Shepseskaf.<sup>4</sup> It is possible that the causeway was left open to the sky; if there was a roof, it probably consisted either of wooden logs covered by reed mats and bricks,<sup>5</sup> or of a simple brick vault.<sup>6</sup> There is no evidence that the causeway was decorated with scenes.

As mentioned above,<sup>7</sup> there is disagreement about whether the "entrance corridor" of the upper temple is part of the temple or of the causeway. Reisner believes that it is part of the temple.<sup>8</sup> Maragioglio and Rinaldi

<sup>1</sup> Fakhry, The Pyramids, p. 83; Perring, The Pyramids of Gizeh, II, pl. vii; Vyse, Operations, I, pl. facing 154; Porter and Moss, Bibliography, III<sup>1</sup>, 32-33.

<sup>2</sup> Reisner, Mycerinus, p. 35.

<sup>3</sup> Maragioglio and Rinaldi, L'Architettura, VI, 64.

<sup>4</sup> Ibid., p. 64, pls. 4 and 10.

<sup>5</sup> Reisner, Mycerinus, p. 25.

<sup>6</sup> Maragioglio and Rinaldi, L'Architettura, VI, 120, obs. 31.

<sup>7</sup> See above, pp. 231-233.

<sup>8</sup> Reisner, Mycerinus, p. 25.

do not agree, and suggest that this corridor represents the causeway as begun by Menkaura. According to their theory, if the causeway had been completed in his reign, it would have continued at this width to the lower temple. Thus they believe that the eventual width of the causeway was decided upon by Shepseskaf for economical reasons.<sup>9</sup> However, the fact that the entire causeway is built on limestone foundations, which are taken elsewhere in the complex as indications of work finished in the time of Menkaura, suggests that the entire length of the causeway was planned and the foundations laid before Menkaura's death. Thus I believe that the "entrance corridor" is part of the temple, and that the causeway was built according to Menkaura's plan.

A small stone cross-channel lies about 5.4 m. from the eastern end of the causeway. This collected the rainwater which gathered to the north of the causeway and turned it to the south.<sup>10</sup>

At their eastern ends, the two side walls of the causeway divide. The north wall ends against the west wall of the lower temple; the south wall makes a sharp turn to the south and runs around the perimeter of the

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<sup>9</sup> Maragioglio and Rinaldi, L'Architettura, VI, 110, obs. 23.

<sup>10</sup> Ibid., p. 64.

lower temple.<sup>11</sup> The corridor that it forms is about equal in width to the causeway.<sup>12</sup> The fact that there is no entrance at the end of the causeway suggests that the lower temple is seen as independent of the upper temple, in contrast to the temples of Khufu and Khafra.<sup>13</sup> The lower temple can be entered at two points along the corridor formed by the extension of the south wall of the causeway and the south wall of the lower temple. A doorway to the southeast of the lower temple also provides access to the corridor, which continues to the east of the lower temple.<sup>14</sup> There were also two doorways in the north wall of the eastern continuation of the corridor.

It does not appear that the causeway was restored during the work on the lower temple in the 6th Dynasty. During this time, the two doorways which gave access from the corridor to the lower temple and the two doorways in the continuation of the corridor were closed off.

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<sup>11</sup> Reisner, *Mycerinus*, pp. 35, 39.

<sup>12</sup> Maragioglio and Rinaldi, *L'Architettura*, VI, 64.

<sup>13</sup> *Ibid.*; Reisner, *Mycerinus*, plan IX.

<sup>14</sup> Reisner, *Mycerinus*, p. 43; Maragioglio and Rinaldi, *L'Architettura*, VI, 64.

### III.6.1: POST-4TH DYNASTY HISTORY

The causeway of Menkaura was not restored or rebuilt after its decay, and was actually blocked off in the later Old Kingdom. Therefore, there was no connection between the lower and upper temples during the 5th and 6th Dynasties. The artefacts found inside the upper and lower temples show that the cults were maintained throughout this period, thus supporting the contention that the causeway was used only for the funeral of the king and not afterwards. The priests who lived in the pyramid city and performed the cults had to go outside the lower temple wall to the north or south and walk up to the upper temple beside the decaying causeway.<sup>15</sup>

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<sup>15</sup> Maragioglio and Rinaldi (L'Architettura, VI, 126, obs. 38) propose four hypotheses to show how the priests could reach the upper temple; they state that the causeway was not restored during the 5th and 6th Dynasties because it had been built with mudbrick.

### III.7: THE LOWER TEMPLE

The lower temple of Menkaura lies southwest of Khafra's lower temple, near the modern cemetery of Nazlet el-Samman. It was completely covered by sand until 1908, when it was excavated by Reisner (plan: 21).<sup>1</sup> The temple is well preserved, and its development over the course of the Old Kingdom can be traced.<sup>2</sup> It appears that, as in the upper temple, the foundations and several courses of some of the walls of the lower temple, were laid in limestone by Menkaura. The temple was then finished in mud brick by Shepseskaf according to the original plans.<sup>3</sup> At some point the western part of the temple, which was completely of mudbrick, was destroyed by a flood apparently at the end of the 5th Dynasty. A new temple was built above the ruins of the old and it is thought that this occurred at the beginning of the 6th

<sup>1</sup> Porter and Moss, Bibliography, III<sup>1</sup>, 27.

<sup>2</sup> Reisner, Mycerinus, pl. vii-x, figs. 18-22, pp. 34-54; Maragioglio and Rinaldi, L'Architettura, VI, 66-73, 76, 79, obs. 33-34, 37-39, pl. 10; Fakhry, The Pyramids, fig. 78; Rieke, Bemerkungen, II, fig. 42; W. M. Whitehill, Museum of Fine Arts, Boston, A Centennial History, I (Cambridge, Mass.: 1970), fig. on 255; Edwards, The Pyramids of Egypt, pp. 156ff.; Badawy, Egyptian Architecture, I, figs. 68, 99-100.

<sup>3</sup> Maragioglio and Rinaldi, L'Architettura, VI, 66.

Dynasty. The cult was maintained here through the reign of Pepi II of the 6th Dynasty.<sup>4</sup>

### III.7.1: GENERAL LAYOUT

The main entrance to the temple is located in the center of the east wall.<sup>5</sup> This entrance was closed by a two-leaved door. The entrance gives access to a small square vestibule which measures about 8 m. from north to south and about 7 m. from east to west.<sup>6</sup> The roof of the vestibule was supported by four wooden pillars on alabaster bases. The vestibule walls were plastered and white washed. A decree of Pepi II, awarding privileges

<sup>4</sup> Ibid., p. 70; Reisner, Mycerinus, p. 44.

<sup>5</sup> Fakhry, The Pyramids, p. 139; Grinsell, Egyptian Pyramids, p. 112.

<sup>6</sup> These measurements are taken from Reisner, Mycerinus, plan IX. Reisner (ibid., p. 40) gives the measurements for this room as 16.10 m. north to south and 14.50 m. east to west; these dimensions do not agree with the scale on his plan and are clearly impossible if the measurements he gives for the open court are correct. Maragioglio and Rinaldi are unhelpful on this point, as they give no dimensions in their text and the scale on their plan is inconsistent.

to the priests of the pyramid city, was found in this vestibule.<sup>7</sup>

Doorways in the western ends of both the north and south walls lead to north-south corridors, each of which gives access to a row of four east-west magazines. At the end of the northern corridor is a staircase which led to the roof of the temple.<sup>8</sup> The southern corridor leads eventually to a doorway which gives access to the causeway corridor. There is evidence that both the northern and southern magazines were roofed with wood.

In the center of the western wall of the vestibule is a doorway which provides access to a very large open court which measures 19.4 m. from east to west and 41 m. from north to south.<sup>9</sup> All four walls of the court were decorated with small and compound niches: five compound on the north and south sides; ten compound on the east side; and six compound on the west side.<sup>10</sup> The court was left unpaved except for a road which runs from east to west from the eastern entrance to the portico on the west. South of the paved road, a basin carved from one

<sup>7</sup> Reisner, Mycerinus, p. 49. This decree is discussed below, pp. 314-315.

<sup>8</sup> Reisner, p. 40; Maragioglio and Rinaldi, L'Architettura, VI, 68. The date of this staircase is uncertain; it is probable that it was built in Dynasty 4 and restored in Dynasty 6.

<sup>9</sup> Reisner, Mycerinus, p. 40; Maragioglio and Rinaldi, L'Architettura, VI, 68.

<sup>10</sup> Reisner, Mycerinus, p. 40; plan IX c.

limestone block is embedded in the rock floor. A channel made of limestone blocks runs northeast from this basin to the paved walkway. These structures were probably connected with the drainage of blood from sacrifices.

A ramp in the center of the west side of the court leads to the western portico.<sup>11</sup> This portico is formed by two recesses. The eastern recess is wider, and contains four pillars to the western's two. Only the bases of these pillars remain, but it is assumed that they, and the roof which they supported, were made of wood. Both recesses are flanked by rectangular antae of plastered mudbrick. The floor of the portico was made of gravel and mud plaster. Four alabaster statues of Menkaura seated upon a throne were found in the western wall of the anteroom; they stood in front of the line of the old portico.<sup>12</sup> Maragioglio and Rinaldi suggest that they were erected flanking a doorway in the western wall of the portico.<sup>13</sup> Reisner, however, believes that the statues were not placed here until after the restoration of the temple in the 6th Dynasty.<sup>14</sup> Since Reisner states that the statues sat on the 4th Dynasty floor, I agree with Maragioglio and Rinaldi, and believe that the

<sup>11</sup> Maragioglio and Rinaldi, L'Architettura, VI, 68, pl. 10.

<sup>12</sup> Reisner, Mycerinus, p. 41-47.

<sup>13</sup> Maragioglio and Rinaldi, L'Architettura, VI, 68.

<sup>14</sup> Reisner, Mycerinus, plan VIII.

statues were planned by Menkaura and placed by Shepseskaf.<sup>15</sup>

The western doorway leads to a long east-west offering room on the central axis of the temple. In the offering room, on its second mud floor, Reisner found the remains of an offering bench or altar; a limestone libation basin; and four small unfinished statues on its western end. Also found here were stone vessels; flint flakes; and pieces of faience vessels. All of these finds date to Dynasty 6.<sup>16</sup> However, I believe that the offering bench at least reflects the layout of the original temple.<sup>17</sup> Doorways in the eastern ends of the north and south walls of the offering room lead to complexes of rooms to the north and south. Each of these doorways had a threshold of one slab of limestone on which were found no traces of door sockets; regardless of this fact, Reisner reconstructs two-leaved doors in both doorways.<sup>18</sup> It is likely that he is correct, at least in that there were doors of some sort, since the offering room should be isolated.

The northern doorway gives access to a group of two-storied magazines oriented east-west on either side of a

<sup>15</sup> Ibid., p. 41.

<sup>16</sup> Ibid., p. 47.

<sup>17</sup> Ibid.; Maragioglio and Rinaldi, L'Architettura, VI, 70.

<sup>18</sup> Reisner, Mycerinus, pp. 41-42.

north-south corridor. The eastern row of magazines consists of five magazines, of which the four northernmost are identical and the southernmost smaller because of the wall of the portico. There are six magazines in the western row. The corridor and all of the magazines were roofed with wood.<sup>19</sup> Finds from this area dated mostly to Dynasties 5 and 6, but some may date from Dynasty 4. The finds included large deposits of stone vessels; flint flakes; copper and stone vessels; three model basins; one of slate, one of crystal and one of haematite; a copper model of a hes vase made of copper; a stack of six model copper basins; and two copper models of shouldered jars.<sup>20</sup> In addition, there were pieces of alabaster statue bases bearing the names of Menkaura and Khafra, the body and legs of an ivory statuette of Menkaura, and quantities of pottery, including many painted jars bearing Menkaura's name, and large offering jars and basins.<sup>21</sup>

The southern doorway leads to a corridor which runs south to the southern wall of the temple, where a doorway leads into the corridor that forms a continuation of the causeway. Along the west side of the corridor is one long room, entered from doorways in the north and south

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<sup>19</sup> Ibid., p. 42.

<sup>20</sup> Ibid., plan IX, 8.

<sup>21</sup> Ibid., p. 37.

ends of its east wall. In the corridor were found three royal and one private statue, and four triads representing the king with Hathor and with various nome goddesses; their sides were against a wall, two against the east wall facing south and two against the west wall facing north.<sup>22</sup> It is thought that these triads were originally in the room west of the corridor and thought that Menkaura intended to have 42 statues of triads to represent the 42 nomes of Upper and Lower Egypt.<sup>23</sup> On the east are two rooms, the northernmost containing three rectangular depressions which Reisner believes were for the bases of statues. In this room were found four statuettes, three of diorite and one of a reddish stone, that seem to have been thrown into it after the end of the Old Kingdom.<sup>24</sup> In a southern room were found several fragments of statues made of alabaster and slate, a model saucer made of alabaster, and a piece of an alabaster slab with the name of Min-nakht. The southern corridor and magazines were also roofed with wood.<sup>25</sup> It is important to note that while the northern magazines

<sup>22</sup> Ibid., p. 35; see also E. Terrace, "A Fragmentary triad of King Mycerinus," BMEF 59 (1961), pp. 40-49; W. Wood, "A Reconstruction of the triads of King Mycerinus," JEA 60 (1974), pp. 82-93.

<sup>23</sup> Edwards, The Pyramids of Egypt, p. 159.

<sup>24</sup> Reisner, Mycerinus, p. 42.

<sup>25</sup> Ibid.

contained vessels and other cult objects, the southern rooms held only statuary, as is described in Chapter 5.

### III.7.2: ADDITIONS TO THE TEMPLE IN DYNASTY 6

At some point during the 6th Dynasty, probably during the reign of Pepi II,<sup>26</sup> the temple was badly damaged by a flood and then rebuilt (plan: 22). The reconstructed temple for the most part followed the original plan. There were, however, several major changes in the layout.

The ante-temple (discussed below) was added against the east face, and houses of the pyramid city were built to the south of this.<sup>27</sup> The northern and southern walls were extended to the east, presumably to surround these structures. The vestibule was rebuilt. The doorway from the vestibule into the northern corridor and the four magazines along this corridor were closed off by walls of mudbrick.<sup>28</sup> Rooms were built over the ruins of magazines and rooms and houses were built in the open court. A thick wall, similar to the screen wall found in the upper

<sup>26</sup> Ibid., p. 44; Maragioglio and Rinaldi, L'Architettura, VI, 70.

<sup>27</sup> Reisner, Mycerinus, p. 46; Maragioglio and Rinaldi, L'Architettura, VI, 72-74.

<sup>28</sup> Maragioglio and Rinaldi, L'Architettura, VI, 72.

temple, was built against the west wall of the open court. A road of five limestone slabs was built across the court, leading to the sanctuary. The length of this road was 3.2 m. and its width was about 1.95 m. The portico was replaced by a rectangular anteroom without recesses; the roof of this anteroom was supported by four pillars arranged in a north-south row. Two pillars were erected in the court in front of the portico.<sup>29</sup>

The northern magazines of the western part of the temple were left as they were. In the southern magazines, the long western room was divided into three shorter rooms.<sup>30</sup> The doorway at the end of the southern corridor was closed off, denying all direct access to the causeway from the temple.<sup>31</sup>

### III.7.3: POST-OLD KINGDOM HISTORY

It appears that the cult of Menkaura was not revived after the end of the Old Kingdom.<sup>32</sup> The temple must have quickly been buried with sand, due to its position below the plateau. There were holes dug into the sand and debris covering the temple; these were probably dug by

<sup>29</sup> Reisner, Mycerinus, pp. 36, 38.

<sup>30</sup> Maragioglio and Rinaldi, L'Architettura, VI, 70.

<sup>31</sup> Ibid., p. 72.

<sup>32</sup> Kemp, "Old Kingdom," pp. 92-94.

treasure seekers, who did not do much damage.<sup>33</sup> The fact that it was buried by sand soon after its abandonment accounts for the fact that it is so largely intact.<sup>34</sup>

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<sup>33</sup> Reisner, Mycerinus, p. 48.

<sup>34</sup> Ibid., p. 34.

III.8: STRUCTURES AND SETTLEMENTS ATTACHED TO THE  
COMPLEX

This section will deal with the following features associated with Menkaura's complex:

1. The ante-temple or the so-called valley temple of Khent-kawes;
2. The purification tent and other attached structures, the basin and the well;
3. The lower temple settlement;
4. The industrial community.

III.8.1: THE ANTE-TEMPLE

The area which adjoins the east side of the lower temple was excavated in part by Hassan and in part by Reisner. Reisner excavated about 7.5 m. in the south and found some houses that he assigned to the pyramid city of the lower temple built in the area north of the eastern continuation of the causeway corridor.<sup>1</sup> Hassan excavated about 10 m. in the north side of this area and

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<sup>1</sup> Reisner, Mycerinus, pp. 49-53.

found a small temple that he labelled the valley temple of Queen Khentkawes.<sup>2</sup>

The structure uncovered by Hassan is built against Menkaura's lower temple. It is entered from the north, and consists of a square room with four pillars and several anomalously shaped chambers.<sup>3</sup> Before the entrance doorway was a portico with two pillars; its walls were plastered and its floor made of limestone slabs.<sup>4</sup> In this doorway were found the feet and pedestal of a statue made of diorite which bears the Horus and nswt-bjtj epithets of Khafra. Hassan suggests that the statue was used as a hinge, and that it was put into place after the fall of the Old Kingdom.<sup>5</sup> Maragioglio and Rinaldi disagree, stating that as there is no evidence for the continuation of a cult here after the Old Kingdom, it is more likely that this statue was thrown out by Khafra's sculptors and used by priests in the 5th or 6th Dynasty.<sup>6</sup>

The doorway gives access to a vestibule whose roof was supported by four pillars on alabaster bases; the walls of the vestibule were plastered and painted in red

<sup>2</sup> Hassan, Giza, IV, 51, 59, plan I; see also Brinks, Entwicklung, pl. 9.

<sup>3</sup> Kemp, "Old Kingdom," fig. 2.3. p. 94.

<sup>4</sup> Maragioglio and Rinaldi, L'Architettura, VI, 74.

<sup>5</sup> Hassan, Giza, IV, 55.

<sup>6</sup> Maragioglio and Rinaldi, L'Architettura, VI, 126, obs. 36.

and black. Hassan found part of a schist statue, possibly representing Khafra seated on a throne; the body of a schist statuette of a sphinx; several inscribed fragments of diorite, one of which is inscribed with the Horus name and cartouche of Khafra; parts of several other statues; a limestone model vessel; several flint tools; and masses of sherds of pottery; a limestone incense burner; and fragments of stone vessels.<sup>7</sup> South of the vestibule, in line with the temple doorway, is another doorway which leads to an open court. This court was paved with mud brick and measures 10.50 m. x 9.9 m.<sup>8</sup> A pathway of stone slabs crosses the court from the vestibule doorway to the eastern entrance to Menkaura's temple.<sup>9</sup> As mentioned above, Reisner discovered the remains of houses in this court; these comprise part of the pyramid city.<sup>10</sup>

In the northwest corner of the court is a doorway which opens towards the north and gives access to two magazines.<sup>11</sup> Maragioglio and Rinaldi believe that the magazines could be living quarters for porters or

<sup>7</sup> Hassan, Giza, IV, 56-57.

<sup>8</sup> Ibid., p. 57; Maragioglio and Rinaldi, L'Architettura, VI, 74, pl. 10, fig. 4.

<sup>9</sup> Hassan, Giza, IV, 57; Maragioglio and Rinaldi, L'Architettura, VI, 74, pl. 10, fig. 4.

<sup>10</sup> Reisner, Mycerinus, pp. 49-54. These will be discussed in the section on the pyramid city, see below, pp. 314-316.

<sup>11</sup> Hassan, Giza, IV, 57-58.

priests,<sup>12</sup> but the artefacts found inside, which include: potsherds of red-ware, which had been blackened by smoke; part of an alabaster offering table, with a rough inscription which reads in part: "...Her father, the King's daughter(?)...;" some circular pieces of red-painted ware, and the head of a limestone statuette of a man;<sup>13</sup> suggest that they were storerooms for cult objects.

A long corridor, about 2.80 m. wide and paved with mud, runs along the east wall of the open court; the walls were blackened by smoke. This corridor is entered at the north and south ends of the west wall. Hassan believes that this was a statue hall. Maragioglio and Rinaldi believe that this corridor is a continuation of the causeway, as it is the same width.<sup>14</sup> The finds from this corridor seem to be domestic in nature; they include: several domestic pots; some flint implements; and a fragment of an alabaster statue.<sup>15</sup>

Hassan believed that the entire area which he excavated was part of the lower temple of Khentkawes, whose funerary monument lies to the northwest of

<sup>12</sup> Maragioglio and Rinaldi, L'Architettura, VI, 74.

<sup>13</sup> Hassan, Giza, IV, 58.

<sup>14</sup> Ibid., pp. 58-59; Maragioglio and Rinaldi, L'Architettura, VI, 74. Look for their discussion on Hassan's photographs, pl. XXVIII, XXXI, and how it does not fit with what he published on fig. I.

<sup>15</sup> Hassan, Giza, IV, 58-59.

Menkaura's lower temple. He suggests that a causeway would have led east from Khentkawes monument, and then turned south, past the houses of the priest of Khentkawes' and a "purification basin"<sup>16</sup> towards this "valley temple."<sup>17</sup> Hassan leans heavily for support of this theory, on the offering table found in the magazine, which he believes belonged to Khentkawes.

Hassan sees the proximity of this building to the lower temple of Menkaura as indicative of the close relationship between Menkaura and his daughter Khentkawes.<sup>18</sup>

Several features of this structure indicate that it does not date to the 4th Dynasty. The north entrance is anomalous for a 4th or 5th Dynasty lower temple, and there are no topographical problems in the area that

<sup>16</sup> Discussed below, pp. 312-313.

<sup>17</sup> Hassan, Giza, IV, 51-59.

<sup>18</sup> Ibid., pp. 52, 57. However, the relationship between Menkaura and Khentkawes is still debated. An inscription on the granite doorway to her chapel calls her the mother of two kings of upper and lower Egypt, but does not name these kings (Hassan, Giza, IV, 3). The attached houses of her priests show the form of 5th rather than 4th Dynasty houses; thus her sons were probably 5th Dynasty rulers (Kemp, "Old Kingdom," p. 79). Her lack of the title "King's wife" led Fakhry to suggest that she was the wife of a priest of Heliopolis (Fakhry, The Pyramids, pp. 155-56). It is likely that she was a daughter of Menkaura (Junker "Die Grabungen der Universität Kairo auf dem Pyramidenfeld von Giza," MDAIK 3 (1932), p. 142; A. Gardiner, Egypt of the Pharaohs, (Oxford: 1961), pp. 83-84), but this is by no means certain, as there is no textual evidence to offer as support.

might account for it. Hassan dismisses this problem by stating that the entrance to Khentkawes's tomb is on the east, which is also anomalous, therefore it did not follow the typical Old Kingdom temple plan.<sup>19</sup> The hypothetical causeway reconstructed by Hassan is also completely anomalous. Archaeological and architectural evidence indicate that this area in front of the lower temple dates to the 6th Dynasty.<sup>20</sup> There also is no evidence that the offering table, on which Hassan places so much weight, belonged to Khentkawes; it could have belonged to an earlier queen and might have been re-used by later priests.<sup>21</sup>

It is now generally accepted that this area has no connection to Khentkawes, but instead forms an ante-temple to the lower temple of Menkaura, probably of 5th or 6th Dynasty date.<sup>22</sup> The artefacts found inside support this identification, as they are very similar to the objects found inside the lower temple. The connection is further strengthened by the existence of the paved path leading from the eastern entrance of the lower temple to the southern entrance of the ante-temple.

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<sup>19</sup> Hassan, Giza, IV, 54.

<sup>20</sup> Maragioglio and Rinaldi, L'Architettura, VI, 64, pl. 10, fig. 3.

<sup>21</sup> Ibid., p. 74.

<sup>22</sup> Ibid., p. 72.

Maragioglio and Rinaldi date this ante-temple to the 5th Dynasty for the following reasons: It could not have been built by Shepseskaf, since its walls were built against the pre-existing walls of the lower temple; and it must have been built before the reconstruction of the lower temple at the beginning of the 6th Dynasty, since the two doorways in the south wall of the courtyard, which led to the continuation of the causeway corridor, were blocked up at this time. These termini ante and post quem leave only the 5th Dynasty for the date of construction.<sup>23</sup> However, dating is a particularly difficult problem in this area, as many of Hassan's finds were not well documented.

The courtyard of this ante-temple was filled with houses belonging to the pyramid city of Menkaura over the course of the Old Kingdom. The link between the ante-temple and the pyramid is shown by the fragment bearing the administrative title (d-mr, nome administrator, which was found in the ante-temple.<sup>24</sup>

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<sup>23</sup> Ibid., p. 126, obs. 37.

<sup>24</sup> Ibid., p. 56.

### III.8.1.1: POST-OLD KINGDOM HISTORY

Late Period mummies were found in a higher stratum of the ante-temple,<sup>25</sup> indicating that the structure was covered with sand and debris at this time.<sup>26</sup>

### III.8.2: THE PURIFICATION TENT AND ATTACHED STRUCTURES

Three structures were found to the north of the ante-temple; these are:

- A. the purification tent;
- B. the basin;
- C. the well.

#### III.8.2.1: THE PURIFICATION TENT

This structure is located by the northeast corner of Menkaura's lower temple. It was labelled the purification tent by Hassan. This structure is made of mudbrick.<sup>27</sup> It is rectangular in form, and measures

<sup>25</sup> Hassan, Giza, IV, 51.

<sup>26</sup> Maragioglio and Rinaldi, L'Architettura, VI, 72.

<sup>27</sup> Hassan, Giza, IV, 53.

about 6.05 m. east to west and 3.10 m. north to south. There is a platform of mudbrick against the middle of the south wall and a small bench lies beside this platform. A drain was cut into the rock of the floor of the so-called purification tent. This runs for about 7.20 m. and connects with the basin north of the building; it was covered with limestone slabs.<sup>28</sup> Inside this building were found stone vessels and flint implements.<sup>29</sup>

#### III.8.2.2. THE BASIN

The second structure found in the area is a large rectangular basin which is connected to the purification tent by the aforementioned drain. It lies about 30 m. north of the ante-temple, and consists of three levels. The lowest level measures 1.60 m. x 9.68 m. to 0.80 x 8.80 m. and 5-stepped sides built of large blocks of local limestone run around it. The two upper stages were made of stone rubble and plastered. The basin in its entirety resembles models found in Old Kingdom tombs.<sup>30</sup>

Hassan found some interesting objects inside the basin. These include: many pieces of alabaster,

<sup>28</sup> Ibid.; Maragioglio and Rinaldi, L'Architettura, VI, 70.

<sup>29</sup> Maragioglio and Rinaldi, L'Architettura, VI, 70.

<sup>30</sup> Hassan, Giza, IV, 54.

limestone and diorite statuary; stone vessels; pottery vessels; the upper part of a large vase of red-ware; and some flint implements.<sup>31</sup>

### III.8.2.3. THE WELL

The well is located west of the platform of the lower temple, as indicated by Hassan. However, we cannot locate this well on the plan or find a full description. Its north and east walls were made of stone rubble and its south and west walls were made of large limestone blocks. These blocks also mark the northwestern end of the temple platform.

### II.8.2.4: DATE AND BRIEF HISTORY OF FUNCTION

Hassan assigns these three structures to the complex of Khentkawes, and connects them to her "valley temple."<sup>32</sup> Maragioglio and Rinaldi believe instead that all of these elements belong to the complex of Menkaura.<sup>33</sup> As seen in the section on the ante-temple, Hassan's identification of this structure with the

<sup>31</sup> Ibid., pls. xxii, xxiv d; Maragioglio and Rinaldi, L'Architettura, VI, 70, PL. 10, Fig. 3.

<sup>32</sup> Hassan, Giza, IV, 51.

<sup>33</sup> Maragioglio and Rinaldi, L'Architettura, VI, 124, obs. 35.

complex of Khentkawes is unfounded; his connection of the purification tent, basin, and well with this queen is similarly unsupportable.

The appropriate location of the purification tent is beside the lower temple for the use in ritual of purification of king's body.<sup>34</sup> Fairly numerous flint implements, which could have been used in the mummification process, were found in the area.<sup>35</sup> The well, if it existed, would then be used as a source for the water necessary in the ceremonies. The body would be placed on the platform by the purification tent and washed with water from the well. The bench could be used as a stand for the stone vessels and flint implements used in the ceremony. The used water would have been drained through the pipe to the basin.<sup>36</sup> Eventually, the body would have been transported from the pavilion to the lower temple.<sup>37</sup>

<sup>34</sup> Ibid., p. 122, obs. 34. See below, pp. 547-548.

<sup>35</sup> Maragioglio and Rinaldi, L'Architettura, VI, 124, obs. 25.

<sup>36</sup> Ibid.

<sup>37</sup> Discussion on the purification tent and the basin will appear in Chapter 5, pp. 547-548. It is important to note that a similar basin was found by the monument of Khentkawes, making the fact that the structures found by the lower temple do not belong to her even clearer (Maragioglio and Rinaldi, L'Architettura, VI, 124, obs. 35).

### III.8.3: THE PYRAMID CITY

The remains of Old Kingdom houses were found in the central open court and in the area just east of Menkaura's lower temple (plan: 22).<sup>38</sup> The area further east of this was left unexcavated, as it is underneath a modern cemetery.<sup>39</sup> These houses were built of mud brick, and some of the rooms had stone thresholds and wooden roofs. Two building levels can sometimes be distinguished. The second is 60 cm. above the first and is built, in part, over the walls of the original temple.<sup>40</sup> This shows that the houses were in use over a lengthy period of time.

The decree of Pepi II, found in the vestibule of the ante-temple, indicates that these houses belonged to the pyramid city of Menkaura.<sup>41</sup> The personnel responsible for maintaining the cult of the deceased king would have lived here.<sup>42</sup> This decree also indicates the importance of maintaining the cult of the king.<sup>43</sup> Reisner states:

<sup>38</sup> Reisner, Mycerinus, p. 49, plan VIII.

<sup>39</sup> Ibid.

<sup>40</sup> Ibid., p. 50.

<sup>41</sup> Ibid., pp. 280-81; Sethe, Urk I, 277ff.; Goedicke, Königliche, pp. 148-154, fig. 12.

<sup>42</sup> Maragioglio and Rinaldi, L'Architettura, VI, 78.

<sup>43</sup> Reisner, Mycerinus, p. 50.

By decree, the inhabitants, who were the priests of the pyramid temples and the trustees of the pyramid endowments, were granted certain privileges, exemption from taxes and from the exactions of administrative officials, probably as an additional inducement to maintain the offerings and services in the temple. These privileges made the pyramid cities very desirable for residence, and certainly everyone living in the neighborhood of such a city who could scrape up any pretext to an inherited right sought to gain a house in the city.<sup>44</sup>

In the debris of the pyramid city, objects were discovered similar to those found in the magazines of the lower temple, including many fragments of stone vessels and statues. The pottery found dates from the 4th to the 6th Dynasties.<sup>45</sup>

Reisner believes that the city inside the temple was first built in the time of Shepseskaf, and then occupied by the priests for the rest of the Old Kingdom.<sup>46</sup> A preferable hypothesis would be that the original pyramid city lies to the east, under the Moslem cemetery, and that over the course of the Old Kingdom it expanded further and further westward due to the fact that during the 4th Dynasty the temple would have been mainly used for the king's cult. Accordingly, the city reached the eastern wall of the temple during or shortly after the reign of Shepseskaf, and then expanded into the lower

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<sup>44</sup> Ibid., p. 49.

<sup>45</sup> Ibid., p. 51, plan VIII.

<sup>46</sup> Ibid., pp. 53-54.

temple proper during the 5th and 6th Dynasties. The reason for this expansion was the increase in the number of temple personnel which took place over time.

Kemp provides insight into the life of the pyramid city and the cult of the king:

The date and circumstances of this rough-and-ready cult being carried on in a dingy chamber at the back of a tightly packed mud village are clear both from the associated archaeological material, which seems not to extend beyond the end of the Old Kingdom, and from a decree of King Pepi II of the Sixth Dynasty found in the floor debris of the gateway, exempting the pyramid town from certain obligations and appointing an official to it. It thus demonstrates official recognition of this site as being part of the pyramid town at a date very close to the end of the Old Kingdom.<sup>47</sup>

No houses or artefacts were found which date to a period after the Old Kingdom; when the temple was abandoned, so was the city.<sup>48</sup>

#### III.8.4: THE INDUSTRIAL COMMUNITY BESIDE MENKAURA'S COMPLEX

About 73 m. south of the causeway of Menkaura, Saleh discovered a very interesting structure that is not

<sup>47</sup> Kemp, "Old Kingdom," p. 94.

<sup>48</sup> Ibid., pp. 92-94.

paralleled in any other Old Kingdom pyramid complex (plan: 20).<sup>49</sup> This construction consists of a long narrow foundation in the shape of a reversed L and a second, shorter, foundation northwest of the first. The two foundations were built of stone rubble mixed with mortar. Saleh labels these foundation embankments, and suggests that they were part of ramps used to transport blocks to building sites.<sup>50</sup>

A rhomboidal structure, which measures 2.60 m. x 1.60 m. x 1.03 m., lies against the western side of the longest branch of the embankments. This is made of dressed limestone and mortar, filled inside with debris and covered on top by rough stones. Saleh suggests that this might be an open-air altar.<sup>51</sup>

Fifteen buildings made of rubble and mortar were built against these embankments.<sup>52</sup> No evidence that might indicate the type of roofing used for these buildings was found in the area.<sup>53</sup> The buildings are of different shapes and contain various numbers of rooms; they are not living quarters.<sup>54</sup> The excavator labels this entire area the industrial community, and suggests

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49 A. Saleh, "Mycerinus Pyramid," pp. 132-154.

50 Ibid., p. 131.

51 Ibid.

52 Ibid., p. 133.

53 Ibid., p. 144.

54 Lehner, "Contextual Approach," p. 30.

that the various activities that took place within were connected with Menkaura's cult.<sup>55</sup> One building consists of a large rectangular pillared hall; Saleh suggests that this could be a scribal hall and that the rooms flanking it could be store rooms for archives.<sup>56</sup> Another building contains four circular stone pits, covered inside with white plaster, which could have held large pottery storage jars for water or beer.<sup>57</sup> One open courtyard held twelve circular brick ovens; Saleh suggests that this was a public kitchen for serving food. Other buildings contained octagonal ovens, also for cooking food, built against the walls.<sup>58</sup> A third type was barrel-shaped, or cylindrical; Saleh compares these to ovens used in Egypt today for baking bread.<sup>59</sup> Some of these ovens could also have been used for firing pottery.<sup>60</sup> Another two areas were shaped like pens that

55 Saleh, "Mycerinus Pyramid," pp. 140-141.

56 Ibid. p. 134.

57 Ibid., p. 135.

58 Ibid.

59 Ibid.

60 Ibid.; Lehner, "Contextual Approach," note 80, states that the type of large barrel ovens which Saleh suggested were for baking bread are also similar to the ovens for firing pottery found on tomb scenes; cf. Dorothea Arnold, "Wandbild und Scherbenbefund zur Töpfertechnik der alten Ägypter vom Beginn der pharaonischen Zeit bis zu den Hyksos," MDAIK 32 (1976), pp. 5-7, fig. 3-6. The idea for having ovens in the site for firing pottery is more acceptable than having ovens for bread, since the industrial area was mainly for providing the temples with cult objects, pottery was a main cult object during Egyptian history.

might have been used to keep sheep or goats for a milk supply.<sup>61</sup>

Four rows of trenches, whose function is unclear, lie in the area. They are near two large ovens which contain traces of malachite and ochre; beside the trenches themselves were traces of a green substance. Thus it seems that the ovens were used for making glazed objects of faience such as vases and amulets.<sup>62</sup>

The pottery found in the area dates the structures to the Old Kingdom.<sup>63</sup> This dating is supported by similar embankments found near Khufu's pyramid,<sup>64</sup> as well as blocks of granite and alabaster found in the area, which are typical Old Kingdom building materials.<sup>65</sup> A more exact date is difficult to ascertain. Only one inscribed object was found in the area; this is a fragment of limestone which bears a graffito of Khafra's prenomen.<sup>66</sup> However, this text cannot be used to date the area to the reign of Khafra, as it also could have been deposited here at any time after his death.<sup>67</sup> It seems most likely that the complex is associated with

<sup>61</sup> Saleh, "Mycerinus Pyramid," p. 143.

<sup>62</sup> Ibid., pp. 145-147.

<sup>63</sup> Ibid., pp. 137-38.

<sup>64</sup> Ibid., p. 137. Saleh also used carbon 14 dating to support this date (ibid.).

<sup>65</sup> Ibid.; cf. W. M. F. Petrie, Gizeh and Rifeh (London: 1970), p. 9.

<sup>66</sup> Ibid.

<sup>67</sup> Kemp, "Old Kingdom," pp. 92-94.

Menkaura's cult. This is indicated by its proximity to Menkaura's causeway<sup>68</sup> the construction techniques used in the building, including the thickness of the walls and the size of the bricks, which parallel the techniques used in the pyramid city of Menkaura.<sup>69</sup>

Thus it seems likely that Saleh is correct in theorizing that this area served to provide the fresh offerings needed to maintain the funerary cult of Menkaura and to provide food for the people who served this cult. The existence of ovens to produce vases and amulets may also suggest that a part of this area could have functioned as a workshop.<sup>70</sup> It probably functioned from the time of Menkaura until the end of the Old Kingdom.

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<sup>68</sup> Saleh, "Mycerinus Pyramid," p. 136. There is, however, nothing to indicate whether it was built before or after the causeway, so its position does not rule out the possibility that it is connected with Khafra's complex, especially, as Saleh (*ibid.*) himself points out, since the construction is built at right angles to the south face of Khafra's pyramid.

<sup>69</sup> Saleh, "Mycerinus Pyramid," p. 137.

<sup>70</sup> *Ibid.*, p. 142.

## CHAPTER IV:

### ADDITIONAL ARCHAEOLOGICAL REMAINS ON THE GIZA NECROPOLIS

#### IV.1: SETTLEMENTS

Several types of building complexes will be discussed in connection with the funerary establishments at Giza. One of these, the funerary domain, an establishment near Giza which produces agricultural and animal products, is located on the flood plain. These products and those of more remote estates are delivered to the  $r-\bar{z}$ , which allots them to the funerary establishment or to the palace. The other types are: a pyramid city, a rest house, and workshops. These can be expected to appear separately but in connection with each of the pyramid complexes. One example, namely, the workmens' camp, most likely served the entire plateau. There are also other installations in the Giza plateau that will be discussed, such as the harbour, canals, and stone rubble walls. Textual and archaeological evidence from the Giza plateau and other Old Kingdom sources will be examined to document the nature of these buildings.

IV.2: TEXTUAL EVIDENCE

Textual evidence found at Giza mentions the name of five buildings or complexes:

## 1. Funerary domains:

terms: grgt

tn

r-š

## 2. Pyramid city:

Khufu: 3ht-Hwfw

Khafra: H(.f.R( wr

Menkaura: Mnk3w-R( ntrj

## 3. Mortuary workshops:

Khufu: w(bt

Menkaura: hmwt smjt

## 4. Rest house:

term: (h

## 5. Workmens' camp:

term: pr-šn(

IV.3: FUNERARY DOMAINS

IV.3.1: GRGT

The source of information about this term came from the titles of the personnel from the tombs at the Giza necropolis. There are eight individuals whose titles refer to this institution and are connected with the funerary establishment of Khufu. One is dated to Dynasty 4, one to Dynasty 5, two to Dynasties 5 to 6, two are dated to Dynasty 6, and two are undated. The data of grgt Khufu from the Giza tombs indicate the following information:<sup>1</sup>

Snnw, son of Jht-n-nb, was (d-mr grgt and hm-ntr of Khufu and held other titles as well, such as hrp jmjw s3. Snnw transferred this office to his son, 3ht-htp, who also had titles such as shd w(bw, hrp (pr nfrw, hrp jmjws3, and shd wj3.<sup>2</sup> Reisner dated the tomb to the middle of Dynasty 5 or later,<sup>3</sup> and it could refer to that of the father; his two sons could have lived at the end of Dynasty 5 and the beginning of Dynasty 6.

<sup>1</sup> See Table 1.

<sup>2</sup> See Appendix, no. 16.

<sup>3</sup> Reisner, Giza, I, 218.

Nj-(nh-nmtj was (d-mr grgt, and hrp w(bw nswt 3ht-Hwfw, and jmj-r3 mš(. He passed one of the same offices to his son Jj-m-htp, who was also hrp w(bw nswt like his father, but who had other offices, such as shd wj3, that his father did not have.<sup>4</sup> This tomb is dated by Baer to Dynasty 6.<sup>5</sup>

Nawt-nfr is a unique person, because he held the title of (d-mr grgt and In rsj at the same time. He is discussed further below.<sup>6</sup>

Another official who held the title (d-mr grgt is Snnw-k3/kkj. He also held titles such as jmj-r3 njwt 3ht-Hwfw, hrp w(bw nswt, jmj-r3 k3t, and zš(-nswt.<sup>7</sup> This tomb is dated from the early to the middle part of Dynasty 5.<sup>8</sup>

Ttj was also (d-mr grgt, and held other titles such as jmj-r3 H(.f.R( wr, w(b nswt, hm-ntr Hwfw, hm ntr H(.f.r( wr, hrj-sšt3 H(.f.R( wr, and hrp jmjw s3 H(.f.R( wr. Ttj also held other administrative titles.<sup>9</sup> The date of his chapel with two false doors is not certain

<sup>4</sup> See Appendix, no. 43.

<sup>5</sup> K. Baer, Rank and Title in the Old Kingdom: The Structure of the Egyptian Administration in the Fifth and Sixth Dynasties (Chicago: 1960), p. 84 [207A].

<sup>6</sup> See discussion and titles of Nswt-nfr below, p. 326; Junker, Giza, III, fig. 28.

<sup>7</sup> See Appendix, no. 101.

<sup>8</sup> Baer, Rank and Title, p. 126 [452A].

<sup>9</sup> See Appendix, no. 136.

and cannot be securely established,<sup>10</sup> but the existence of the title ḥm-nṯr of Khafra's pyramid suggests the time of Djedkare of Dynasty 5.<sup>11</sup> This title ranked higher than the other known titles of ḥm-nṯr of a king.

The last person in this group had the variant title (ḏ-mr grgt mḥtj, which occurs only once. K3-tp, who held this title, had other titles such as w(b nswt, ḥm-nṯr Ḥwfw, ḥrp w(bw nswt, and ḥrp jmjw s3.<sup>12</sup> One of the other titles held by K3-tp, jmj-r3 k3t nswt, indicates that he was a high-ranking official.<sup>13</sup> There is no specific date given to this tomb, but Baer suggests that it was early.<sup>14</sup>

The name grgt also occurs with the funerary domains of the Old Kingdom. There are 99 examples of grgt listed by Jaquet-Gordon. They are written the same as the grgt that occurred with the eight officials listed above.<sup>15</sup> A number of those listed by Jaquet-Gordon have the name of grgt followed by the name of an official, while others

<sup>10</sup> Baer, Rank and Title, p. 154 [574].

<sup>11</sup> Ibid., pp. 264-267.

<sup>12</sup> See Appendix, no. 130.

<sup>13</sup> N. Kanawati, The Egyptian Administration in the Old Kingdom: Evidence on its Economic Decline (Warminster: 1977), p. 15.

<sup>14</sup> Baer, Rank and Title, p. 150 [549].

<sup>15</sup> H. K. Jaquet-Gordon, Les Noms des Domaines Funéraires sous l'ancien Empire égyptien. (Cairo: 1962), pp. 473-474.

are listed with the four names of Khufu, and still others with the names of Sneferu, Unas, and Djedkare.<sup>16</sup>

#### IV.3.2: TN RSJ

There are four individuals who held the title (d-mr Tn rsj, but there is only one person who held the title in connection with the royal cult of Khafra. Nswt-nfr was (d-mr Tn rsj Ḥ(.f.R( wr and (d-mr grgt at the same time. Nswt-nfr also had another unique title, in addition to the two listed above. These titles are jmj-r3 (ḥ Ḥ(.f.R( wr, ḥrp jmjw s3 Ḥ(.f.R( wr, ḥrj sst3 Ḥ(.f.R( wr, jmj-r3 w(bw Ḥ(.f.R( wr, ḥm-nṯr Ḥ(.f.R(<sup>17</sup> The wife of Nswt-nfr was a priestess of Hathor and Neith and two of her sons were shḏ wj3 and one was ḥrp (ḥ.<sup>18</sup> Junker listed the title of this person, (d-mr Tn rsj, as a person who lived in the pyramid city of Khafra.<sup>19</sup> The term Tn is not mentioned in the funerary domains of the Old Kingdom and is not found elsewhere.<sup>20</sup>

<sup>16</sup> Ibid.

<sup>17</sup> See Appendix, no. 59; see also three other persons who held the same title collected from fragments by W. Helck, "Bemerkungen zu den Pyramiden-städen im Alten Reich." MDAIK 15 (1957), p. 93.

<sup>18</sup> Junker, Giza, III, 163-187.

<sup>19</sup> Ibid., p. 175.

<sup>20</sup> Jacquet-Gordon, Les Noms, pp. 457-477.

The discussion above informs us that with the funerary cult of Khufu, there were seven (d-mr grgt and one (d-mr grgt mḥtj). With Khafra there was only one person who was (d-mr Tn raj of the pyramid of Khafra and this person's tomb is dated to early Dynasty 5.<sup>21</sup>

#### IV.3.3: BASIC MEANING OF GRGT AND TN

These two terms are interesting to scholars because they are connected with the pyramid complexes of Khufu and Khafra and because the two terms are followed by the city determinative. The basic meaning of grgt is a village or a town,<sup>22</sup> and Tn can be translated as a frontier mark or a boundary of a city or something else.<sup>23</sup> Jacquet-Gordon translated grgt as a foundation and she gives the meaning of an agricultural area to the term; she believes it is derived from the verb grg, which means "found."<sup>24</sup> This verb may also be translated as "to found a land,"<sup>25</sup> which is related to Jacquet-Gordon's translation of the term grgt as an agricultural land. Junker, who transliterated the term grgt as spt,

<sup>21</sup> Baer, Rank and Title, pp. 96-97, 292 [292].

<sup>22</sup> Erman and Grapow, Wörterbuch, V, 188.

<sup>23</sup> Ibid., p. 372.

<sup>24</sup> Jacquet-Gordon, Les Noms, pp. 47-48.

<sup>25</sup> Faulkner, Dictionary, p. 291.

translated it as a district or region.<sup>26</sup> Finally, this term is mentioned in a text of an official from Mo'alla, dated to Dynasty 6. In this text, the official noted the word grgt when he was trying to explain the reasons for his interference in Edfu; he mentioned a nome flooded like grgt.<sup>27</sup> This word is translated as "marshland?" here.<sup>28</sup>

The term In raj is translated by Junker as "the southern boundary region" or the southern frontier district.<sup>29</sup> But Edel gives the meaning of In as "mountain or populated area."<sup>30</sup>

We can see from the previous discussion that scholars give several different meanings to the term grgt. It seems that an agricultural foundation was meant in both the funerary domain<sup>31</sup> and in Khufu's funerary titles, since the two words have the same determinative and the same writing.

<sup>26</sup> Junker, Giza, VI, 20, 240, 257.

<sup>27</sup> J. Vandier, Mo'alla, La Tombe d'Ankhtifi et la Tombe de Sebekhotep (Cairo: 1950), p. 163.

<sup>28</sup> Kanawati, Administration, p. 75.

<sup>29</sup> Junker, Giza, III, 175.

<sup>30</sup> E. Edel, "Ein 'Vorsteher der Farafra-Oase' im alten Reich?" ZAS 81 (1956), p. 67.

<sup>31</sup> Jacquet-Gordon, Les Noms, pp. 241-242.

IV.3.4: THE MEANING OF THE TWO TERMS IN THE GIZA

MATERIAL

The two terms discussed above occur with titles connected with the funerary complexes of Khufu and Khafra. These titles are (d-mr grgt, (d-mr grgt mḥtj, and (d-mr Tn rsj. These titles never occur within the funerary establishment of any other king in the Old Kingdom.

Kees briefly discussed grgt and Tn and believed that Tn is a lower area or a part of the settlement of grgt.<sup>32</sup> He also noted that the personnel who lived in the pyramid city were divided into phyles.<sup>33</sup> He stated that the leader of the phyles in Dynasty 4 was ḥrp jmjw s3w and that this title was known from the time of Khufu, Khafra, and Neuserre.<sup>34</sup> Thus the two titles were phyle leaders

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<sup>32</sup> H. Kees, "Die Phylen und ihre Vorsteher im die Dienst der Tempel und Totenstiftungen." Orientalia 7-1 (1948), p. 83.

<sup>33</sup> Phyles are distinguished by A. Roth: "Throughout Egyptian history, a system of rotating groups of part-time workers was used to supply the non-specialized staff of large institutions, principally temples. These groups are called phyles, after their Greek counterpart." From A. M. Roth, "Egyptian Phyles of the Old Kingdom" Ph.D. dissertation: Chicago, 1985), p. x.

<sup>34</sup> Kees, "Die Phylen," pp. 77-81, 321 ff.; however, cf. Roth, Egyptian Phyles, pp. 158-161.

in the workmens' city.<sup>35</sup> Helck subsequently discussed the two titles and stated that (d-mr grgt came from the leaders of the phyles, and that the same people who held this title were also the leaders of ships and were a lower-level class. The other title, (d-mr In rsj, was another division in the workmen's city and this division was called In and their leader was (d-mr.<sup>36</sup> These lower-class people, as Helck stated, were from among those workers who worked in the pyramid construction; they took the office of (d-mr. Therefore, Helck concluded that Khufu's workmen's village was called grgt and Khafra's workmen's village was called In.<sup>37</sup>

The opinions of Helck and Kees are very difficult to support because if this were really a low-ranking position, then Nswt-nfr's tomb would not be so rich with funerary domains and all the types of offerings presented to him and his wife.<sup>38</sup> Therefore, this tomb cannot belong to one of the phyle leaders. In consideration of the other administrative titles that he held, he must have been of high rank.<sup>39</sup> Further, if these titles existed at Giza from Dynasty 4 to Dynasty 6, then there

<sup>35</sup> Kees, "Die Phylen," pp. 77-81.

<sup>36</sup> W. Helck, Untersuchungen zu den Beamtentiteln des Ägyptischen alten Reiches (Glückstadt: 1954), p. 129.

<sup>37</sup> Helck, "Bemerkungen," pp. 93-93.

<sup>38</sup> Junker, Giza, III, figs. 27-28.

<sup>39</sup> See Appendix, no. 59.

would be no reason for the workmen's village to function in the 6th Dynasty. There should be either another phyle of Menkaura's group, or the name of his workmen's village, such as the name suggested by Helck for Khufu's and Khafra's workmen's villages, called grgt and Tn.

Because of this misreading, Junker hypothesizes that Tn is a border area near Khafra's pyramid complex, and he did not see the relationship between Tn and grgt.<sup>40</sup> Edel philologically analyzed the terms and stated that it seems strange that the word Tn, based on its determinative which can mean mountain, could also be a populated area. Tn, in his opinion, could include the mountain walls which surround the valley of the Nile.<sup>41</sup> For Edel, Tn means the settled desert edge or the high land. In this case, the title (d-mr Tn rsj ꜥ(.f.R( wr can be translated "administrator of the southern settled desert edge of the pyramid of Khafra is great."<sup>42</sup>

Edel felt that Tn rsj could also be next to the southern edge of the desert of Khafra, Tn, and the northern edge of the desert of Khufu's pyramid, grgt. There is a northern settlement, which was ruled by an (d-

<sup>40</sup> Junker, Giza, III, 172-176; Giza, XII, 169; see above, pp. 327-328.

<sup>41</sup> Edel, "Vorsteher," pp. 67-88.

<sup>42</sup> Ibid., p. 70.

mr and called grgt mḥtj; the person who was in charge of this area was also a priest of Khufu.<sup>43</sup>

Junker located In beside Khafra's complex,<sup>44</sup> and grgt mḥtj should be beside that of Khufu.<sup>45</sup> Edel concluded that there were two major cities with north and south boundaries and that it was significant that K3-tp altered his title to "(ḏ-mr of the northern settlement," whereas Nswt-nfr additionally calls himself "(ḏ-mr of the southern settlement."<sup>46</sup>

Edel does not agree with either Junker or Kees' hypotheses. He feels that there were two separate districts called grgt and In, but that they were not physically separated from each other. Edel did not state the function of this type of settlement.

Stadelmann assigned these two terms to two separate towns of the pyramids of Khufu and Khafra and stated that grgt was north of Khufu and In was south of Khafra.<sup>47</sup> In Dynasty 4 and 5, they do not appear as cities, but they were cities by the end of Dynasty 6 and administrated by jmj-r3 njwt.<sup>48</sup> Stadelmann's analysis of the two cities

<sup>43</sup> Ibid., p. 71.

<sup>44</sup> Junker, Giza, III, 176.

<sup>45</sup> Edel, "Vorsteher," p. 71.

<sup>46</sup> Ibid.

<sup>47</sup> R. Stadelmann, "La Ville de Pyramide à l'ancien empire," RdÉ 33 (1981), p. 69.

<sup>48</sup> Ibid., pp. 69-70; see also Helck, "Bemerkungen," pp. 92-93.

is based on Tn rsj Khafra, because grgt is not followed by the name of Khufu's pyramid. We know only that grgt is connected with Khufu because of the other titles that the eight officials had who are connected with Khufu's cult. His analysis is unlikely and is difficult to support.

Lehner followed Stadelmann's analysis and, in his reconstruction of the projects of Khufu, placed grgt north of the lower temple of Khufu and Tn south of the boundary wall.<sup>49</sup>

#### IV.3.5: R-S KHUFU

This term appears in the tomb of Mrj-jb at Giza and in the Abousir Papyri. In the tomb of Mrj-jb it is listed as r-š Khufu, as one domain out of 16 mentioned in the tomb.<sup>50</sup> The writing of this term, as it occurs in the tomb, starts with the cartouche of Khufu followed by r-š and the city determinative, like the other 16 foundations.<sup>51</sup> The date of this tomb is well established

<sup>49</sup> Lehner, "Khufu Project," pp. 18-19.

<sup>50</sup> Jacquet-Gordon, Les Noms, pp. 229-231; H. Gauthier, Dictionnaire des noms géographiques contenus dans les Textes Hiéroglyphiques, III (Cairo: 1926), 127.

<sup>51</sup> Jacquet-Gordon, Les noms, p. 231; H. Schäffer, Aegyptische Inschriften aus den königlichen Museen zu Berlin, I (Leipzig: 1913), 88-100.

by Baer in the early part of Dynasty 5.<sup>52</sup> The term is also mentioned in the Abousir Papyri, written beside the term r-š̄ k3kj and followed by other names of kings' foundations.<sup>53</sup>

#### IV.3.6: BASIC MEANING OF R-Š̄

Literally r means mouth, door, opening of, or edge,<sup>54</sup> and š̄ means lake, pool, or garden.<sup>55</sup> R-š̄ basically is the mouth of the pool<sup>56</sup> or the edge of the garden.

#### IV.3.7: DISCUSSION OF ITS FUNCTION AND USES

The term r-š̄ also occurs in the Palermo stone, which mentions r-š̄ Sahura.<sup>57</sup> Jacquet-Gordon listed this term as a funerary domain of Khufu with the translation of "the mouth of the pool" and listed this domain in Upper Egypt.<sup>58</sup> The term r-š̄ k3kj is not found outside the

<sup>52</sup> Baer, Rank and Title, p. 79 [182].

<sup>53</sup> Posener-Kriéger, Les Archives, II, 618-622.

<sup>54</sup> Faulkner, Dictionary, pp. 145-146.

<sup>55</sup> Ibid., p. 260.

<sup>56</sup> Jacquet-Gordon, Les noms, p. 231

<sup>57</sup> Sethe, Urk, I, 244.15.

<sup>58</sup> Jacquet-Gordon, Les noms, pp. 229-230.

Abousir Papyri and its function within the papyri is not clear.<sup>59</sup> But other foundations of domains from the tombs of the Old Kingdom belong to K3kj.<sup>60</sup> These names are found with the city determinative, which is typical of any funerary domain in the Old Kingdom.<sup>61</sup> The absence of the specific term r- $\overline{\text{S}}$  k3kj from the Old Kingdom tombs could imply that this term belongs to the temple as the only domain of Neferirkare.<sup>62</sup> Therefore, Posener-Kriéger believes that r- $\overline{\text{S}}$  k3kj should be the funerary domain of Neferirkare, but of a particular kind of agricultural domain.<sup>63</sup>

Goedicke also discusses this term in his analysis of the text of the decree of Pepi I at Dahshur, which is the decree mentioning that personnel of the r- $\overline{\text{S}}$  of Ikauhor's pyramid were brought to the city of these two pyramids to do irrigation work.<sup>64</sup> Goedicke's hypothesis that r- $\overline{\text{S}}$  could be the valley temple area<sup>65</sup> seems to have developed through the meaning of r- $\overline{\text{S}}$  as the mouth of the pooland

<sup>59</sup> Posener-Kriéger, Les Archives, II, 612.

<sup>60</sup> Ibid., pp. 614-615; Jacquet-Gordon, Les noms, pp. 296-297.

<sup>61</sup> B. van de Valle, "Remarques sur l'origine et le sens des Défilés de Domaines dans les Mastabas de l'ancien Empire." MDAIK 15 (1957), pp. 288-296.

<sup>62</sup> Posener-Kriéger, Les Archives, II, 616.

<sup>63</sup> Ibid., p. 619.

<sup>64</sup> Goedicke, Königliche, p. 56; Borchardt, "Königerlass," pp. 1-11; Sethe, Urk, I, 212, 2-3.

<sup>65</sup> Goedicke, Königliche, p. 56-69; Posener-Kriéger, Les Archives, II, 617.

significance that the valley temple is located on the mouth of the pool.

Posener-Kriéger does not agree with this identification because a study of the Abousir Papyri proved that  $r-\text{ḫ}$  had been the only economic unit proper for King Neferirkare, and this economic unit had a link with the solar temple and the residence.<sup>66</sup>  $R-\text{ḫ}$  Khufu is mentioned in the papyri as a domain unit because of the delivery of goods from it.<sup>67</sup> This statement is very important because it certainly clarifies the function of  $r-\text{ḫ}$  Khufu, and Goedicke's explanation should be excluded because no evidence of a valley temple of Neferirkare has been found.

Finally, another hypothesis of the meaning of  $r-\text{ḫ}$  has been presented by Stadelmann. He believes that this term should refer to the entire pyramid complex, because it is located before the harbor and the canal.<sup>68</sup> This explanation of the term is also hard to accept because there is no evidence to support it, except for the term's literary meaning.

<sup>66</sup> Posener-Kriéger, Les Archives, II, 618.

<sup>67</sup> Ibid., pp. 304-305, 621.

<sup>68</sup> R. Stadelmann, "Die  $\text{Ḥntjw}-\text{ḫ}$ , der königsbezirk  $\text{ḫ}$  n pr-(3, und die Namen der Grabanlagen der Frühzeit." BIFAO 81 supp. (1981), pp. 157-158.

IV.3.8: CONCLUSIONS ABOUT THE FUNCTION OF GRGT, TN, AND

R-S

One can wonder why scholars do not assign grgt and Tn as a funerary domain, even in instances where there is clear evidence points to that function, as for example the tomb of Nswt-nfr at Giza. In one of the scenes from that tomb, we see the two titles of (d-mr grgt and (d-mr Tn rsj) listed one under the other, and below the two titles are scenes arranged in registers, showing males and females bringing offerings to the deceased from the funerary domain.<sup>69</sup> Nswt-nfr's tomb shows, through the list of domains, that he is a person who controlled many of these foundations. Therefore, he had a strong connection with the funerary domain. Furthermore, many of the officials who were in charge of grgt and Tn transferred their offices to their children, and the funerary domains would be something that the officials would have transferred to their families more frequently than any other office.

There is no list for Khafra's funerary domains at all during the Old Kingdom.<sup>70</sup> The funerary domains discussed by Jacquet-Gordon were of two types: a royal

<sup>69</sup> Junker, Giza, III, fig. 30.

<sup>70</sup> See Jacquet-Gordon, Les noms.

ḥwt and njwt. Khufu had one ḥwt domain and four njwt. The number of titles that Khufu had can explain the need for this number of domains. I argued in the previous chapters in favor of the relationship between Khufu as Ra and his son Khafra as the son of Ra, that the grgt or funerary domain of Khufu, was a single entity of which the southern portion became In rsj and was assigned to Khafra. The northern part of it was called grgt mḥtj and was the sector assigned to Khufu. This would explain the texts which mention only grgt and the fact that there were seven (d-mr who were in charge of it. One person was (d-mr grgt mḥtj and at the same time, there was In rsj of the grgt because Nswt-nfr was in charge of both grgt and In rsj.

From the Abousir papyri, the function of R-<sup>v</sup> Khufu is clearly as an economic unit, a place to organize the delivery of the products of the funerary domains to the temple and residence. Therefore, it is a place for the delivery of commodities such as corn, fruit, bread, beer, meat and fowl;<sup>71</sup> all of these items came from the funerary domains.

<sup>71</sup> Kemp, "Old Kingdom," p. 90; cf. H. W. Helck, Ägyptische Aktenkunde des 3. und 2. Jahrtausends v. Chr. (Munich and Berlin: 1974), p. 66; P. Kaplony, "Das Papyrus archiv von Abusir," Orientalia 41 (1972), pp. 56-57.

IV.3.9: LOCATION AND RELATIONSHIP BETWEEN GRGT, TN AND

R-<sup>v</sup>

The location of grgt and Tn is very difficult to ascertain, but because Tn rsj is directly connected to the pyramid of Khafra, its location has to be in the Memphite region. In this case, since it is a part of grgt, the two have to be in close proximity. R-<sup>v</sup> Khufu, since it is mentioned in the Abousir Papyri and it is the area of delivery, must be in a location near the palace in the capital and pyramid complex. The relationship between the three terms is clear. Grgt and its subdivision grgt mḥtj and Tn rsj are the areas of production in the funerary domains, and all their agricultural produce should be delivered to the r-<sup>v</sup> Khufu. This was the sacred place that collected the produce to be delivered to the temples of Khufu and Khafra and, to the palace as well.

IV.4: PYRAMID CITIES

I believe that each pyramid at the Giza necropolis had its own city; the person who was in charge of the city bore the title *jmj-r3*.

IV.4.1: TEXTUAL EVIDENCE FROM GIZA AND DYNASTY 4Meidum:

Name of the city : *dd-Sneferu*

1. *Ranofer* was *jmj-r3*

Dahshur:

1. *Dw3-R(*  
*jmj-r3 h( Sneferu (two pyramid determinatives)*
2. *(nh-m(-R(*  
*jmj-r3 h(rsj Sneferu (one pyramid determinative)*
3. *Hn-k3*  
*jmj-r3 h( Sneferu (two pyramid determinatives)*
4. *K3-nfr (son of Sneferu)*  
*jmj-r3 h( Sneferu (one pyramid determinative)*

Giza:

## Khufu:

3ḫt-Ḥwfw (two pyramid town directors without the city determinative and six town directors with the city determinative)

## 1. 3ḫt-ḥtp

jmj-r3 3ḫt-Ḥwfw; w(b nswt ḥm ntr Ḥwfw;  
governmental titles<sup>1</sup> (this unpublished tomb is  
dated to the middle of Dynasty 5)<sup>2</sup>

## 2. Jrw-k3-Ḥwfw

jmj-r3 3ḫt-Ḥwfw (no city determinative and no  
other titles found)

## 3. K3r

jmj-r3 njwt 3ḫt-Ḥwfw;<sup>3</sup> also shd ḥm-ntr, smr w(ty  
and Ḥrj tp nswt (dated to Dynasty 6)

## 4. J-n-3ḫt/jrj

jmj-r3 njwt 3ḫt-Ḥwfw, shd w(bw 3ḫt-Ḥwfw and other  
governmental titles<sup>4</sup> (this tomb is dated to  
Dynasty 6, from Merenra to Pepi II<sup>5</sup>)

## 6. Nfirt-nswt

jmj-r3 njwt 3ḫt-Ḥwfw, jmj-r3 w(bt nswt, ḥm-ntr

<sup>1</sup> See Appendix, no. 4.

<sup>2</sup> Baer, Rank and Title, p. 52 [10].

<sup>3</sup> This is a false door from Munich and according to Edward Brovarski, he could be the same K3r of G7101; his title has the njwt determinative.

<sup>4</sup> See Appendix, no. 13.

<sup>5</sup> Baer, Rank and Title, pp. 58, 240, 288 [48].

Hwfw and hrp w(bw n nswt<sup>6</sup> (dated to Dynasty 5, from Djedkara to Unas<sup>7</sup>)

7. Snnw-k3/kkj

jmj-r3 njwt 3ht-Hwfw, (d-mr grgt and hrp w(bw with governmental titles<sup>8</sup> (dated to early Dynasty 5<sup>9</sup>)

8. K3r/Mrj-R(-nfr

jmj-r3 njwt 3ht-Hwfw, jmj-r3 njwt Mn-k3w-R( ntrj, hntj-s Mr-j-R( mn-nfr and shd w(bw H(.f.R( wr; governmental titles show he held high rank<sup>10</sup> (dated to Dynasty 6, from Pepi I to Pepi II<sup>11</sup>)

9. Ttwi/k3 nswt

jmj-r3 njwt 3ht-Hwfw, jmj-r3 hntjw-s, and shd w(bw 3ht-Hwfw; he has other administrative titles<sup>12</sup> (dated to Dynasties 5 and 6<sup>13</sup>)

Khafra:

There are eight individuals who held the title jmj-r3 H(.f.R( wr and the dates range between Dynasty 5 and

<sup>6</sup> See Appendix, no. 57.

<sup>7</sup> Baer, Rank and Title, pp. 91, 240, 291 [263].

<sup>8</sup> See Appendix, no. 101.

<sup>9</sup> Baer, Rank and Title, p. 126 [452A].

<sup>10</sup> See Appendix, no. 112.

<sup>11</sup> Baer, Rank and Title, pp. 136, 294 [495].

<sup>12</sup> See Appendix, no. 137.

<sup>13</sup> W. K. Simpson, Mastabas of the Western Cemetery: part I: Giza, IV (Boston: 1980), 13-14.

Dynasty 6. Only one individual who held the title *jmj-r3* *njw* *H(.f.R(* wr is dated to Dynasty 5.<sup>14</sup>

1. *Nfr-jh*

*jmj-r3 H(.f.R(* wr, *jmj-r3 Mn-k3w-R( ntr* and *sp*  
w(bw; he held governmental titles<sup>15</sup> (this  
tomb is dated from Dynasty 6 to the First  
Intermediate Period<sup>16</sup>)

2. *Nfr-Hww* and his wife *S(nh-Hth*

The two held the office *jmj-r3 H(.f.R(* wr. *Nfr-*  
*Hww* was wr *mdw sn(w* and his wife was w(b nswt  
and *hrp w(bw nswt*<sup>17</sup> (his tomb is dated to  
Dynasty 5<sup>18</sup>)

3. *R(-hw.f*

*jmj-r3 H(.f.R(* wr; *hm-ntr H(.f.R(* and *hrp w(bw*  
nswt; he also held governmental titles<sup>19</sup>  
(his tomb is dated to Dynasty 5<sup>20</sup>)

4. *K3-(pr*

*jmj-r3 H(.f.R(* wr and w(b nswt; he also held  
other governmental titles<sup>21</sup> (the tomb is dated  
to late Dynasty 5<sup>22</sup>)

<sup>14</sup> See Tables IIA and IIB.

<sup>15</sup> See Appendix, no. 50.

<sup>16</sup> Baer, Rank and Title, pp. 90-91, 240-291 [257].

<sup>17</sup> See Appendix, no. 55.

<sup>18</sup> Baer, Rank and Title, pp. 92-93 [269A].

<sup>19</sup> See Appendix, no. 62.

<sup>20</sup> Baer, Rank and Title, pp. 100-101 [313].

<sup>21</sup> See Appendix, no. 121.

<sup>22</sup> Baer, Rank and Title, p. 139 [510].

## 5. Ttj

jmj-r3 H(.f.R( wr, (d-mr grgt, w(b nswt, hm-ntr  
 Hwfw, hm-ntr H(.f.R( wr, hrj-sst3 H(.f.R( wr,  
 and hrp jmjw s3 H(.f.R( wr; he held  
 governmental titles<sup>23</sup> (the date of his tomb is  
 not established<sup>24</sup>)

6. Two unknown names held the same title and they  
 held titles such as hrp w(b and wr mdw sm(w.<sup>25</sup>

## 7. K3-jrj.s

The only individual who has the title jmj-r3  
 njwt H(.f.R( wr and shdw (bw, hm-k3.<sup>26</sup> (the tomb  
 is dated to the middle of Dynasty 5.<sup>27</sup>)

## Menkaura:

There are four individuals who had connections with  
 the city. Three had the njwt sign and the fourth did  
 not.

## 1. Nfr-jh

See titles under Khafra. He was in charge of  
 the pyramids of Khafra and Menkaura.<sup>28</sup>

## 2. Jsfj

jmj-r3 njwt Mn-k3w-R( ntrj, jmj-r3 wahm Mn-k3w-

<sup>23</sup> See Appendix, no. 135.

<sup>24</sup> Baer, Rank and Title, p. 154 [574].

<sup>25</sup> See Appendix, nos. 144, 155.

<sup>26</sup> Ibid., no. 119.

<sup>27</sup> Baer, Rank and Title, p. 139 [508].

<sup>28</sup> See Appendix, no. 50.

R( ntrj, jmj-r3 hbt m Mn-K3w-R( ntrj, jmj-r3 m  
Mn-k3w-R( ntrj;<sup>29</sup> these titles are from the  
decree of Pepi II to Menkaura's priests<sup>30</sup>

2. K3-Mrj-R(-nfr

The same person under Khufu with the njwt  
sign.<sup>31</sup>

4. The name of the individual is not known but he  
held the title jmj-r3 njwt Mn-K3w-R( ntrj.

IV.4.2: BASIC MEANING OF CITY NAMES AT GIZA

The name of the pyramid of Khufu was 3ht-Hwfw: "the  
horizon of Khufu," which seems also to have been the name  
of the pyramid city.<sup>32</sup> The person who was in charge held  
the title jmj-r3, which means "overseer,"<sup>33</sup> thus showing  
that someone was in charge of something. The same title  
also had the determinative of a city, which may have been  
added later as the city grew in size. At Giza, there  
were three separate pyramid cities located beside the

<sup>29</sup> Ibid., no. 17.

<sup>30</sup> L. Leprohon. Stelae I. The Early Dynasty Period to the Late Middle Kingdom. CAA 1 (Mainz-Rhein: 1985), 114-314.

<sup>31</sup> See Appendix, no. 112.

<sup>32</sup> Helck, "Bemerkungen," pp. 93, 107.

<sup>33</sup> A. Gardiner, "The proposed new reading of the word for "overseer." JEA 41 (1955), p. 122.

lower temples as indicated through the archaeological record.<sup>34</sup>

IV.4.3: DISCUSSION ON THE PREVIOUS TEXTUAL EVIDENCE OF  
THE PYRAMID CITIES

Textual evidence before the time of Khufu shows the existence of pyramid cities. At Meidum, the evidence comes from the tomb of a high-ranking government official named Ranofer, who bore the title of the director of the pyramid city.<sup>35</sup> Stadelmann, through his interpretations of various titles, has concluded that the pyramid city at Meidum housed personnel of both high and middle rank.<sup>36</sup>

Egyptologists have tried to connect the name Dd Sneferu, which is found in the Westcar Papyrus as the place where the magician Djedi lived, with the pyramid city of Sneferu at Meidum.<sup>37</sup> The Abousir Papyri, which dates from Dynasty 5, confirms this theory, because Dd Sneferu is found in document 33-35A of the papyri, and

<sup>34</sup> See below, p.375-383.

<sup>35</sup> Stadelmann, "Ville de Pyramide," p. 68. The name of the city is not written with the town determinative.

<sup>36</sup> Ibid., p. 69.

<sup>37</sup> J. Yoyotte, "Études géographiques II: Les localités méridionales de la région memphite et le pèhou d'Héracléopolis" RdE 15 (1963), pp. 92-96; D. Wildung, "Zur Deutung der Pyramide von Medum," RdE 21 (1969), pp. 135-145; Helck, "Bemerkungen," p. 106; D. Wildung, "Meidum," LÄ 25 IV<sup>1</sup> (1980), pp. 10-13.

the name of the town is written with the city determinative.<sup>38</sup> One could interpret this evidence as meaning there were two cities at Dahshur for the two pyramids, one called ḥ(j) Snfrw mhtj: "Kha-Sneferu north" and the second called ḥ(j) Snfrw rsj: "Kha-Sneferu south."<sup>39</sup>

Further epigraphic evidence comes from the aforementioned decree of Pepi I, which exempts some of the personnel of the pyramid city from state charges.<sup>40</sup> Stadelmann suggests that the textual evidence from Dahshur shows the existence of two cities for the two pyramids, one in the north and one in the south.<sup>41</sup> This, however, may not be the case; it should be one city for the two pyramids. In the north district lived the personnel who were in charge of the cult of the northern pyramid, and in the south district lived the personnel who were in charge of the cult of the southern pyramid. This is confirmed by the titles of the personnel: there

<sup>38</sup> Posener-Kriéger, *Les Archives*, I-II, 268; 623-624; V. Maragioglio and G. Rinaldi, "Considerazioni sulla città Dd-Snfrw," *Orientalia* 40 (1971), pp. 67-74.

<sup>39</sup> Helck, *Beamtitten*, p. 130; Wildung, "Zur Deutung," p. 136. Here again, the town determinative was not written in connection with the pyramid cities until the 6th Dynasty. Before this period, the name was followed by a pyramid determinative (Helck, *Beamtitten*, p. 130). The change is probably due to the growth of the building complex over time.

<sup>40</sup> Borchardt, "Königerlass," pp. 1-11; Goedicke, *Königliche*, pp. 55ff.

<sup>41</sup> Stadelmann, "Ville de Pyramide," pp. 69-70.

was one person who was *jmj-r3* of the two pyramids with the pyramid determinatives. Furthermore, evidence through the aforementioned funerary domains of Khufu and Khafra show one in the north called *grgt mḥtj* and one in the south called *In rsj*.

The previous discussion suggests that the name of the pyramid city in the Old Kingdom was the same as the pyramid name and that the pyramid cities were ruled by a *jmj-r3*. The *jmj-r3* of a pyramid was sometimes a high ranking position held by a vizier and at other times was a middle or a low ranking position, depending on the period. As Helck pointed out:

Just as for the 4th Dynasty, we do not know any leaders of a reigning king of a pyramid city in the 5th Dynasty. Therefore the fact that we find high-ranking and highest-ranking officers as *jmj-r3* of the pyramid city since Neferirkare in all probability, and since Neuserre with certainty, can be considered an important feature of a changing attitude towards tombs and the mortuary cult.<sup>42</sup>

*Jmj-r3* is known as a title ranked above that of (*d-mr*; the latter title designating a low-rank.<sup>43</sup> The title *jmj-r3* was held by a vizier in Dynasty 4 and was held by viziers of the ruling king under Pepi II.<sup>44</sup> The viziers also bore the title *jmj-r3 njwt* without the name of a

<sup>42</sup> Helck, "Bemerkungen," p. 94.

<sup>43</sup> Helck, *Beamtitlen*, p. 129.

<sup>44</sup> Helck, "Bemerkungen," p. 95.

specific pyramid.<sup>45</sup> Perhaps then the *jmj-r3* of a pyramid was the person who was in charge of the whole pyramid complex.

It has been suggested by many Egyptologists, including Stadelmann and Helck, that the pyramid city in the Old Kingdom did not function as a city until the 6th Dynasty. The evidence from our Appendix however, and the individuals who were in charge of the city of Khufu does not support their theory. Four of the officials in charge of the city of Khufu are dated to Dynasty 5 and they were in charge of the *njw*t Khufu in that period. This theory, which Helck developed and Stadelmann followed, is criticized by Baer, who does not agree with Helck's dating and rejects his conclusion for the history and development of the royal cult.<sup>46</sup>

An example of *jmj-r3 njw*t *3ht-Hwfw* in Dynasty 5 comes from the tomb of *Snnw-k3* at Giza, which is dated from the early to the middle of Dynasty 5.<sup>47</sup> This title informs us that the city of Khufu's pyramid had the sign *njw*t as early as the beginning of dynasty 5 and, that the same person bore the title (*d-mr grgt*). Moreover, *Snnw-k3* took this office instead of giving (*d-mr grgt*) to one of his assistants, and thereby was able to control the

<sup>45</sup> Helck, *Beamtitlen*, p. 130.

<sup>46</sup> Baer, *Rank and Title*, p. 249, note.

<sup>47</sup> See Appendix, no. 101.

funerary domain grgt as well as the pyramid city of Khufu.

For Khafra, there were nine individuals who were in charge of the pyramid city from Dynasty 5 to Dynasty 6. Two individuals' names and dates are not known.<sup>48</sup> In Dynasty 5, the city also functioned with the njwt sign.

For Menkaura, Table 12A shows four individuals who were in charge of the city. Three of them are dated to Dynasty 6, and one of them wrote his title with the njwt sign. There is one person whose name is not known and the date of his tomb is not confirmed. One wonders why there is no official who was in charge of the pyramid city of Menkaura in Dynasty 5. While I cannot answer this question decisively, I can suggest that the individual whose name and date is missing could be the person who was in charge of the city in Dynasty 5. The individuals who were in charge of the pyramid cities of Khufu and Khafra in Dynasty 5 could also be the same who were in charge of the city in Dynasty 4. The date of the tomb is based on the titles and these individuals could have started their careers in Dynasty 4 and died in Dynasty 5.

The textual evidence confirms that the pyramid cities at Giza were called 3ht-Hwfw, H(.f.R( wr and Men-

<sup>48</sup> Table II.

k3w-R( ntrj. Officials bearing the title jmj-r3 njwt of a pyramid city occurred in Dynasty 5, not 6, and the person who was in charge of the city bore the title jmj-r3. Textual evidence cannot confirm the location of these cities.

#### IV.5: REST HOUSE

I believe that at the Giza necropolis, there was only a rest house, called ḥ, built to function as a rest house for the living king. It further served during the sed festival as a resting place and changing room for the deceased king at various points during the ceremony. I argue against the hypothesis that the palace of the living king and his administration was built at Giza; I believe the palace was constructed at Memphis.

##### IV.5.1: ḥ AND ITS CONTEXT FROM GIZA

1. ḥ from the Old Kingdom tombs connected with Khafra's pyramid

The title ḡḡ-r3 ḥ Ḥ(.f.R( wr occurred in the tomb of Nswt-nfr, where this title is linked directly to the pyramid of Khafra is great.<sup>1</sup> This individual was cited before under the discussion of the funerary domains.<sup>2</sup> This title is listed in the tomb as the second title after ḥd-mr In rsj.<sup>3</sup>

<sup>1</sup> See Appendix, no. 59.

<sup>2</sup> See above, p. 326.

<sup>3</sup> Junker, Giza, III, 169, fig. 30.

2. (ḥ in texts at Giza related to Khafra

(ḥ is found with the title ḥrp (ḥ in the tomb of Nfr, who is w(b nswt and ḥm-nṯr Khafra. The tomb is dated to the middle of Dynasty 5.<sup>4</sup> K3mjb, son of Nswt-nfr, who is connected with Khafra's cult, held the title ḥrp (ḥ; his tomb is dated to Dynasty 5.<sup>5</sup>

3. (ḥ in texts at Giza related to Khufu

Many individuals bore titles such as ḥrp (ḥ, and there was one jmj-r3 (ḥ found in the tombs of those individuals having titles related to the mortuary cult of Khufu.

Intj bore the titles jmj-r3 (ḥ and ḥrp (ḥ; he is also w(b nswt and ḥm-nṯr of Khufu.<sup>6</sup> 3ḥt-ḥtp bore the title ḥrp (ḥ and he is ḥm-nṯr of Khufu.<sup>7</sup> Mrj-jb/k3-nj-njswt bore the title ḥrp (ḥ. He is ḥm-nṯr of Khufu, in addition to many governmental titles.<sup>8</sup> Ḥ(.f.Hwfw I bore the titles ḥrp (ḥ, ḥm-nṯr Khufu, and many governmental titles.<sup>9</sup> Finally, the individual Snb bore the title ḥrp (ḥ and, at the same time, is ḥm-nṯr of Khufu and

<sup>4</sup> See Appendix, no. 45.

<sup>5</sup> Ibid., 59.

<sup>6</sup> Ibid., 135.

<sup>7</sup> Ibid., 1.

<sup>8</sup> Ibid., 34.

<sup>9</sup> Ibid., 82.

Djedfra.<sup>10</sup> These tombs are dated from Dynasty 4 to the end of Dynasty 6.

4. (ḥ in reliefs related to Khufu

The title ḥrp (ḥ occurred in one of the reliefs from the pyramid of Amenemhet I at Lisht, which had been originally assigned to the upper temple of Khufu. In a scene connected with the sed festival of Khufu,<sup>11</sup> the title is written above officials depicted there.

IV.5.2: BASIC TRANSLATION

(ḥ literally means a palace (with sometimes a secondary temple).<sup>12</sup> The title ḥrp means controller or administrator, which means the title ḥrp (ḥ can be translated "controller of the palace."<sup>13</sup> The title jmj-r3: "overseer" has already been discussed in relation to the pyramid city.

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<sup>10</sup> Ibid., 99.

<sup>11</sup> Goedicke, Re-used Blocks, p. 39.

<sup>12</sup> Faulkner, Dictionary, p. 46; Erman and Grapow, Wörterbuch, I, 214.

<sup>13</sup> Ibid., p. 196.

IV.5.3: TERMS FOR A PALACE FOUND IN ASSOCIATION WITH THE  
PERSONNEL OF THE FUNERARY ESTABLISHMENT AT GIZA

There are four terms that can be translated as "palace" or "residence," which are found in association with governmental titles of the personnel who were connected with the cult at Giza. These terms are:

1. pr-(3
2. pr pr-(3
3. hnw
4. Jnbw hd

1. pr-(3

Found in association with the titles jmj-r3, jmj-r3  
hntj-š, šh<sub>d</sub> hntj-š, šh<sub>d</sub>, hntj-š, and jmj-h<sub>t</sub>.<sup>14</sup>

2. pr pr-(3

This term is found only in association with the title  
jmj-r3.<sup>15</sup>

<sup>14</sup> See Appendix, nos. 6, 9, 19, 21, 31, 48, 67, 69, 73, 87, 98, 106, 114, 117, 118.

<sup>15</sup> Ibid., 72.

3. hnw

This term means "interior" or "royal residence,"<sup>16</sup> and is found in association with the title jmj-r3.<sup>17</sup>

4. Jnbw-ḥd

This term means "white wall," which was the name of Memphis and its nome.<sup>18</sup> This term is applied here because it is the name of the capital, which contained the hnw and pr-(3 of the king. The word jnb could also mean the wall of a palace.<sup>19</sup> Jnbw-ḥd is found associated with the title jmj-r3.<sup>20</sup>

#### IV.5.4: TERMS FOR "PALACE" IN THE OLD KINGDOM

Goelet, in his very important study of the royal palaces and the terms associated with them, distinguished five terms which mean "palace" and discussed their function in the Old Kingdom administration and funerary establishment.<sup>21</sup> The terms for "palace" were used by the

<sup>16</sup> Faulkner, Dictionary, p. 202.

<sup>17</sup> See Appendix, no. 112.

<sup>18</sup> Faulkner, Dictionary, p. 23.

<sup>19</sup> Sethe, Urk, IV, 2155-11.

<sup>20</sup> See Appendix, no. 120.

<sup>21</sup> O. Goelet, "Two Aspects of the Royal Palace in the Egyptian Old Kingdom." Ph.D. dissertation (New York: 1985).

Egyptians during all periods of Egyptian history to express the concept of the palace and royal residence. During the Old Kingdom, the royal residence and a number of other structures had an important function.<sup>22</sup> The terms for the palace are:

1. hnw
2. pr-(3
3. stp-s3
4. pr-nswt
5. (h

1. hnw

This term is found in the governmental titles associated with the funerary establishment titles.<sup>23</sup> It is often translated as the "residence,"<sup>24</sup> and literally denotes the interior of the palace. It is believed to be the innermost place where the king lived inside the royal palace. Goelet stated that the determinative of the word hnw changed from  in the Old Kingdom to  in the Middle Kingdom. In Goelet's opinion, this was due to a

<sup>22</sup> Ibid.

<sup>23</sup> See above, p. 356.

<sup>24</sup> Goelet, Two Aspects, p. 682; in Faulkner, Dictionary, p. 202, the word means "interior" and "royal palace" with the city determinative only in the Middle Kingdom. It is also mentioned in the Westcar Papyri; cf. Simpson et al., Literature, pp. 15-30.

change in size and administration within the residence.<sup>25</sup> Furthermore, he stated that the word does not have any ceremonial or religious meaning, but was mainly connected with the bureaucratic, administrative, and economic aspects of the government.

This is supported by the use of the word hnw in the Abousir Papyri, where hnw indicates a major economic entity.<sup>26</sup> If the hnw, as Goelet stated, meant the inner place in the palace, from where the king administered the country, then it can mean the court of the king and could mean also be involved with the daily life of the king in which his administration and the business of the country were carried out. In this case, all the titles of the officials who are connected with the hnw have to be associated with the administration, bureaucracy, or the economy of the country.

## 2. pr-(3

This word is also associated with governmental titles and is connected with the individuals involved with the cult at Giza. These references are found in the Appendix.<sup>27</sup> In the Abousir Papyri, the word pr-(3 shows that the personnel whose titles are connected with this

<sup>25</sup> Goelet, Two Aspects, p. 682.

<sup>26</sup> Ibid.; Posener-Kriéger, Les Archives, II, 619-624.

<sup>27</sup> See above, p. 355.

term are not a permanent staff of the pyramid city.<sup>28</sup> This indicates that they may have been involved in the mortuary cult only on a temporary basis by order of the king for specific work.

Goedicke stated that the pr-(3 is connected with the funerary establishment of the king.<sup>29</sup> Goelet however, demonstrates in his conclusion that in the Old Kingdom, pr-(3 definitely refers to the royal living quarters of the king. According to Goelet's study, the titles that are compounded with this term are concerned with the everyday life of the king as well as his family.<sup>30</sup> In this case, it is believed that pr-(3 is only concerned with the actual living quarters of the king because the titles associated with this word do not have anything to do with the temple and the economic activity of the residence.<sup>31</sup> Pr-(3 is connected more with the Memphite region, as shown in Goelet's statement:

The chief use of pr-(3 is as an element of official titles. It seldom occurs in narrative texts. In a few instances, the connection between the living king and the pr-(3 was so strong that the word became virtually a

<sup>28</sup> The titles that are connected with the pr-(3 are not included in the Appendix with the funerary titles; see Posener-Kriéger, Les Archives, II, 619-624; Goelet, Two Aspects, p. 684.

<sup>29</sup> H. Goedicke, "Die Laufbahn des Mtn," MDAIK 24 (1966), pp. 1-71.

<sup>30</sup> Goelet, Two Aspects, p. 684.

<sup>31</sup> Posener-Kriéger, Les Archives, II, 619-623.

circumlocution for the king himself.<sup>32</sup>

It is clear from the previous discussion that the word pr-(3 had nothing to do with the funerary establishment of the king, but had to do with the affairs of the king and his family.

### 3. stp-s3

This term does not occur in any title in the Appendix, and never occurs in the Abousir Papyri. Based on Goelet's study, this term never referred to a palace but more to a specific service rendered by the official on behalf of the king.<sup>33</sup> This type of service might refer to a council in which a decision is made.<sup>34</sup>

### 4. pr-nswt

This term is not found in association with any type of title in the Appendix. Goelet concludes that this term literally means "the house of the king," and that it does not refer to a palace but more to the royal estate. Pr-nswt occurs in the Abousir Papyri as an economic unit

<sup>32</sup> Goelet, Two Aspects, p. 685.

<sup>33</sup> Ibid., p. 683.

<sup>34</sup> Ibid.

along with the hnw, and it handles some of the business of the pr-(3.<sup>35</sup>

5. (ḥ

This term is very important to my study, because it is the only term found directly compounded with the name of the pyramid of Khafra; other (ḥ are indirectly connected with Khufu and Khafra, as indicated above. The title gmj-r3 (ḥ H(.f.R( wr is discussed by Junker. He suggests that the sixth and seventh vertical columns of these titles, as shown in the tomb, are connected more with the nomen of Khafra than the pyramid city.<sup>36</sup> But Goelet believes that these two columns are located higher than the other four and states:

This arrangement cordons off the first group of four columns appearing beneath the other place names, thus effectively underscoring the unity of those five terms as well as their close relationship with that smaller version of the name of Chephren's pyramid city.<sup>37</sup>

But it seems to me that all seven titles were connected with the pyramid of Khafra because all of them lie directly under the name of the pyramid. Similar

<sup>35</sup> Ibid., p. 684; Sethe, Urk. IV, 1105-5-7 shows that the pr-nswt and hnw can be distinguished from each other. Pr-nswt is more closely connected with the income and expenses, but the fields belong to the hnw.

<sup>36</sup> Junker, Giza, III, 174-177.

<sup>37</sup> Goelet, Two Aspects.

titles occur in a tomb at Dahshur, which is believed to be for Nfr-maat, son of Nswt-nfr at Giza, who had this title.<sup>38</sup> Fischer believes that the titles in the Giza tomb are similar to the titles at the Dahshur tomb and he interprets this to mean that the son, whose tomb is dated to Dynasty 5, was in charge of the funerary establishment at Dahshur.<sup>39</sup>

Goelet sees a problem with the occurrence of the preposition m to the title in the Dahshur tomb and suggests that either it is part of a title that is missing or belongs to a phrase of honorific title.<sup>40</sup> He sees the (ḥ in the tomb of Nswt-nfr as a part of the funerary complex, indicating that it was a very important building at Khafra's complex. He also based his conclusions on evidence from the Abousir Papyri and their indication that there was an (ḥ in the Memphite area.<sup>41</sup> Nswt-nfr at Giza seems to have been a very important person with high governmental titles. This suggests that the (ḥ was a very important aspect, an idea that is

<sup>38</sup> Ibid.; A. Barasanti, "Sur la découverte du puits d'Cuazhourou à Sakkarah," ASAE 3 (1902), pp. 209-212; G. Maspero, "Trois années de fouilles dans les tombeaux de Thèbes et de Memphis," MMAFC I (1884), pp. 133-242; H. Fischer, "Four provincial Administrators at the Memphite Cemeteries," JAOS 74 (1954), pp. 26-34.

<sup>39</sup> Fischer, "Four provincial," p. 28.

<sup>40</sup> Goelet, Two Aspects.

<sup>41</sup> Ibid.

supported by the fact that it also occurred as the second title of the seven titles listed.<sup>42</sup>

The Abousir Papyri clearly indicates that the (ḥ is completely separate from the royal palace and the governmental administration, which means then that it was connected with the funerary establishment.<sup>43</sup> In the New Kingdom an (ḥ was located inside the temple of Karnak;<sup>44</sup> and although the time is distant in this comparison, it still stresses the religious significance over any other purpose.

Goelet concludes that the (ḥ was normally a shrine for various gods, although Horus was strongly associated with it. Although it could serve as a temporary residence for the king, Goelet sees its most significant function to be the role it played at the sed festival. Throughout all periods of Egyptian history, it served as a resting place and changing room during various rituals of the ceremony.<sup>45</sup> According to Goelet, the (ḥ was an economic entity with hnw and it also occurred inside the Djoser pyramid complex.<sup>46</sup> Goelet's study of the

<sup>42</sup> See Appendix, no. 59; see also Goelet, Two Aspects, on his discussion on the writing and the occurrence of (ḥ in the Archaic Period and the Old Kingdom.

<sup>43</sup> Posener-Kriéger, Les Archives, I, II, 47-48, Table I; 517, 522, 556-557.

<sup>44</sup> M. Gitton, "Le palais de Karnak," BIFAO 74 (1974), pp. 63-73.

<sup>45</sup> Goelet, Two Aspects, pp. 682-683.

<sup>46</sup> Ibid., p. 683.

Pyramid Text shows that it indicates a building in the reliefs of the Old Kingdom.

Finally, Goelet's conclusions about (ḥ indicate:

The (ḥ seems to have been closely associated with the changing of the king's regalia, his purification and salving and rituals in which the monarch travelled by boat.<sup>47</sup>

From this conclusion, one can draw important information. The (ḥ was a building connected with the pyramid complex of Khafra or with his funerary establishment. The two major functions of the (ḥ during the Old Kingdom show that:

1. It is a building connected with the sed festival of the pyramid complex.
2. The same building, or perhaps another one, can be a temporary building of the king as a rest house at the pyramid complex.

The second theory can be supported by Goelet's conclusion that more than one (ḥ may occur in the pyramid complex at once.<sup>48</sup> Thus, I suggest that within the pyramid complexes of Kafra and Khufu there was an (ḥ for the sed festival and that Nswt-nfr was in charge of Khafra's (ḥ and Intj was in charge of Khufu's (ḥ.<sup>49</sup> There was another temporary residence for the king at

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47 Ibid.

48 Ibid.

49 See Appendix, nos. 59, 135.

Giza, which was to be used when the king visited the site; a hrp could be in charge of it. The inscription of Debhen at Giza shows that the king could visit the site during construction of the pyramid,<sup>50</sup> and would therefore need a temporary rest house. This temporary (h) could be used as an economic entity as well, as the Abousir Papyri indicate an organization of the products which came from the r-3 to the pyramid complex and a connection with the hnw at the royal residence at Memphis.

#### IV.5.5: THE SIGNIFICANCE OF THESE TERMS FOR THE FUNERARY ESTABLISHMENT

The previous discussion states that the (h) was not a permanent royal palace but was for the sed festival and rest house for the king. Therefore, other terms, such as pr-(3, are connected with the royal residence at Memphis. Stadelmann's argument that the permanent royal palace was located at the pyramid site<sup>51</sup> and played an administrative role cannot therefore be true based upon the evidence cited above. He based his theory on the existence of a palace for King Isesi mentioned in a

<sup>50</sup> Reisner, Mycerinus, pp. 257-258.

<sup>51</sup> Stadelmann, "Ville de pyramides," p. 77.

document stating that a palace was built under the direction of Sndm-jb-Intj. This palace was called "the lotus of Isest" and it measures 115.28 m. long and its width was 62.88 m.<sup>52</sup> However, the location of the "lotus Isest" is not known exactly; it may have been at Memphis or at the pyramid site or at the Heliopolis sector.<sup>53</sup> There is no doubt that the residence of the king should be at Memphis. It is also difficult to believe that the king would live in an area when a great construction was being completed on the site,<sup>54</sup> when there was a capital close by.

<sup>52</sup> Sethe, Urk, I, 62-63; Posener-Kriger, Les Archives, II, 620; Lehner, "Khufu project," p. 20.

<sup>53</sup> Posener-Kriger, Les Archives, II, 620.

<sup>54</sup> See E. Winter, "Zur Deutung der Sonnenheiligtümer der 5. Dynastie," WZKM 54 (1957), pp. 222-233.

#### IV.6: WORKSHOPS AT GIZA

Two terms showing the existence of workshops connected with the funerary establishments occurred in texts at Giza. Khufu's workshop was called w(bt and Menkaura's workshop was called hmwt-smjt. The texts do not state the name of Khafra's workshop.

##### IV.6.1: BASIC MEANING OF W(BT AND ITS MEANING IN THE CONTEXT OF THE FUNERARY ESTABLISHMENT

In general, w(bt means place of embalment, tomb, kitchen, or refectory.<sup>1</sup> While the basic meaning of w(bt, then, is embalming workshop, Reisner and Smith suggested that its specific meaning is the workshop of Khufu.<sup>2</sup> This term is seen on a mud seal found in the burial chamber deposit in the shaft of Queen Hetep-heres I's tomb. The mud seal was impressed with w(bt Hr Mddw.<sup>3</sup> This may mean that the one who sealed the tomb worked in Khufu's workshop. Brovarski discussed the private and

<sup>1</sup> Faulkner, Dictionary, p. 54.

<sup>2</sup> Reisner and Smith, Giza, II, p. 14.

<sup>3</sup> Ibid., pl. 43, fig. 47, no. 1434.

the royal workshop through an analysis of the meaning of the term w(bt through the Old Kingdom.<sup>4</sup>

In the tomb of Ankhmahor at Saqqara, there is a scene of a scribe named Mesi painting a statue of the deceased. Above the scene is written the title w(bt ss ršj: "the scribe of the southern w(bt."<sup>5</sup> Brovarski referred to an earlier discussion of this title, in which Wilson suggested the existence of a northern and southern workshop.<sup>6</sup> Other evidences of w(bt are found in the tomb of Ankhianty, who was the chief of metal workers and also bore the titles of overseer of the two w(bts and overseer of the southern w(bt.<sup>7</sup> Brovarski suggested that the southern w(bt should be connected with the artisans' workshop.<sup>8</sup> This hypothesis may also be linked to Ankhianty's title of chief of the metal workers, who were supposed to work in the workshop of the pyramid complex.

Other Old Kingdom examples of the term w(bt were collected by Brovarski from the tomb of Ankhidjau, who may be the son of Ankhianty. This individual had the

<sup>4</sup> E. Brovarski, "The Doors of Heaven," Orientalia 46.1 (1977), pp. 107-115.

<sup>5</sup> Ibid., p. 114; for the scene, see J. Capart, Une Rue de Tombeaux à Saqqarah, vol. I (Brussels: 1907), pl. 33.

<sup>6</sup> Brovarski, "Doors of Heaven," p. 114; see J. Wilson, "Funeral Services of the Egyptian Old Kingdom," JNES 3 (1944), p. 202; idem, "A Group of Sixth Dynasty Inscriptions," JNES 13 (1954), p. 260.

<sup>7</sup> Brovarski, "Doors of Heaven," p. 114.

<sup>8</sup> Ibid.

title of jmj-r3 smt w(bt: "overseer of the smelter of the w(bt."<sup>9</sup> Brovarski believes that the royal w(bt could be the southern one mentioned in the text, but he also raised a question, stating that if this is true and this southern workshop refers to the artisans, then it is strange not to see the northern w(bt as the workshop of the house of the embalmers.<sup>10</sup> Brovarski's final statement is that:

The attachment of "southern" to the craftsmen's workshop may refer to its location on the south of the pyramids of Giza or to the south of Memphis, or of some other well-known local landmark.<sup>11</sup>

This discussion suggests the existence of a southern royal workshop at Saqqara and a northern workshop at Giza.

In the Middle Kingdom, w(bt means only "tomb,"<sup>12</sup> and the workshop was named whrt.<sup>13</sup> The existence of a name for Menkaura's workshop cannot prove this conclusion, but it may refer to a southern and northern workshop at Sakkara. At Giza there was a w(bt workshop for Khufu and a workshop for Menkaura. W(bt Khufu may function as a workshop for Khufu and Khafra, since no name of Khafra's

<sup>9</sup> See below, p. 606.

<sup>10</sup> Brovarski, "Doors of Heaven," p. 115.

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

<sup>13</sup> W. K. Simpson, Papyrus Reiner, II, (Boston: 1965), 17.

workshop has been found, but the archaeological evidence shows that each king at Giza had his own workshop.

#### IV.6.2: MEANING AND OVERVIEW OF MENKAURA'S WORKSHOP

Ḥmwt means craftsman,<sup>14</sup> and smjt means desert or necropolis.<sup>15</sup> The term ḥmwt-smjt, however, has been translated as workshop; although several Egyptologists mention it as Menkaura's workshop, the term's meaning is never discussed.<sup>16</sup> It was found during Reisner's excavation of the pyramid complex of Menkaura.<sup>17</sup> The archaeological evidence at Giza sheds more light on this term and the function of the workshop.

#### IV.7: WORKMEN'S CAMP

There is no textual evidence found at Giza that provides the name of a workmen's installation, but from other Old Kingdom sources comes the term pr ḥn(, which could refer to the workmen's installation.<sup>1</sup>

<sup>14</sup> Faulkner, Dictionary, p. 170.

<sup>15</sup> Ibid., p. 226.

<sup>16</sup> See Stadelmann, "La Ville de Pyramide," p. 67.

<sup>17</sup> Reisner, Mycerinus, p. 277.

<sup>1</sup> Stadelmann, "Ville de Pyramide," p. 67.

#### IV.7.1: PR ŠN(

This term is mentioned by Helck;<sup>2</sup> šn( means a police district or to turn back or repel.<sup>3</sup> It is also found in the Abousir Papyri, where it means the "magazine."<sup>4</sup> It is very difficult to assign this term as a reference to the workmen's camp.

#### IV.7.2: WORKMEN

Although the name of the workmen's camp is not found in the Giza textual evidence, we do have textual evidence from Giza to demonstrate the existence of the workmen who worked in the pyramid construction. This is supported by the workmen's quarry that was found inside the Great Pyramid,<sup>5</sup> and the blocks of Khufu's boat.<sup>6</sup> There are also inscriptions from the small reviewing chambers above the king's chamber of Khufu's pyramid, which give the names of four crews who worked on the construction of the

<sup>2</sup> W. Helck, "Arbeitersiedlung," LÄ I<sup>3</sup> (1973), pp. 374-375.

<sup>3</sup> Faulkner, Dictionary, p. 269.

<sup>4</sup> Posener-Kriéger, Les Archives, II, 505-6-509-10.

<sup>5</sup> Fakhry, The Pyramids, p. 120.

<sup>6</sup> Nour et al., Cheops Boats, pp. 6-10.

pyramid.<sup>7</sup> Other names of crews were found during the excavation of Menkaura's complex under the name (prw: "crew."<sup>8</sup> These inscriptions prove the existence of specific groups of workmen involved in the construction of the pyramid.

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<sup>7</sup> Reisner, Mycerinus, p. 275.

<sup>8</sup> Ibid., p. 276.

#### IV.8: ARCHAEOLOGICAL EVIDENCE

There is no archaeological evidence at Giza, or in the Memphite region, to support the existence of the grgt-tn or funerary domain; or that of the r-s or delivery place of Khufu. Future lines of research will probably not be useful because the grgt and the r-s were probably located on the flood plain. All of these sites are occupied by modern buildings and agricultural fields. The archaeological remains, in connection with the textual evidence, support the existence of the pyramid cities, workshops, and workmen's camp. The textual evidence supports the existence of an (h at Giza; while no remains of the resthouses have been found, archaeological discussions can still be related to this building.

There are other archaeological remains found at Giza without textual evidence to support them: the harbour the canal and the rubble stone walls.

Future research at Giza will be very important in clarifying some of the structures that were discussed in the previous three chapters. For example, the southern side of the subsidiary pyramid G1c of Henutsen should be explored in order to search for its boat. More work has to be done in the causeway and the lower temple of Khufu,

and the excavations should be extended to look for the pyramid city.

In Khafra's pyramid complex, the so-called workmen's barracks has to be excavated to find out more about its function. In Menkaura's pyramid complex, the lower temple and the pyramid city should be re-excavated because the relationship between the two is not that clear. Much work also remains to be done in the so-called industrial community. Finally, the area south of the boundary wall should be excavated to look for the workmen's camp and define its location, which will give us a good idea about the people who built the pyramids. The relation of these sites to the pyramid complexes must be examined through excavation and analysis of the stratified levels and their relevant objects.

Based on the archaeological evidence that we have at Giza, the following elements will be discussed:

1. pyramid city
2. rest house
3. workshop
4. workmen's camp
5. harbour and canal
6. stone rubble walls

#### IV.9: PYRAMID CITY

The textual evidence has proved the existence of pyramid cities at Meidum and Dahshur as well as one for each pyramid complex at Giza. The archaeological evidence supports the textual evidence regarding the existence of pyramid cities in the areas of the lower temple.

##### IV.9.1: MEIDUM AND DAHSHUR PYRAMID CITIES

These two sites are very important because they were occupied just before the Giza necropolis.

At Meidum, the remains of an enclosure wall of mud brick, measuring about 400 m., was located in the valley below the pyramid complex. This wall is thought to be part of the pyramid city.<sup>1</sup> This city was called Dd-Sneferu,<sup>2</sup> and this mud brick wall is without doubt part of the city that is mentioned in the text.

At Dahshur, the archaeological evidence consists of a rectangular area, enclosed by a limestone wall measuring about 65 m. by 100 m., which was excavated east of the north pyramid. Within this area was found a

<sup>1</sup> Stadelmann, "Ville de Pyramide," p. 68.

<sup>2</sup> See above, p. 340.

decree dating to the reign of Pepi I. Borchardt identified this wall as the wall of a pyramid city connected with the north pyramid.<sup>3</sup> Stadelmann, however, believes that this wall forms part of the lower temple of the north pyramid, not a pyramid city, because this wall would have been too modest to be the boundary of a city. Further, the pyramid city should be delimited by a mud-brick wall, not one of limestone.<sup>4</sup>

Stadelmann reconstructs this wall as the lower temple with two entrances as it is in Khafra's lower temple.<sup>5</sup> He believes that the pyramid city should be the mud brick houses, found in 1904, forming a city extended at the point of the lower temple of Dahshur's north pyramid.<sup>6</sup> The limestone wall that was found in Dahshur is similar to the Old Kingdom rough stone wall that defined the settlement of Buhen, which was of typical Egyptian design.<sup>7</sup> This wall was designed during the Egyptian control of Lower Nubia,<sup>8</sup> and it shows that a stone wall could define a settlement in the Old Kingdom. It is also evidence for Sneferu's pyramid city being that it is enclosed by such a stone wall. The archaeological

<sup>3</sup> Borchardt, "Königerlass," pp. 1-3.

<sup>4</sup> Stadelmann, "Ville de Pyramide," p. 71, fig. I.

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

<sup>7</sup> Kemp, "Old Kingdom," p. 125.

<sup>8</sup> Ibid.

evidence at Dahshur supports the idea that there was only one pyramid city for the two pyramids with two districts, one on the north and the other on the south.<sup>9</sup>

#### IV.9.2: THE PYRAMID CITIES OF KHUFU AND KHAFA

The archaeological remains before Khufu indicate that the pyramid city was located at the foot of the lower temple. This is also supported by the location of the pyramid cities of Menkaura and Khentkawes.<sup>10</sup> Thus, the location of the pyramid cities of Khufu and Khafra should be located also at the foot of the lower temples.<sup>11</sup> There are no archaeological remains that can be directly identified as remnants of either Khufu's or Khafra's pyramid cities.

Reisner was the first to suggest that Khufu's pyramid city should be sought under the modern village of Nazlet el-Samman, near the conjectural location of Khufu's lower temple.<sup>12</sup> Stadelmann agrees with this

<sup>9</sup> See above, pp. 347-348.

<sup>10</sup> Reisner, Mycerinus, pp. 34ff; Hassan, Giza, IV, 35-40.

<sup>11</sup> Stadelmann, "Ville de Pyramide," pp. 68-70; Reisner and Smith (Giza, II, 59) do not believe that either Khafra or Menkaura had their own pyramid cities, suggesting instead that their personnel were housed in Khufu's city, which was expanded into the area east and southeast of the Sphinx to accommodate them; this is unlikely and nothing can prove their hypothesis.

<sup>12</sup> Reisner, Giza, I, 26.

hypothesis, and goes further to suppose that the original settlement was located northeast of the lower temple.<sup>13</sup> This is indeed the most likely location for the pyramid city, because of the evidence of the location of pyramid cities during early and late Dynasty 4. The presence of a modern village currently makes excavation of this area impossible; however, excavations in the only area which is empty modern houses, in a mound located east of the cliff of the eastern field of Khufu's cemetery and south of the conjectural location of Khufu's lower temple, have uncovered remains of a Graeco-Roman settlement. It is possible that this is Busiris<sup>14</sup> and lays on top of part of the late Old Kingdom pyramid city of Khufu. This is based on the excavated trench, which went down about 12 m. to solid rock. This excavation was carried out in 1978 in the area of Nazlet el-Samman, in an effort to locate settlement remains that might be connected with the pyramid cities of Khufu or Khafra or a palace belonging to either or both kings.

In this area three squares were opened in a grid.<sup>15</sup> In these squares were found late Roman sherds, including many neck, handle and conical base pieces of dull brown

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13 Stadelmann, "Ville de Pyramide," pp. 71-72.

14 Hawass and Lehner, Excavations.

15 See plan, no. 23.

amphorae.<sup>16</sup> The evidence from the two squares in the center of the mound demonstrates the possible existence of the Graeco-Roman village, Busiris, that existed at Giza.<sup>17</sup>

There is also evidence of a New Kingdom settlement in the same area, by means of the name of a modern village near Nazlet el-Samman, called el-Harania; this name derives from the Canaanite name for the Sphinx, Haroun.<sup>18</sup> The Greek and Roman settlement, as well as the New-Kingdom settlements, open the possibility that there were also Middle and Old Kingdom occupations in the area. It is here that vestiges of the pyramid city of Khufu and other remnants of the little-known 4th Dynasty, are likely to be recovered.<sup>19</sup> If the settlement existed in the Late Period and the New Kingdom, then the Old Kingdom

<sup>16</sup> The types of amphorae are similar to that illustrated by W. F. Petrie, Ehnasya (London: 1905), pls. 30-34, no. 133, with pronounced ribbing on the neck, wide shoulders, and a tapering conical base.

<sup>17</sup> For the existence of Busiris at the Giza plateau, see the Greek inscriptions found at the Sphinx excavation mentioning Busiris (Vyse, Operations, III, 118-119). Baraize found a decree from the pyramid Busirites to the governor of the nome (see Hassan, Giza, VIII, 122-123). See also Yoyotte, "Les Bousiris," pp. 57-60, for the origin of Busiris; H. Gauthier, Dictionnaire des noms géographiques contenus dans les textes hiéroglyphiques, II (Cairo: 1925-1929), 70; Zivie, Giza, p. 15.

<sup>18</sup> Z. Hawass, "The Excavations Northeast of the Sphinx." Unpublished paper read at the Third International Congress of Egyptology (Toronto: 1982).

<sup>19</sup> M. Lehner, "Note on the proposed excavations at the Eastern base of the Giza Plateau," unpublished manuscript.

pyramid city could have started at the foot of the lower temple and extended south in later periods.

There are many scholars who have tried to identify the location of Khafra's pyramid city. Hölscher found remains of a building in the vicinity of Khafra's lower temple and believed that this building represented part of the pyramid city.<sup>20</sup> This building and its location, directly south of the lower temple, can be identified with something else,<sup>21</sup> and I do not see it as part of the pyramid city. Stadelmann, based on the name of In rsj, suggests that the pyramid city of Khafra was located south of the causeway and the lower temple.<sup>22</sup> Lehner followed Stadelmann and suggests a large settlement should be located south of the boundary wall; he also identified that with In rsj.<sup>23</sup>

This identification by both scholars is not likely because In rsj is identified with the funerary domain.<sup>24</sup> It is also not possible that a settlement could exist south of the boundary wall because the boundary was built in the time of Khafra to separate the pyramid city, which lay to the north, near the lower temple as indicated from

<sup>20</sup> Hölscher, Chephren, pp. 14-15.

<sup>21</sup> See below, pp. 389-390.

<sup>22</sup> Stadelmann, "Ville de Pyramide," p. 72.

<sup>23</sup> Lehner, "Khufu Project," p. 17.

<sup>24</sup> See above, p. 329-333.

the 4th Dynasty archaeological remains, from the workmen's camp laying to the south.<sup>25</sup>

A stela found close to the lower temple near the site of the building excavated by Hölscher reads: "a gift that the king gives and Anubis who is upon this mountain, to the chief of the pyramid How Great is Khafra."<sup>26</sup> This stela indicates that there was an overseer of the pyramid city of Khafra, separate from Khufu, and its name was H(.f.R( wr: "Khafra is great." The exact location of this original settlement was most likely in front of the east façade of the temple, east of the temple terrace and east of the hypothetical canal which fronted the two temple entrances.<sup>27</sup> It is unlikely that the city ever reached the proportions postulated by Lehner through the parallels made to Middle and New Kingdom cities, such as Deir el-Medineh and Illahun. This type of city should be located at the capital and should have served in the administration of the country. The plan of the Old Kingdom funerary city of Queen Khentkawes<sup>28</sup> is the best layout to use to project the plans of the city of Khafra and Khufu (plans: 24-25).

<sup>25</sup> See below, p. 399-404.

<sup>26</sup> Steindorff, in Hölscher, Chephren, p. 113, fig. 165.

<sup>27</sup> See below, p. 407-415.

<sup>28</sup> Hassan, Giza, IV, pl. 16.1

#### IV.9.3: THE PYRAMID CITY OF MENKAURA

Remains of Menkaura's pyramid city have been excavated in the area around his lower temple; in the later Old Kingdom, houses and rooms were built inside the temple itself.<sup>29</sup> The Moslem cemetery to the east has precluded determination of the limits of this city, but based on parallels with the pyramid city at Dahshur, a length of 78-79 m. and a width of 51 m. has been postulated.<sup>30</sup>

Artefacts found in room 307 of the city include pottery types spanning Dynasties 4 through 6.<sup>31</sup> Reisner suggests that the earliest houses were built inside the courtyard of the lower temple, and that the city continued to expand from this area.<sup>32</sup> It is more likely, however, that the pyramid city of Menkaura was originally built outside the lower temple and only later, probably in the 5th Dynasty, spread to the courtyard inside the temple.

The relationship and the connection between the lower temple of Menkaura and the pyramid city is not

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29 See above, p. 314-316.

30 Reisner, Mycerinus, p. 49.

31 Ibid., p. 51.

32 Ibid., p. 51.

clear from the excavations; the date of the city and its function throughout the Old Kingdom are also not clear.<sup>33</sup> But the remains that have been found help in providing a picture of the cult that took place here, as indicated by Kemp:

The date and circumstances of this rough and ready cult being carried on in a dingy chamber at the back of a tightly packed mud village are clear both from the associated archaeological material, which seems not to extend beyond the end of the Old Kingdom.<sup>34</sup>

The part of the city that was revealed by the excavations shows that there were eleven houses in the north and south part of the court.<sup>35</sup> This shows that the whole city was not recovered. The decree of Pepi II shows that the city existed until Dynasty 6 and also states the privileges given to the officials who lived there (plan: 26).

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<sup>33</sup> Helck, "Bemerkungen," p. 108; Goedicke, "Königliche," pp. 16-21.

<sup>34</sup> Kemp, "Old Kingdom," p. 94.

<sup>35</sup> Ibid.

#### IV.10: THE REST HOUSES

The textual evidence indicates that there was a ritual palace connected with the sed festival, used also as a temporary rest house, or two rest houses, that existed in the pyramid complex. The large permanent palace at Giza, as indicated by scholars, is unlikely and its location should be the capital Memphis.

##### IV.10.1: KHUFU

Stadelmann believes that the royal residence and the administration court of the country were permanently located at Giza. He feels that the building of the pyramid complex was of primary importance, and required the cooperation of the entire country throughout the year. He connects the palace of Isesi, which is said to have stood on the s of the king, with the title hntj-s, which is a common mortuary title at Giza. Thus he argues that Isesi's palace was at his pyramid site.<sup>1</sup> He goes on to suggest that the palace built by Khufu was used also by Khafra and Menkaura.<sup>2</sup>

<sup>1</sup> Stadelmann, "Ville de Pyramide," pp. 76-77; Sethe, Urk., I, 62-63.

<sup>2</sup> Stadelmann, "Ville de Pyramide," p. 77.

Lehner agrees with Stadelmann, and reconstructs a huge palace south of the lower temple of Khufu and northeast of the Sphinx.<sup>3</sup> He bases its measurements on the palace of Iseki and supposes that it would be surrounded by a palace façade and enclosure wall with recessed panelling in addition to large estates with groves of trees, lakes or pools, and vineyards.<sup>4</sup>

Winter objects to the placement of a permanent court at Giza, arguing that the continual dust raised by the work being carried out on the pyramid would make life at the site unpleasant and unsuitable for a king and the members of his administration.<sup>5</sup> Stadelmann counters with the statement that the quarries for the pyramid were located on the west of the plateau, and draws parallels to the New Kingdom sites of Thebes and Amarna, where palaces were located near the sites on which major temples were built.<sup>6</sup> However, his first point is not valid, as the bulk of the limestone used to build the pyramid of Khufu was brought from the south side.<sup>7</sup> More importantly, the stones that had to be imported from elsewhere in Egypt, such as Tureh limestone and Aswan granite, had to be transported along the causeway, which

<sup>3</sup> Lehner, "Khufu Project," p. 19.

<sup>4</sup> Ibid., p. 20.

<sup>5</sup> Winter, "Zur Deutung," pp. 222-233.

<sup>6</sup> Stadelmann, "Ville de Pyramide," p. 76.

<sup>7</sup> Lehner, "Khufu Project," p. 19.

lay near the hypothetical site of the palace as reconstructed by Lehner.

Stadelmann's arguments for placing the palace of Isesi at the site of his pyramid complex are unsubstantial at best. The title hntj-s does not appear at all until the end of Dynasty 5,<sup>8</sup> and the s of the king could also have been located in the capital, Memphis, as his pool.

It is also unlikely that a palace built for Khufu, which would have been decorated with scenes labelled with Khufu's cartouches, could have been re-used by Khafra and Menkaura. New Kingdom remains indicate that each king built his own palace,<sup>9</sup> and it is probable that the same procedure was followed in the Old Kingdom.

Two facts render the hypotheses of Stadelmann, as followed by Lehner, highly unlikely: the first is the existence of the royal city, Memphis, as the capital of the Old Kingdom,<sup>10</sup> and the second is the complete lack of both archaeological and epigraphic evidence for a palace at Giza.<sup>11</sup> A huge palace as reconstructed by Lehner

<sup>8</sup> Cf. Helck, "Bemerkungen," p. 102; Baer, Rank and Title, pp. 272-273.

<sup>9</sup> D. O'Connor, "New Kingdom and Third Intermediate Period, 1552-664 B.C.," in B. G. Trigger, et al., Ancient Egypt: A Social History (Cambridge: 1983), pp. 215-218.

<sup>10</sup> Kemp, "Old Kingdom," pp. 80-85.

<sup>11</sup> See Porter and Moss, Bibliography, III<sup>1</sup>, III<sup>2</sup>, III, part 2, fasc. I; III<sup>2</sup>, part 2, fasc. 2.

would not have disappeared completely at Giza. The Abousir Papyri indicate clearly that the titles with pr- (3: "the great palace" were not permanent officials of the pyramid city,<sup>12</sup> but were connected with the palace in the capital. Therefore, the hypothesis of placing the palace and the administrative court at Giza has to be disregarded completely.

Furthermore, some long overdue survey and excavations have been carried out recently on the ancient site of Memphis. Unfortunately, most of the site is covered with agricultural fields, but enough has been uncovered to demonstrate its importance throughout Egyptian history.<sup>13</sup>

The temple of Ptah "South of the Wall" was the focal point of ancient Memphis; textual evidence indicates that this temple dates back to at least the reign of Userkaf in Dynasty 5, and the royal palace was located to the north of this temple.<sup>14</sup> In the New Kingdom, the primary capital of Egypt was Thebes; Memphis became the second

<sup>12</sup> Posener-Kriéger, Les Archives, II, 619-624.

<sup>13</sup> H. S. Smith and D. G. Jeffereys, "The north Saqqara temple town survey: preliminary report for 1976-77," JEA 64 (1978), pp. 10-21; H. S. Smith, D. G. Jeffereys, and J. Malek, "The Survey of Memphis, 1981," JEA 69 (1983), pp. 30-42; H. S. Smith, D. G. Jeffereys, and J. Malek, "The Survey of Memphis, 1982," JEA 70 (1984), pp. 23-32; H. S. Smith and D. G. Jeffereys, "The Survey of Memphis, 1983," JEA 71 (1985), pp. 5-11; D. G. Jeffereys, The Survey of Memphis, I (London: 1985).

<sup>14</sup> Sethe, Urk., I, 51-52.

capital. We know of many kings who built palaces on the site; one known example is the palace of Merenptah,<sup>15</sup> which is now erected in part at the University Museum.

The evidence from the survey at Memphis not only indicates the Old Kingdom level and the stratified sections, but also includes Old Kingdom sherds.<sup>16</sup> This could demonstrate that the ancient capital was in use during the Old Kingdom and that it housed the palace of the king as well as the administration center of the country.

Lehner's reconstruction of the palace is completely hypothetical, and one would expect all of these luxuries to be located in the living quarters of the king at Memphis, not in his cemetery at Giza. Goelet's study indicates that the palace, pr-(3, was located at Memphis, not on the pyramid site.<sup>17</sup>

If the royal residence and the court traditionally were located at the pyramid site, one would expect that the city determinative would appear with the name of the pyramid city, since from the earliest times, a large city would surround his court.

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<sup>15</sup> H. Kees, Ancient Egypt: A Cultural Topography (Chicago: 1977), pp. 173-176.

<sup>16</sup> Jeffereys, Memphis, I, 29.

<sup>17</sup> Goelet, Two Aspects, p. 684.

The (ḥ) of the king as a ritual palace for the sed festival, or a temporary rest house, should exist only at Giza for Khufu and its location should be south of the lower temple at the site I excavated in 1978 (plan: 24).

#### IV.10.2: KHAFFRA

The only possible locations for Khafra's (ḥ) are on or near the southern side of the lower temple of Khafra. The first possibility is based on the remains of a building that was found on the southern side of the lower temple by Hölscher which he identified as a part of the pyramid city.<sup>18</sup> This would be a good place for the (ḥ) connected with the sed festival because it would be used after the completion of the pyramid complex; it would not be a good place for the temporary rest house, as the deliveries of granite and fine limestone would have to pass right by it. The second possibility is more likely for a rest house; unfortunately, the administrative building for the Sound and Light show is now built over remains of mudbrick that were not recorded.<sup>19</sup> This could be a good location for the temporary rest house which

<sup>18</sup> Hölscher, Chephren, pp. 14-15.

<sup>19</sup> This is based on the inspector's report at that time; it is not published.

could also have been a part of the pyramid city (plan: 25).

#### IV.10.3: MENKAURA

There is no archaeological evidence for the rest house of Menkaura, but we know from the inscription of Debhen that the king used to visit the site, which indicates that he needed a rest house.<sup>20</sup> The only hypothetical location for the rest house is east of the lower temple, under the Moslem cemetery. This rest house did not function for the sed festival because I believe that his ritual pyramid functioned instead of the (h.

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<sup>20</sup> See above, pp. 364-365.

#### IV.11: MORTUARY WORKSHOPS

A mortuary workshop would have been an important element in the pyramid complex. In this workshop statues, stone and pottery vessels, flint knives, and other equipment necessary for the maintenance of the cult would have been made. Also, bread and beer were made in a part of these workshops to feed the personnel at the pyramid cities. Since the cults at Giza continued until the end of the Old Kingdom, these workshops would have functioned throughout this time.

##### IV.11.1: PREVIOUS OLD KINGDOM ARCHAEOLOGICAL EVIDENCE

There is evidence for a mortuary workshop in the 3rd Dynasty pyramid complex of Djoser at Saqqara. This evidence consists of a small house which Lauer considers part of Djoser's desert installations.<sup>1</sup> The large number of stone vessels found inside the Step Pyramid<sup>2</sup> may represent the products of this workshop.

At the beginning of the 4th Dynasty, there is evidence for the existence of workshops in the form of

<sup>1</sup> Lauer, *Pyramide à degrés*, I, 183, fig. 207.

<sup>2</sup> A. el Khouli, *Egyptian Stone Vessels Predynastic Period to Dynasty III*, 3 vols. (Mainz am Rhein: 1978).

two constructions found on the east of the North pyramid of Sneferu.<sup>3</sup>

#### IV.11.2: KHUFU

Lehner suggests that the mortuary workshops in the complex of Khufu were located beside his hypothetical palace, attached to its south and west sides.<sup>4</sup> Even if there were such a palace, it is hard to imagine that bustling, noisy workshops would be located so close to it.

Lehner's discussion of the storage magazines relates to what is called "workmen's barracks," which will be discussed under Khafra's workshop. I believe that storage magazines for the tools that the workers used should be in the workmen's camp and the cult objects that were produced by the workshop community were stored in the cult temples according to the need of the cult. The workshop produced the tools for the workmen before the cult of the deceased king started, because these tools would be used in the construction of the pyramid. After that, the role of the workshop would be to feed the people in charge of the cult and to provide the temples

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<sup>3</sup> J. De Morgan, Carte de la Necropole Memphite (Cairo: 1897); Stadelmann, "Ville de Pyramide," p. 67.

<sup>4</sup> Lehner, "Khufu project," p. 20, fig. 3 C32 and 33.

with the cult objects. There would also have been a scribal hall in the workshop<sup>5</sup>, for the scribes to record all the products leaving the workshop.

The archaeological evidence proves that the workshop community of Khufu was located to the east of the pyramid, south of Reisner's G7000 in the Eastern Cemetery and north of the modern paved road, which runs from Khufu's pyramid into the valley.<sup>6</sup> Here, the Department of Antiquities at Giza found the remains of embankments similar to those found by Saleh around the pyramid of Menkaura.<sup>7</sup>

These embankments run north and south, parallel to each other, for a distance of 80 m. and cover an area of 5.40 to 5.70 m. They are built of rock blocks coated with mud; each of the two main walls is about 2.50 m. wide and 2.30 m. high. A cross wall, about 10 m. - 21 m. in length, was built against these embankments.<sup>8</sup> Mud seals inscribed with the name of Khufu were found in the debris around the walls.<sup>9</sup> Mudbrick remains, probably belonging to this complex, were also found during the

<sup>5</sup> Saleh, "Mycerinus Pyramid," p. 134.

<sup>6</sup> *Ibid.*, p. 137; Stadelmann, "Ville de Pyramide," p. 67; Lehner, "Khufu Project," p. 8, fig. 3B, B9.

<sup>7</sup> Saleh, "Mycerinus pyramid," p. 137; see above, pp. 316-320.

<sup>8</sup> Saleh, "Mycerinus pyramid," p. 137; Lehner, "Khufu Project," p. 8, 139.

<sup>9</sup> Saleh, "Mycerinus Pyramid," p. 137.

construction of the paved road which runs north of the Sphinx; these remains were never recorded or published.

Reisner and Smith suggest that the workshop of Khufu should be located in the lower desert, near the pyramid city, after the discovery of a sealing which contains the name of the workshop, which was found inside the shaft of the tomb of Hetep-heres I.<sup>10</sup> This location is not likely. Therefore, I propose that the only possible location for the workshop of Khufu is in the embankments.

Through parallels with Menkaura's workshop, Khufu's mortuary workshop, w(bt, should have contained: kilns for firing pottery; ovens for baking bread; storage jars; public kitchens to produce food, milk, and meat; wood-working shops to make sledges, rockers, track beams for the pyramid construction, and sacred boats; and an area for the recording of equipment which was sent to the temple magazines, tombs, and archives.<sup>11</sup> These workshops would have continued to function as long as the cult of the king was maintained (plan: 24).

<sup>10</sup> Reisner and Smith, Giza, II, 57; pl. 43, fig. 47, no. 1434.

<sup>11</sup> Saleh, "Mycerinus Pyramid," pp. 133-136; Stadelmann, "Ville de Pyramide," p. 67; Lehner, "Khufu Project," p. 20.

IV.11.3: KHA Fra

It is probable that the structures labelled "workmen's barracks" by Petrie actually represent a part of the workshop of Khafra.<sup>12</sup> The building techniques used in these buildings indicate that they were erected in the early years of Khafra's reign, as indicated by Lehner:

The kind of stones with which the walls are constructed and the fact that to the east and west of the galleries there is only the natural desert surface showing may suggest that they were built very early in the Khafra project.<sup>13</sup>

The absence of settlement debris; such as bone, fiber, ash, and charcoal in this area, renders Petrie's identification of the site unlikely.<sup>14</sup> Maragioglio and Rinaldi suggest that the structures were magazines used to store the cult equipment of Khafra.<sup>15</sup> Kemp suggested to Lehner that they were magazines for storing foodstuffs for the workmen.<sup>16</sup>

<sup>12</sup> See discussion above, pp. 182-186.

<sup>13</sup> Lehner, "Contextual Approach," p. 34; *idem*, "Khufu Project," p. 20.

<sup>14</sup> Lehner, "Contextual Approach," p. 33.

<sup>15</sup> Maragioglio and Rinaldi, *L'Architettura*, V, 96.

<sup>16</sup> Lehner, "Contextual Approach," p. 34.

Therefore, I propose that this area was the workshop of Khafra. The proposed date of the structure, early in Khafra's reign, suggests that it was established to produce tools and artefacts for the workmen and then used to produce cult objects and food to maintain the cult of the deceased king. The site was not excavated completely; only a few rooms were excavated by Petrie, but the site is still large enough to be excavated further.

The artefacts of alabaster, dolerite, and quartzite which are typically materials for statuary, that were also found in Khafra's lower temple, suggest that these structures can be identified with Khafra's workshop.

There are no other remains that could be identified with Khafra's workshop around his pyramid. It is possible that these structures were placed west of Khafra's pyramid for topographical reasons. This also suggests that the workshop should contain an area for the storage of foodstuffs and cult objects based on the great quantity of items that came to the pyramid complex of Khafra and because of the lack of magazines found elsewhere in his temples (plan: 25).

#### IV.11.4: MENKAURA

The mortuary workshop of Menkaura is located about 73 m. south of his causeway.<sup>17</sup> The remains here indicate clearly that the site was used in the manufacture of the objects and foodstuffs necessary for the cult of Menkaura and his courtiers.

The activity in this workshop can be seen through the three large bread ovens, which suggest that the area was used as a kitchen; the 12 circular fireplaces suggest public kitchens, and other buildings have been distinguished as workshops, with one area containing official buildings, such as the scribal hall.<sup>18</sup>

Large magazines were found in the desert workshop, which would have been used to store pottery vessels, statues, etc., and also to serve food and offerings for the temples. This area was entitled to the most continuous attention so as to provide the fresh offerings needed to maintain the daily ritual services for the dead king and the tombs of his courtiers. The preparations of these offerings barely required more than one oven, water jars, bins for grain and ordinary reservoirs of pottery for keeping the goods required.<sup>19</sup>

The workshop could also produce, based on the evidence from this area, different kinds of stone

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<sup>17</sup> See above, pp. 316-320.

<sup>18</sup> *Ibid.*

<sup>19</sup> Saleh, "Mycerinus Pyramid," pp. 141-142.

statues, such as alabaster or quartzite. The amount of artefacts found in Menkaura's temple may indicate the activities of the workshop and also shows its importance for the cult of the dead king because without the existence of this element in the pyramid complex, the cult could not have been maintained (plan: 26).

#### IV.12: THE WORKMEN'S CAMP

I argue here that there was only one workmen's camp for the Giza necropolis. This camp housed the workers who constructed the pyramids of Khufu, Khafra, and Menkaura. The camp was not large, because most of the workers came from nearby sites; therefore, they arrived at the site from their homes, and the site housed only those who lived far away from the Giza necropolis. The location of the camp should be down in the valley, southeast of the Sphinx.

##### IV.12.1: ARCHAEOLOGICAL DISCUSSION

In 1971-75, Kromer carried out a series of excavations on a large mound located east of Menkaura's pyramid, just behind the sandy plain and the main wadi, not far from the boundary wall.<sup>1</sup> This mound rises about 30 m. above the floor of the wadi. According to Kromer, the finds both on the surface of the mound and throughout

<sup>1</sup> K. Kromer, "Siedlungsfunde aus dem frühen alten Reich in Giseh," Denkschriften Österreichische Akademie der Wissenschaften, philosophisch-historische Klasse 136 (1978), pp. 1-130; Lehner, "Contextual Approach," p. 37; K. Butzer, "Review of 'Siedlungsfunde aus dem frühen alten Reich in Giseh,'" JEA 41 (1982), pp. 140-141; idem, Archaeology as Human Ecology: Method and Theory for a Contextual Approach (Cambridge: 1982), pp. 93-95.

its excavated strata consisted of pieces of bone, ashes, potsherds, flints, stone bowls, mudbrick debris, and mud seals of Khufu and Khafra. From these remains, he concluded that the mound represented a dump of the specialized workmen's village that served Khufu and Khafra which was transferred from its original site because of the construction of the pyramid of Menkaura.<sup>2</sup>

Butzer carefully analyzed Kromer's data and concluded that the mound contained the remains of several settlements for the specialized artisans who produced cult objects for the Giza complexes.<sup>3</sup> He states that the artefacts found by Kromer can be assigned to five distinct strata and identifies them as typical settlement remains.<sup>4</sup> Stadelmann agrees for the most part with Butzer, but also suggests that limestone debris and sand found within the mound represents ramp debris from Khafra's pyramid.<sup>5</sup>

Lehner believes that the mound represents a workmen's village, and adds that Kromer probably excavated into what might have been the main area for trash disposal for this settlement.<sup>6</sup> The types of artefacts found, along with the fact that this is the

<sup>2</sup> Kromer, "Siedlungsfunde," pp. 100-111.

<sup>3</sup> Butzer, Archaeology as Human Ecology, pp. 93-94.

<sup>4</sup> Ibid., p. 95.

<sup>5</sup> Stadelmann, "Ville de pyramide," p. 68.

<sup>6</sup> Lehner, "Contextual approach," p. 29.

best possible location for such a settlement, makes this theory very likely.<sup>7</sup>

Further support for the identification of this mound as a workmen's village, is a wall of limestone blocks which lies to the northeast of Kromer's excavations and separates the mound from the area where the pyramid city of Khafra lay.<sup>8</sup> In the center of this wall is a sort of entrance or gateway constructed of limestone slabs; this measures about 3 m. wide. Lehner dates this wall to the reign of Khufu.<sup>9</sup> However, there would be no reason for Khufu to have built this wall, as it is far removed from his complex. Its proximity to the complex of Khafra, coupled with the style of its blocks, which Stadelmann dates to the reign of Khafra, makes it much more likely that it was built in Khafra's time.<sup>10</sup> Thus this wall was probably built by Khafra in order to isolate the workmen's camp from his pyramid city.

<sup>7</sup> Lehner, "Khufu project," p. 19, 15.

<sup>8</sup> D. R. Rostem, "Bridges in ancient Egypt; with a report on a newly discovered bridge from the Old Kingdom, Giza," ASAE 48 (1940), pp. 167-177; Lehner ("Khufu Project," p. 9) gives the length of this wall as 178 m.; H. Gauthier ("Les fouilles en égypte en 1932-33," RdE 1 (1933), p. 71) gives its length as 200 m.; G. Goyon ("Les ports des pyramides et le grand canal de Memphis," RdE 23 (1971), p. 14) gives its length as 181 m.; Maragioglio and Rinaldi (L'Architettura, VI, 96) give its length as 180 m.

<sup>9</sup> Lehner, "Khufu Project," p. 9.

<sup>10</sup> Stadelmann, "Ville de Pyramides," p. 71-72; Goyon, "Ports des pyramides," p. 146.

Further remains of the workmen's village were uncovered by Hassan in the area 300 m. to 450 m. south of this wall, east of Kromer's mound.<sup>11</sup> Here he found mudbrick walls, fragments of flint, and mud seals bearing the cartouches of Khufu and Khafra similar to those found by Kromer.<sup>12</sup> The houses in the camp were built of mudbrick, and probably had roofs made of wooden beams.

Some of the workers housed in this camp probably labored only during the period of the flood, while others worked in the quarries year-round. The camp should have been founded during the reign of Khufu, and occupation would have continued during the reigns of Khafra and Menkaura.

The area occupied by this camp is not large enough to house the entire labor force needed to build a pyramid complex. It is likely that the workers who lived here were from far Upper or Lower Egypt; the laborers who lived in the area, within a radius of about 20 - 30 km. from Giza, would probably have walked to work each day from their homes, arriving early in the morning and leaving again at sunset.<sup>13</sup>

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<sup>11</sup> Hassan, Giza, IV, 42.

<sup>12</sup> Ibid.; cf. Gauthier, "Fouilles en égypte, 1932-33," p. 298.

<sup>13</sup> This practice is followed today by workers employed in the excavation of the various pyramid sites around Cairo.

After Menkaura's pyramid complex had been completed, the camp, which was no longer needed to house laborers, might have been used for other purposes by the priests of the mortuary cults or by the personnel responsible for bringing products from the estates to the pyramid cities.

Lehner reconstructs the workmen's camp along the lines of Deir el-Medineh and the workmen's village at Amarna.<sup>14</sup> However, comparison with Deir el-Medineh and Amarna is not appropriate, because the two New Kingdom sites housed specialized artisans while the workmen's camp at Giza housed simple laborers. Lehner also compares this site to the 12th Dynasty city at Illahun and the 5th Dynasty pyramid city of Khent-kawes at Giza; these parallels are also invalid because they housed priests and higher mortuary personnel.<sup>15</sup>

In the Old Kingdom, there was only one yearly agricultural term;<sup>16</sup> the peasants had no work in the fields during the remaining months of the year. During these idle months, the kings of Egypt hired these peasants to work on government building projects in

<sup>14</sup> Lehner, "Khufu Project," p. 15, C19; for information on Deir el-Medineh, Lehner refers to B. Bruyere, Rapport sur les fouilles de Deir el Medineh (1934-35), III: Le Village vol. 16 (Cairo: 1939), p. 3-79; for Amarna, he refers to C. L. Wolley, "Excavations at Tell-el-Amarna, JEA 8 (1922), pp. 48-60.

<sup>15</sup> Lehner, "Khufu Project," p. 15.

<sup>16</sup> Kees, Ancient Egypt, pp. 47-86.

return for a living wage and exemption from government duty. The laborers who worked on the pyramid complex of Khufu were probably the same who worked on the pyramid complexes of Khafra and Menkaure. It is most likely that they lived on the same site.

The workmen's camp was a temporary place for people who worked from the construction of one pyramid to another or from the reign of one king to another king. The space that they should occupy would be away from the pyramid complex; thus the area beyond the large wall would be the perfect site.

It is very important to start an excavation to test the whole area south of the boundary wall. Such an excavation would give us information about the type of houses in which these workers lived, and reveal the types of tools they used; it will give us a more complete idea of the circumstances and the life of these ordinary people (plan: 26).

IV.13: THE HARBOR AND THE CANALS OF THE GIZA NECROPOLIS

In general, the harbor and canals that were connected with the pyramid site were very important to the cult of the king. The function of these harbors and canals for the pyramid complex can be summarized as follows:

During the periods of pyramid construction, the harbor and canals were used to deliver casing stones of fine white limestone and granite from the Aswan quarries to be constructed in the temples and used as statues for the king.<sup>1</sup> Further, they could transport food items from the estates for the sustenance of the workers and the officials who were in charge of overseeing the construction. The king could have used them to visit the site via the Nile and his officials could have used them to visit the capital to report on their progress. The river route could also have been used by the workers who did not live at the pyramid site.

After the death of the king, the harbor and the canals could transport the body of the king to its burial site, and to convey the funeral procession to the pyramid.<sup>2</sup> The harbor and canals would continue to serve

<sup>1</sup> Goyon, "Portes des pyramides," p. 137.

<sup>2</sup> Ibid.

as a connection between the pyramid city and the capital, and would be used to transport food from the pyramid estates to the pyramid city and to bring people, to attend public feasts, such as that of Hathor, Ra, and Horus.<sup>3</sup> Pilgrims coming to visit the pyramids would also have used the river route,<sup>4</sup> as would other tourists who have left their graffiti on the site throughout history.<sup>5</sup>

#### IV.13.1: ARCHAEOLOGICAL DISCUSSION

Archaeological surveys made by Goyon showed the existence of ports by the pyramids of the Old Kingdom.<sup>6</sup> East of the Senn el-Agouz at Giza, Goyon found an outer casing of limestone built in steps which showed the damaging effects of water; he assumed that this was connected with the harbor of Khufu.<sup>7</sup> For the port of Khafra, Goyon states:

Le temple de la vallée de Khéphren, qui possède un quai commun avec celui dit "du sphinx," ressemblait donc à une presqu'île puis qu'il était entouré d'eau sur la majeure partie de ses bords.<sup>8</sup>

<sup>3</sup> Posener-Kriéger, Les Archives, II, 535-563.

<sup>4</sup> Goyon, "Portes des pyramides," note 1, p. 138.

<sup>5</sup> Ibid.

<sup>6</sup> Ibid., p. 138.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

Fakhry also mentions that there is a platform connected with a north-south canal against the east face of Khafra's lower temple. The south end of the canal runs into a tunnel which, in turn, runs under the temple of Osiris which was thought to be east of the Sphinx. The north end of the canal disappears under a mound of sand northeast of the Sphinx temple. This canal has never been excavated.<sup>9</sup> Two channels were cut into the platform or quay which fronts Khafra's lower temple.<sup>10</sup>

Other investigations have been conducted around the pyramids of Menkaura, Unas, and Pepi II, to find the harbors at these sites.<sup>11</sup>

In 1980, our excavation in front of the Sphinx temple proved the existence of a harbor at the Giza necropolis.<sup>12</sup> At this time, a small square (7 x 8 m.) was located in the bedrock. A vertical ledge running east to west was cut into the bedrock 21 m. east of the northeast corner of the Sphinx temple (plan: 23). This was 7 m. east of the crude unfinished tomb cut into the ledge, and just beside a lamp box of the Sound and Light installation. When the loose sand and refuse was cleared

<sup>9</sup> Fakhry, The Pyramids, p. 132; Maragioglio and Rinaldi, L'Architettura, V, 88.

<sup>10</sup> Goyon, "Portes des pyramides," p. 141, fig. I.

<sup>11</sup> Ibid., pp. 143-145, figs. 3-5; idem, Secret des Batisseurs, pp. 27, 139, fig. 2; pp. 42-43.

<sup>12</sup> Hawass and Lehner, Excavations.

off the surface, a layer of packed limestone and sand debris was exposed, which contained the conical bases of crude red ware jars,<sup>13</sup> and some sherds of burnished red ware dated to the Old Kingdom. This deposit looked very much like one found during the excavations in the northeast corner of the Sphinx sanctuary. No further work was continued in this square.<sup>14</sup>

The other important square was surveyed 36 m. east of the Sphinx temple. The archaeological sequence of this square was noted, and two probes were cut in this square to the bedrock in the southwest and northeast corners of the square. The northeast probe, located at a higher surface level, went through about 9 m. of level 2 of the square. The elevation of the floor in the two probes was 6.57 to 6.60 m. After we finished the work on that square, the Institute of Underground Water of the Ministry of Irrigation began a core drilling 20 m. further to the east and slightly southwest of our square.<sup>15</sup> A pit, 1.5 m. x 1.6 m., was dug for anchoring the drill rig to a depth of 1.7 m. This went through loose gray sand (modern) to loose clean sand with scattered limestone fragments. A basketful of sherds was collected, many of which were burnished red ware bowl

<sup>13</sup> Reisner's type A-IV (see Giza, II, 70, fig. 85).

<sup>14</sup> Hawass and Lehner, Excavations.

<sup>15</sup> See plan, no. 23.

fragments which might be of an Old Kingdom date. However, there were also fragments which are likely Roman amphorae handles. Two large alabaster fragments also came up from this pit. Nine core samples were brought when the drilling commenced.

The probes in the excavated square went through 2.29 m. to 3.4 m. of deposit to the levelled bedrock floor, where the core drill went through about 16 m. of deposit before hitting a solid surface. This must indicate that in the 20 m. between the square and the drill there is a subsurface drop-off to the bedrock which is at least 12.21 m. deep.<sup>16</sup>

It is desirable to know the limits of this drop-off to the north and south for the topography of the area, as it might be the edge of an Old Kingdom harbor or quay which is hypothesized as fronting the temples.

Butzer has cited the indirect evidence of cut-stone revetments, large piers, and extensive, artificial basins on the desert edge between Giza and Abousir, in pointing out that a depth of the flood waters of less than 1.5 m. would have been:

insufficient for systematic navigation by heavily loaded barges, quite apart from the fact that the flood surge has a duration of

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<sup>16</sup> The total depth of the drill hole, 16 m., minus the depth of deposit from the surface to the level of the bedrock terrace as found in the excavated square.

only four to six weeks.<sup>17</sup>

The cultural topography of the Sphinx complex reveals that this part of the plateau was quarried into a series of terraces, and the drop-off in the bedrock indicated by the 1980 excavation and core drilling, may be the edge of the lowest and easternmost terrace, a continuation of that upon which the Sphinx temple is founded. If this was formed early in the construction of the Giza pyramids, it would have served as a main quay for a deep-water harbor at the lowest point of the Mokattam outcrop, where the bedrock strata being exploited, meet the general level of the flood plain at their natural dip to the east-southeast of about 6 degrees.

The core drilling was placed about 68 m. to the east of the Sphinx temple facade. About 320 m. to the south, there is the huge limestone wall, referred to by Reisner as the boundary wall.<sup>18</sup> It has been suggested that this wall was built about the same time as the Khafra valley temple, as a southern limit to the necropolis.<sup>19</sup> The wall runs an additional 147 m. east of the position of the core drill. In 1948, excavations under the wide gate built into this wall, were taken down to a depth of 5 m.

<sup>17</sup> K. W. Butzer, Early Hydraulic Civilization in Egypt (Chicago: 1976), pp. 45-46.

<sup>18</sup> Reisner, Giza, I, 26; see discussion on the pyramid city of Khafra, pp. 377-381.

<sup>19</sup> Stadelmann, "Ville de pyramide," p. 72.

below the bases of the monolithic slabs spanning the gate; at which point Nile mud wet with subsoil water, was encountered.<sup>20</sup> Hassan reported that test trenches along the south side of the wall exposed a pavement upon a bed of limestone rubble.<sup>21</sup> It is still not clear whether this massive wall is founded on bedrock. In any case, its position suggests that a harbor in front of the Sphinx and valley temples turns into the area from some access to the east, perhaps a large canal.

Thus Goyon's suggestion of a fairly large harbor fronting the lower temples of Menkaure, Khent-kawes, and Khafra merits more investigation.<sup>22</sup> At the same time, if the drop-off to the bedrock, indicated by the 1980 probes, is the quay (plan: 23), then the waters did not advance so close to the temples as indicated in Goyon's reconstructions. It is therefore possible that the sunken panel of bedrock, along the west side of the Khafra valley temple, was flooded as an arm of the harbor, as Goyon suggests.

At the 16 m. depth, the core drill was on a hard surface which could not be penetrated. From this depth, the poulder, in the form of a metal I-beam, with a notch

<sup>20</sup> Rostem, "Bridges," p. 161.

<sup>21</sup> Hassan, Giza, IV, 42.

<sup>22</sup> Goyon, "Ports des pyramides," pp. 137-153; Goyon, Secret des Batisseurs, p. 26, fig. 2, p. 136, fig. 42, pp. 137 and 139, fig. 43.

in the end, brought up a chunk of red granite about 10 cm. broad wedged into the notch. When the cylindrical sampler, with a toothed end, was turned onto the bottom of the hole, it scraped a hard surface and brought up small chips and particles of red granite. This could be from granite blocks which fell over the edge of the quay during the 4th Dynasty construction, or the later robbing of the Sphinx and Khafra lower temple, both structures having received granite sheathing.

It is possible that the harbor of the Giza necropolis began at the area of the drilling 68 m. east of the Sphinx, which renders Goyon's reconstruction of a port stretching in front of the lower temples of Khafra, Menkaura, and Khent-kawes incorrect.<sup>23</sup> The only support left for this theory is the quay which Fakhry mentions in front of the lower temple of Khafra.<sup>24</sup>

Lehner reconstructs a harbor directly in front of the lower temple of Khufu. This reconstruction is completely hypothetical, but until further archaeological work has been done, it remains the best possibility.<sup>25</sup>

Other harbors may have been built after the time of Khufu. Lehner reconstructs one such harbor in front of the Sphinx, in the area where our excavations located a

<sup>23</sup> Ibid., p. 145, fig. 5.

<sup>24</sup> Fakhry, The Pyramids, p. 132.

<sup>25</sup> Lehner, "Khufu Project," p. 12.

drop-off.<sup>26</sup> Lehner bases the hypothetical size of this harbor on the measurements of the Birket-Habu at Malkata, which is 210 m. north to south and 350 m. east to west.<sup>27</sup> Lehner's main objection to Goyon's reconstruction is that it brings the harbor into the area of Menkaure's pyramid city.<sup>28</sup> Lehner also states:

It must be admitted that the harbour as reconstructed in fig. 3C does seem much larger than necessary for providing quay space for unloading even the amount of material required for the Khufu pyramid. Finally, it might be noted that the edge of the harbour would probably have had a much greater slope than indicated here, and it may have been revetted, to avoid the edge being undermined by the seasonal fluctuations of the water level.<sup>29</sup>

In conclusion, the area east of the Sphinx is the most likely location of the harbor. However, we do not know what happened during the time of the inundation, when the water would have reached the lower temples.<sup>30</sup> The steps that Goyon found by the lower temple of Khufu could have served to protect the temple from the waters of the Nile flood. If the water of the inundation reached the temples, this might have encouraged the

<sup>26</sup> Ibid., p. 14.

<sup>27</sup> Ibid.; for Malkata, see B. Kemp and D. O'Connor, "An Ancient Nile Harbour: University Museum excavations at the 'Birket Habu'." Int. J. Naut. Underwater Explor. 3 (1974), pp. 101-136 and 182. Goyon's reconstruction is larger, see "Ports des pyramides," p. 145, fig. 5, and Secret des Batisseurs, pp. 135 and 139, fig. 42-43.

<sup>28</sup> Lehner, "Khufu Project," p. 15, fig. 3, C18.

<sup>29</sup> Ibid.

<sup>30</sup> Grinsell, Egyptian Pyramids, p. 108.

ancient Egyptians to deliver the Tureh limestone and Aswan granite during the flood period only.

Goyon reconstructs a canal in the western desert which would have served the lower temples;<sup>31</sup> he named this the canal of Memphis. It would have run parallel to the Nile and connected all the pyramid harbors.<sup>32</sup>

The existence of a canal of Memphis dates back to the time of Menes; it is mentioned by the Arab writers, and existed until Napoleon's expedition to Egypt.<sup>33</sup> This canal served the pyramid complexes from Hawara in the south to Abu Rawwash in the north,<sup>34</sup> and ran close to the harbor at Giza, as reconstructed by Goyon.<sup>35</sup> The recent survey at Memphis brought to light another alternative against the theory of a grand canal that runs parallel to the Nile on the west; it suggests:

that the river once flowed directly past the ruin field, and has receded by approximately 2.5 km., an average 3.6 metres per annum since the 14th century.<sup>36</sup>

The Nile, in this case, was close to the pyramid sites and shifted to its current location gradually throughout

<sup>31</sup> Goyon, "Ports des pyramides," p. 148.

<sup>32</sup> Ibid.; cf. Butzer, Hydraulic Civilization, p. 46.

<sup>33</sup> Goyon, "Ports des pyramides," pp. 148-150.

<sup>34</sup> Ibid., pp. 148-153.

<sup>35</sup> Lehner, "Khufu Project," p. 18, C19; Goyon, Secret des Batisseurs, p. 43, fig. 2.

<sup>36</sup> H. S. Smith and D. G. Jeffreys, "A Survey of Memphis, Egypt," Antiquity 60 (1986), p. 91, fig. 2.

the ages.<sup>37</sup> I believe that it was not necessary for the ancient Egyptians to cut this grand canal on the west of the Nile. In the theory presented by Butzer and discussed by the team survey of Memphis, it is suggested that the Nile was closer to the pyramid sites in antiquity. Therefore, the ancient Egyptians would have cut a canal from the nearby river to connect it with the harbor discovered at Giza (plan: 23).

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<sup>37</sup> Ibid., p. 94; see also K. Butzer, "Environment and human ecology in Egypt during Predynastic and Early Dynastic Times," BSGE 32 (1959), pp. 43-88.

IV.14: THE STONE RUBBLE WALLS AT THE GIZA PLATEAU

As discussed in Chapters 1, 2, and 3, each pyramid had two enclosure walls: one to isolate the pyramid and its immediate court; and the other to surround the larger pyramid complex.<sup>1</sup> These walls are of stone rubble, which is a typical 4th Dynasty building material.

It is difficult to determine the dates of these walls; thus, their functions are unclear. Lehner offers three theories concerning their building times and functions: "they were built mostly at the same time, upon completion of all three pyramid complexes, to zone the necropolis;...they were built to reserve an area around each pyramid, upon the completion of each, so that succeeding construction would not encroach upon the finished cult precinct;...they were built as an initial stage in the construction of each pyramid to delimit the work area, in some cases to act as rough markers and back sights for the sides and axes of the pyramid, and in other cases as debris-filled embankments for the transportation of materials."<sup>2</sup>

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<sup>1</sup> For Khufu's walls, see above, pp. 31-35; for Khafra's see above, pp. 159-162; for Menkaura's, see above, pp. 255-257.

<sup>2</sup> Lehner, "Contextual Approach," p. 36.

Of these three possibilities, Lehner prefers the second and third, and refers to the stone rubble wall which lies above the boat pits of Khufu as a "final addition to this pyramid layout."<sup>3</sup> The solution offered by Lehner seems to be the best explanation for the function of these walls.

#### IV.14.1: THE GREAT WALL

In addition to the temenos walls of the three pyramid complexes, there is a great limestone wall which seems to serve as the boundary wall for the entire plateau. This wall was first recorded by Perring and Vyse.<sup>4</sup> It lies at the southeast end of the plateau, beginning just east of the village of Nazlet el-Samman and runs west in a straight line for about 108 m. Its original height cannot be determined, but it is about 7.5 m. thick and seems to have been cased with granite.<sup>5</sup>

Based on the similarity of its construction to the construction of Khafra's temples, Stadelmann dates this wall to the reign of Khafra.<sup>6</sup> Goyon agrees with this

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<sup>3</sup> Ibid.

<sup>4</sup> Perring, Pyramids of Gizeh, I, 7; Vyse, Operations, I, 167.

<sup>5</sup> Maragioglio and Rinaldi, L'Architettura, VI, 196.

<sup>6</sup> Stadelmann, "Ville de Pyramide," p. 72.

dating,<sup>7</sup> but Lehner dates the wall to the reign of Khufu.<sup>8</sup>

The gateway of the wall is about 3 m. wide and consists of three limestone slabs.<sup>9</sup> Perring believed that the wall was a dike and that the gateway was a bridge built over an irrigation canal.<sup>10</sup>

Rostem believes that the wall represents an extension of a causeway.<sup>11</sup> Maragioglio and Rinaldi state:

"we think that it is a causeway or elevated road which led to a monument now completely destroyed, not yet discovered, or not at the moment connected to the road itself, or even one whose construction was never begun. In this case the bridge might be an underground passage similar to those which exist along the ceremonial causeways of Cheops, Chephren, Mycerinus and Khenkaus."<sup>12</sup>

The structure is most likely a boundary wall built to separate the workmen's camp to the south from the pyramid city of Khafra.<sup>13</sup>

<sup>7</sup> Goyon, "Ports des pyramides," p. 146.

<sup>8</sup> Lehner, "Khufu Project," pp. 9-16, fig. 3b.

<sup>9</sup> Rostem, "Bridges in Ancient Egypt," pp. 161-162.

<sup>10</sup> Perring, Pyramids of Gizeh, I, 7.

<sup>11</sup> Rosem, "Bridges," p. 161.

<sup>12</sup> Maragioglio and Rinaldi, L'Architettura, VI, 196; cf.

Lehner, "Khufu Project," p. 9.

<sup>13</sup> See above pp. 380-381.

IV.15: CONCLUSION OF THE OVERVIEW OF THE SETTLEMENTS AT  
THE GIZA NECROPOLIS

The previous section is very important to the study of the Giza necropolis, as it deals with subjects that have never before been adequately studied (plans: 24-26).

The terms grgt and In are designated to be the funerary domains of Khufu and Khafra, to be located on the nearby flood plain. In Khufu's time, grgt was established as the main funerary domain of the king, but in Khafra's period, this area, grgt, consisted of grgt mḥtj (north) for Khufu and In rsj (south) for Khafra. Part of these funerary domains were given to the royal residence at Memphis and the rest were given to the cult of Khufu and Khafra at Giza. R-š Khufu was the site of delivery of the products from the funerary domain. Textual evidence, from the time of Khafra, indicates what kind of endowment was given by the king to the pyramid complex of Khafra such as; 1,055 head of cattle, 974 head of and 2,235 head of goats.<sup>1</sup> This indicates that the personnel of the pyramic city were involved in many activities.

<sup>1</sup> Lepsius, Denkmäler, II, 9.

There is no textual evidence of a name of a funerary domain assigned for the pyramid complex of Menkaura, and there is no indication that any parts of the products of grgt and In were given to Menkaura. The interpretation of Shepseskaf's decree indicates that the cult of Menkaura did not have its own fields at first, but was dependent on the circulation of products from Shepseskaf's temple.<sup>2</sup>

Textual and archaeological evidence indicates that each pyramid complex at Giza had its own pyramid city and that their location should be at the foot of the lower temple of each pyramid. The name of each pyramid city is combined with the name of the pyramid. The determinative of the pyramid city occurred as early as the 5th Dynasty, not the 6th Dynasty as indicated by other Egyptologists.<sup>3</sup> The archaeological evidence from the temples of Menkaura indicates the activity and the type of cult objects that were used in the daily ritual activity of the temples.

The theory that the palace and the administration of the king should be at Giza is unlikely. (ḥ was a ritual palace for the sed festival because (ḥ plays a significant role at this feast; it served as a resting place and changing room at various points during the

<sup>2</sup> Helck, "Bemerkungen," p. 108.

<sup>3</sup> See below, pp. 599-600.

ceremony. The (ḥ was strongly associated with Horus the king, and there is evidence that more than one (ḥ may have existed at Giza. The second may have been a temporary rest house at Giza. Two (ḥ are explained by the existence of two different titles with this building.

Three workshops were connected with Khufu, Khafra and Menkaura. Textual evidence gave the name of Khufu's and Menkaura's workshops, and the archaeology proves the existence of the 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 be used to store the items that arrived from the funerary domains.

There was only one workmen's camp which served the three pyramids at Giza. There is no textual evidence at Giza to give it a name, but there was a name in the Old Kingdom, pr-sn(, which may apply to the one at Giza. Archaeological evidence, through Kromer's excavations and other test trenches by Hassan, indicate the existence of the workmen's camp on the far east of the Giza necropolis.

The 1978 excavations and drilling proved the existence of a harbor the east of the Sphinx temple. This harbor may be connected with the Nile by a canal.

The Nile was near the pyramid sites in ancient times and 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 sites at the Memphis region is unlikely.

The harbor and the canal served for the transportation of stones laborers, and officials from the capital during the pyramid construction. Linked the pyramid site with the capital and the transported products for the maintenance of the cult of the deceased king.

The stone rubble walls were made to delimit each pyramid complex; and the Giza plateau and the great boundary wall were built at the time of Khafra to divide the workmen's camp from the pyramid cities.

CHAPTER V: FUNCTION OF THE PYRAMIDCOMPLEX AT GIZA

The discussion in the preceding chapters indicates that functions are suggested for certain elements in the pyramid complexes at Giza: subsidiary pyramids; boats; temenos wall; funerary domain; pyramid city; resthouses; workshops; and workmen's camp. The basis of this information is the archaeological and textual material from the Giza plateau. The function of other architectural elements, such as the lower temple, causeway and the upper temple are still unclear. The purpose of this chapter is to determine the functions of these elements while discussing the meaning of the pyramid complex and how its layout related to the gods and king.

## V.1: ARCHAEOLOGICAL OVERVIEW OF THE GIZA PLATEAU

This section will include a discussion of the pyramid names and significance of the design of the burial chambers; it will also include a conclusion summarizing the discussions in Chapters 1-3, dealing with the upper temples, causeways, and lower temples, and comparing the three pyramid complexes.

### V.1.1: PYRAMID NAMES AND SIGNIFICANCE OF THE BURIAL CHAMBERS

Three major pyramids stand at the Giza plateau, all belonging to one family. The earliest pyramid, that of Khufu, was called 3ḥt Ḥwfw; literally meaning simply "Horizon of Khufu." Bennett discussed Gunn's analysis of 3ḥt as the nisbe from 3ḥty and he takes the pyramid names as adjectival: "Khufu's pyramid which is at the place of sunrise and sunset."<sup>1</sup> Thus explains his interpretation of the meaning of Khufu's pyramid as the place "where the

<sup>1</sup> J. Bennett, "Pyramid Names," JEA 52 (1966), pp. 174-175; Faulkner, Dictionary, p. 5; see Gardiner, Egyptian Grammar, p. 495.

sun rose and set."<sup>2</sup> This phrase can only refer to Ra, who rises and sets and changes his solar boats at sunrise and sunset. It also suggests that Ra and Khufu are equated, both rising and setting in the horizon, a meaning which never occurs with any other pyramid.

The pyramid of Khafra, H(.f.R( wr, literally means "Khafra is great," but was translated "Khafra's pyramid, the great" by Bennett<sup>3</sup>; it was built to the south of the pyramid of his father Khufu, while his brother Djedefra built his pyramid at Abu Rawash.<sup>4</sup> Menkaura's pyramid was Mn k3w R( ntrj, meaning Menkaura is divine, and is translated by Bennett, "Menkaura's pyramid, the sacred."<sup>5</sup> There is a change in the position of the king's burial chamber inside Khufu's pyramid: It is not underground, but placed high up in the pyramid. As there is no structural reason for the change, it must be for

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<sup>2</sup> Bennett, "Pyramid Names," p. 175; see also G. LefeBvre, "Apropos d'un nom de pyramide," RdE 5 (1946), p. 46.

<sup>3</sup> Bennett, "Pyramid Names," p. 175.

<sup>4</sup> See Kanawati, Administration, p. 76 for the theory of the family trouble after Khufu's death.

<sup>5</sup> Bennett, "Pyramid Names," p. 175.

religious reasons.<sup>6</sup> This unique position of the burial chamber places Khufu within the horizon of Ra. In Khafra's pyramid, the burial chamber is at the base, as it is in Sneferu's pyramids at Dahshur. Menkaure's burial chamber is subterranean, as is the case in the 5th and 6th Dynasties, following the tradition of the Old Kingdom architectural style.<sup>7</sup>

#### V.1.2: COMPARISON OF THE ARCHITECTURAL COMPONENTS OF THE PYRAMID COMPLEXES AT GIZA

The functions of three architectural elements within the pyramid complex at Giza are as yet unclear from the previous discussion. Although their exact functions are

<sup>6</sup> See above, pp. 83-84; Maragioglio and Rinaldi, L'Architettura, IV, 22-60; see also discussion on the change of the pyramid design in L. Borchardt, Einiges zur Dritten Bauperiode der grossen pyramide Gise (Berlin: 1932), pp. 1 ff; Petrie, Pyramid and Temples, p. 214; G. Goyen, "Le mécanisme de fermeture à la pyramide de Chéops," RAR 2 (1963), pp. 1 ff, agrees with Borchardt on the change on the three projects for Khufu's pyramid, however," Maragioglio and Rinaldi, L'Architettura IV, 148-154, obs. 42 do not agree and believe that the great pyramid had only one project and no change had been done.

<sup>7</sup> Edwards, The Pyramids of Egypt, pp. 99-110; Maragioglio and Rinaldi, L'Architettura, V, 50-52; Grinsell, Egyptian Pyramids, pp. 110-115; the north pyramid at Dahshur is of exception, but still, its burial chamber is at the base of the pyramid.

a matter of debate among scholars, their layout is well established. The elements are:

1. The upper temple
2. The lower temple
3. The causeway

The upper temples of the three pyramids at the Giza necropolis are similar in some ways but different in others. The open court existed in all three temples. It is confirmed that Khufu's upper temple has five statue niches for the four names of Khufu, and one niche for the statue of Hathor. Each of these statues was served by a priest.<sup>8</sup> In Khafra's upper temple, five statue niches were found. However, since only three of his names had priests associated with them, then only three niches would contain statues for these names.<sup>9</sup> Therefore, the other two niches might contain one statue for Khufu and one for Hathor,<sup>10</sup> or possibly two statues for Khufu only as suggested in Chapter I.

Menkaura's upper temple has a completely different layout in this specific area. Instead of the five niches, it contains one long room which, I believe, contained a statue of Ra. There are rooms in the three temples containing cult objects; other rooms were

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<sup>8</sup> See Table, no. 13A.

<sup>9</sup> *Ibid.*, 13B.

<sup>10</sup> See above, p. 153.

utilized as treasuries. The temples of Khufu and Khafra were decorated with scenes, but Menkaura's temple was not. This may be due to the fact that Menkaura died prior to completion of his monument; his pyramid complex was then completed by his son Shepseskaf. Menkaura's temple was the only one in which many of the original statues and possibly cult objects, such as flint instruments, offering pottery, stone vessels and other items, were found.

A cult offering place existed between the base of each pyramid at Giza and the rear walls of the upper temples. Khufu and Khafra's offering places may contain an altar and two limestone stelai, but Menkaura's may contain a false door.

The lower temple of Khufu has not yet been found, but there is archaeological evidence for its location. The lower temple of Khafra is the most complete temple of the Old Kingdom. It was entered through two doorways. The north entrance is inscribed with the king's titles and the name of the northern lioness goddess, Bastet<sup>11</sup>; the southern entrance is inscribed with the king's titles and the name of the southern goddess, Hathor, Lady of the Sycamore. The presence of the two goddesses,

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<sup>11</sup> E. Otto, "Bastet," LÄ I-IV (1973), pp. 528-630.

representative of the North and South, is indicative of the power of the king as the ruler of the two lands.

The temple has a T-shaped hall with pillars and statues of the king; the latter were found cut into small pieces, suggesting deliberate damage for reasons of revenge. The lower temple of Menkaura 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. No evidence has been found inside the lower temples at Giza that indicates mummification took place within them. However, since archaeological evidence indicates that it was done elsewhere, the temple must have had another purpose.<sup>12</sup>

Khufu and Khafra's causeways were decorated with scenes and covered with roofs, but Menkaura's causeway did not have any of these due to the reason stated above.<sup>13</sup> The entrance to Menkaura's causeway followed the plan of the Dynasty 5 causeway, and is different from that of Khufu and Khafra.

The statue of the Sphinx at Giza is unique; nothing that compares to it has yet been found at any Old Kingdom site. It was suggested in the previous chapters that the

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<sup>12</sup> See below, pp. 547-548.

<sup>13</sup> See above, pp. 289-292.

Sphinx represents Khafra as Horus, making offerings with his two paws to Khufu, as the latter rises and sets through the two temple niches in the form of the sun god over the temple in front of the Sphinx.

V.2: DISCUSSION OF PREVIOUS SCHOLARS' ANALYSES OF THE  
FUNCTION OF TEMPLES AND OTHER ARCHITECTURAL  
ELEMENTS AT THE GIZA NECROPOLIS

V.2.1: INTRODUCTION

Many scholars have discussed the function of the pyramid complex; some of them treated the subject generally while others dealt with the specific functions of areas within the pyramid complex. A recent study of the function of the pyramid complex was conducted by Grinsell, who dealt with most of the architectural components. Ricke and Schott are among the scholars who dealt specifically with the interpretation of the royal architecture of the Old Kingdom, basing their study on the analysis of the pyramid texts. Recently, two German scholars, Arnold and Brinks, have disagreed with Ricke and Schott, and have proposed another alternative for the function of the pyramid complex.

Other Egyptologists, such as Edwards, Badawy and Fakhry, agreed with the interpretations of Ricke and Schott and further presented ideas of other scholars. Researchers, such as Goyon and Hassan, have put forth

different ideas concerning the purpose of the upper temple.

The lower temple has also been discussed by several Egyptologists, including: Grdseloff, Drioton, Rieke, Hassan, Reisner and Brovarski. Each has a different approach, but all agree that the lower temple was the site of ritual and mummification processes.

Finally, there are three scholars who have produced an important discussion on the meaning and function of the pyramid complex, these being Arnold, Brinks and Barguet.

In the following paragraphs I will discuss the theories of the above-mentioned scholars and analyze their interpretations to see how their works are related to the present study.

As we will see from this discussion, no scholar, until now, has dealt with the functions of a specific pyramid complex of a particular king, or dealt with the functions of the pyramid complexes at one site. Instead, discussions have centered on all the pyramid complexes at every site, making it difficult to discern functions characteristic of one particular period or site.

It has been stated from the comparative analysis and interpretation of the architecture of the royal tombs from Djoser through Niuserra, that each king made certain

adjustments in his design to accommodate the demands of the ever-changing mortuary rituals.<sup>1</sup> Giza is a good illustration of this relationship between the king and the design of this complex. However, even though one can see the adjustments that were made by each king, the general layout of the Old Kingdom temples remains essentially the same throughout the period.

V.2.2: MODERN SCHOLARS' VIEWPOINTS REGARDING THE UPPER  
TEMPLE

Grinsell was the first distinguished scholar to note the function of the upper temple.<sup>2</sup> He did not go into detail concerning its function, but rather pointed out some important aspects. Grinsell stated that the function of the upper temples can be understood through their location in Dynasty 4, on the east side of the main pyramid. In this position, the priests who performed the offering rituals in front of the cult place, between the temple and the pyramid base, would be looking towards the west, the place and location of the dead and also of the setting sun.<sup>3</sup>

<sup>1</sup> Ricke, Bemerkungen, II, 68-72.

<sup>2</sup> Grinsell, Egyptian Pyramids, p. 25.

<sup>3</sup> Ibid.

Grinsell's viewpoint is very important because it indicates the relationship between Ra and the architecture of Dynasty 4, and also shows that in this period, the main cult was Ra and that the Osiris cult did not exist in this period.<sup>4</sup>

Grinsell suggested that the function of the upper temple is not completely understood, and he proposed three possible functions for it:

1. Presentation of offerings by certain priests in front of the temple shrines that were located on the temple's west side.
2. The ceremony of the opening of the mouth performed in front of the statues located inside the niches.
3. As a house for the ka of the deceased king.<sup>5</sup>

The first and second suggestions of Grinsell are supported by the existence of the niches and the statues inside the upper temples at Giza. The third theory of Grinsell is unlikely because, if the upper temple is the house of the king's ka, then what is the function of the lower temple, which also has statues and niches? Below, I will argue that the functions of the two temples can be interpreted in another way.

<sup>4</sup> See Kemp, "The Osiris Temple," pp. 138-155; idem, "The Osiris Temple at Abydos. A Postscript to MDAIK 23 (1968) 138-155," GM 8 (1973), pp. 23-25.

<sup>5</sup> Grinsell, Egyptian Pyramids, p. 25.

Grinsell explained the meaning of the outer and inner portion of the upper temple.<sup>6</sup> The outer part, in his opinion, is the eastern section, consisting of an entrance corridor and a court with a long axis directed north-south. The inner part of the temple is located on the west side. Khufu and Khafra's inner part contains the five niches, but that of Menkaura has the long niche. Behind the five niches in Khafra's temple are five cult rooms that contained offering objects or equipment for the performance of rites in front of the statues.<sup>7</sup>

Ricke and Schott are among the scholars who dealt with the subject in detail.<sup>8</sup> As noted earlier, Ricke made a comparative study of the royal funerary monuments of the Old Kingdom and pointed out its religious significance, based on Schott's interpretation of the pyramid complexes using the spells of the pyramid texts.<sup>9</sup>

Ricke distinguished between two main cult components connected with the upper temples of the 4th Dynasty: the temple of worship and the mortuary temple.<sup>10</sup> The temple of worship is located between the base of the pyramid and

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<sup>6</sup> Ibid.

<sup>7</sup> Ibid., p. 26.

<sup>8</sup> Ricke, Bemerkungen, II; idem, "Der Harmachistempel," pp. 1-43; Schott, Pyramidenkult; idem, "Das Sphinx Temple," pp. 49-79.

<sup>9</sup> See D. Arnold, "Rituale," pp. 1-14, on his objection for the use of the pyramid texts on the function of the pyramid complex; see also discussion below, pp. 460-464.

<sup>10</sup> Ricke, Bemerkungen, II, 35-83.

the west wall of the upper temple; it is distinguished in the 4th Dynasty by two stelae in front of an altar, but in the 5th Dynasty, they were replaced by a false door. The mortuary temple, referred to in this study as the upper temple, is always to the east of the pyramid during the Old Kingdom,<sup>11</sup> with one exception; Userkaf's temple which is located to the south for topographical reasons, as explained by Swelim.<sup>12</sup>

Ricke indicated that the development of the worship temple from the reign of Sneferu through that of Menkaura, seen from the differences between Djoser's temple and that of Khufu, are quite remarkable. One has to then assume a sequence of intermediary forms built within the century that lies between them. According to Ricke, the stages of this development may be documented by the tombs of Zawyet el Arian and Meidum and by the Sneferu pyramids at Dahshur.<sup>13</sup>

The upper temple of Khufu, as reconstructed by Ricke, has three major parts, the pillared open

<sup>11</sup> Ibid., pp. 68-71.

<sup>12</sup> Swelim, "The Great Dry Moat."

<sup>13</sup> Ricke, Bemerkungen, II, 41-60, at the time of Ricke's statement, the pyramids of Sneferu at Dahshur were not yet excavated and the others were not entirely documented, such as the tombs of Zawyet el Arian and Meidum (see ibid., p. 42, fig. 12), on Ricke's hypothesis of the cult offering of Sneferu's Bent Pyramid at Dahshur and his reconstruction of the funeral procession's path; (see ibid., pp. 43-44; 86; 102 ff).

courtyard, the recess (portico), and its connection with the five niches, first introduced by Khufu. The courtyard was supposedly related to a slaughter yard, probably still used as such at Khufu's time, but was only a symbol in later temples.<sup>14</sup> The recess or the dual antechamber, as it was named by Ricke, might have had its origin in what he called "the gate of Nut."<sup>15</sup> This name of the goddess Nut came to Ricke's attention through its mention in the pyramid texts.

The worship temple of Khafra is also, as is Khufu's, set between the pyramid's east base and the west wall of the upper temple.

The upper temple of Khafra has often been regarded as the beginning of a series of architectural developments because of the increase of rooms and halls, which are not present in Khufu's temple.<sup>16</sup>

The open court was, according to Ricke, the open sacrifice court, which he felt contained seated statues of Khafra on niches flanked by inscriptions with the king's titles. These statues were set exactly against the piers in shallow niches; the rest of the inner temple

14 Ibid., pp. 44-47.

15 Ibid., pp. 60-62.

16 Ibid., p. 47.

has the five niches, located behind them are the other five rooms containing cult objects.<sup>17</sup>

Ricke also discussed the cult area, or temple of worship, of Menkaura, which was also set between the pyramid base and the temple wall.<sup>18</sup> The upper temple of Menkaura was hastily completed by his son Shepseskaf and altered several times later in the Old Kingdom. Ricke reconstructed the temple based on the layout of the parts finished during Menkaura's reign and also by a parallel with the ground plan of Khufu's temple.<sup>19</sup>

Ricke reconstructed five rooms on the temple's southern side because he believed that it was intended to be on the original plan of Menkaura.<sup>20</sup> Ricke found that the most remarkable feature of Menkaura's original layout of the temple was that it had only one statue chamber, not five niches as is the case with Khufu and Khafra. He assumed that Menkaura had planned to have this chamber as a cult niche for the Osiris statue, while the statues of

<sup>17</sup> Ibid., pp. 50-51; figs. 17, 19; for the reconstruction of the courtyard, (see ibid., p. 50, fig. 18); for the granite stone that was found in the core of Amenemhet I at Lisht with Khafra's cartouche (ibid., pp. 50-55, pl. 2), the reconstruction of the court is based on this stone; (see ibid., p. 53, fig. 20) on the elevations including reconstructed parts and ground plan of Khufu and Khafra's courts drawn into one another at the same scale.

<sup>18</sup> Ibid., pp. 56-57, figs. 21-22.

<sup>19</sup> Ibid., p. 55.

<sup>20</sup> Ibid., pp. 56-57.

other gods would have been erected at the recess, or what he called (incorrectly), the gate of Nut.<sup>21</sup>

The previous discussion highlights the most important points of Ricke's study, which is mainly an architectural analysis that compares Old Kingdom components. Most of these ideas were accepted and discussed in a previous chapter, especially with respect to the existence of the five niches in Khufu's temple and the reconstruction of Khafra's courtyard and the southern side of Menkaura's upper temple.

I explained that Ricke based his interpretation of the architecture on Schott's analysis of the Pyramid Texts. They both attempted to identify in the Pyramid Texts, the rituals that were performed in the pyramid complexes, from which they derived their conclusions concerning the function of those complexes during ceremonial activities.

Before I discuss Ricke's analysis and interpretation of the names of the architectural components, it is important to give a summary of Schott's analysis of the Pyramid Texts.

Schott studied the sequence of the Pyramid Texts that dealt with topics including funeral rites, ritual

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<sup>21</sup> Ibid., p. 59.

sacrifice, and the opening of the mouth ceremony.<sup>22</sup> He also noted elements having to do with the mortuary cult, the festival sacrifices on new year's day, and the gods that occurred in the texts.<sup>23</sup> Also, the names of the sacred sites that are mentioned in the Pyramid Texts, such as Sais, Buto and Heliopolis, were used to designate certain rooms in the upper temple.<sup>24</sup> Briefly then, Schott used the Pyramid Texts to reconstruct the function of the specific places in the temple by allotting different segments of the texts to different parts of the temple.

Following is Schott's conclusions of the study of the Pyramid Texts and how they relate to the pyramid complexes:

1. Schott concentrates on those aspects of the pyramid cult that can explain architectural features in terms of their function for the cult.
2. The Pyramid Texts, which constitute the basic corpus of ancient Egyptian religious literature, and contain references to gods, sacrifices and other rites, makes it seem very likely, in Schott's opinion, that these texts were actually used as parts of the pyramid cult itself and had a certain place in the ritual order. However,

<sup>22</sup> Schott, Pyramidenkult, pp. 149-161.

<sup>23</sup> Ibid., pp. 201-210.

<sup>24</sup> Ibid., p. 214.

there are objections to this theory given by Arnold and others.<sup>25</sup>

3. Since verses and sequences of verses of related meaning are often inscribed at the same place in different pyramids, one can then assume that they are generally valid ritual performances, or funeral services.

4. If a direct relationship between the texts and the rituals is assumed, then one has to sequence the texts according to the most likely direction of the funeral procession, moving from the outside into the burial chamber. A reverse order, as in the existing editions of the pyramid texts, does not make sense under this assumption.<sup>26</sup>

5. The plan of the pyramid complex, in its essentials, reflects the plan of the private tombs: The entrance to the complex is the lower temple, the entrance to the tomb is a chamber, and the hallway in the tomb has the same function as the causeway. And, the two inner chambers of the tomb are separated by a passageway corresponding to the gate separating the chapels and sacrifice temple from the sacrifice yard.

6. The Pyramid Texts and the ritual structures can be assigned to the ritual function of the pyramid complex.

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<sup>25</sup> See below, p. 462-468.

<sup>26</sup> Schott, Pyramidenkult, pp. 149-150, 223-224.

7. The development of the rites in the pyramid complex can reconstruct the early forms of the pyramid cult.
8. According to his analysis, Schott named each temple and space within it according to its ritual function, such as "the temple of worship," and the "landing place." Others were named after their reference to ancient Egyptian names, such as: the house of Sokar, house of Anubis, Buto and Sais.
9. Text analysis and architectural analysis complement each other and both confirm the assumptions made about the pyramid cult.
10. Thus, the form and development of the pyramid cult could be extrapolated from both literary sources, such as the Pyramid Texts, and the architectural evidence.
11. Finally, according to Schott's conclusions, the pyramid cult managed to incorporate the lower Egyptian funerary ceremonies and the upper Egyptian sacrifice cult into one perfect symbolic entity.<sup>27</sup>

Schott's conclusions led Ricke to designate names for the architectural elements at Giza. Ricke named the recess in Khufu's temple, located between the court and the five niches, the wide hall in Khafra's temple, and the recess of Menkaura, located as in Khufu, between the

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<sup>27</sup> Ibid., pp. 223-224.

court and long room, as the gate of Nut (see plan nos. 29-31).<sup>28</sup>

Ricke claimed that the first example of this gate, found only in Khufu's upper temple, has a different location in Khafra's temple from that of Khufu and Menkaura.<sup>29</sup> Ricke divided the temple of Khafra into two main sections. At the beginning of the temple forepart, he distinguished the four rooms in the north containing the four alabaster sarcophagi of the inner organs as a Buto burial, and the other two rooms to the south of Khafra's temple containing the crowns, a Sais burial.<sup>30</sup> The names of Sais and Buto occurred in the Pyramid Texts but their meanings are unclear; thus, there is no evidence to support Ricke's use of them. Therefore, a discussion of these names is useless.

Ricke used the same method of analysis for Menkaura's temple; the chambers to the northwest of the temple would contain the two crowns of Sais and the other chambers to the south would contain the inner organs of Buto. These chambers were used as five magazines during the time of Shepseskaf.<sup>31</sup> He also suggested that the niches in the burial chamber of Menkaura's pyramid were

<sup>28</sup> Ricke, Bemerkungen, II, 60.

<sup>29</sup> Ibid., pp. 59-60.

<sup>30</sup> Ibid., p. 108.

<sup>31</sup> Ibid., p. 110.

for the organs of Buto and two for the crowns of Sais, because Shepseskaf used the chambers in the temples as magazines for the cult of his father.<sup>32</sup>

Finally, throughout most of Ricke's discussion of the interpretation of the architecture, he describes the presence of any new architectural entity as being due to the struggle between the cults of Osiris and Ra.<sup>33</sup>

The most useful portion of Ricke's study is his discussion of the Old Kingdom pyramid complexes and his comparative analysis of that subject. The doubtful elements in Ricke and Schott's study are:

1. Their use of the Pyramid Texts as a source for determining the function of the pyramid complexes.
2. Ricke's theory of the struggle between Osiris and Ra during the 4th Dynasty.

The ideas of Ricke and Schott are summarized and accepted by many other scholars, with the exception of Arnold and Brinks, who have taken a different approach.

It is impossible to use the Pyramid Texts as a main source for determining the function of the pyramid complexes because they were written down towards the end of the Old Kingdom, but they contain much that was composed earlier; they were meant: "...to aid the king

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<sup>32</sup> Ibid., pp. 108-109.

<sup>33</sup> Ibid., pp. 55-60.

in the transition between his earthly functions and the position which he was to assume amongst the gods after death."<sup>34</sup>

The Pyramid Texts do not describe the functions of the complex, but rather, they give religious beliefs accumulated over the preceding generations. There are other sources to use to establish the function of the pyramid complexes, such as: wall reliefs, statues, architecture and relevant inscriptions.<sup>35</sup> Finally, the Pyramid Texts were considered by Schott to be a basic corpus of ancient Egyptian religious literature; however, we cannot be certain that they were actually a part of the pyramid cult. Also, the names that were given to different parts of the pyramid complex are completely hypothetical and are not based on any solid evidence.

The second point of Ricke and Schott listed above, concerning the struggle between Osiris and Ra, is also unfeasible. Ricke, in his discussion of Khafra's upper temple, stated that during the construction of the temple there was a conflict between the cult of Osiris and of the rising sun, (Ra), and that conflict is reflected in the temple plan.<sup>36</sup> There is no doubt that the courtyard

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<sup>34</sup> Smith, Art and Architecture, revised by Simpson, p. 440, nt. 31.

<sup>35</sup> Arnold, "Rituale," pp. 1-14.

<sup>36</sup> Ricke, Bemerkungen, II, 53.

shows the connection with the cult of Ra, as well as the location of the upper temple; but, no evidence can be found, through the study of these temples, that shows a struggle or conflict between Osiris and Ra. The layout of the pyramid complexes at Giza and the archaeological information do not indicate any evidence for the existence of Osiris in any wall reliefs or inscriptions. There is another important point to consider with respect to Osiris, and that is, Osiris does not occur in any mortuary temple before the reign of Djedkare of Dynasty 5, as indicated by a fragment found from the latter's upper temple.<sup>37</sup> Thus, the available evidence, or rather lack of evidence, argues against Ricke's analysis, making his use of names improbable.

Other Egyptologists, such as Edwards, have agreed completely with the views of Ricke and Schott. Edwards has cited them concerning the function of the lower temple. However, with regard to the upper temple, he stated that it is the place in which the priests and w(b) priests performed the ritual ceremonies.<sup>38</sup>

Two other scholars have also supported Ricke and Schott's analysis; but, unlike Edwards, did not add any interpretations of their own concerning the function of

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<sup>37</sup> Baer, Rank and Title, p. 297.

<sup>38</sup> Edwards, The Pyramids of Egypt, pp. 146-147.

the pyramid complexes. These scholars are Badawy,<sup>39</sup> and Fakhry.<sup>40</sup>

Other Egyptologists, namely Goyon and Hassan, have taken a different approach from that of Ricke and Schott with regard to the function of the upper temples. Goyon, like Ricke and Schott, also used the Pyramid Texts, but he used them to determine the daily rituals the priests practiced inside the temple.<sup>41</sup> From that information, he then determined that there were three types of daily rituals performed.<sup>42</sup> Hassan, on the other hand, theorizes that the embalming workshops were located inside the upper temple, basing this theory on the existence of channels inside the temples of the three kings at Giza.<sup>43</sup>

Both Goyon and Hassan's hypotheses are unlikely because we do not know if the spells of the Pyramid Texts were really used by the priests. The Pyramid Texts do not appear to be specifically focussed on certain functions. The embalming also is unlikely to have been performed inside the upper temples, because the channels may have just as easily been used for sacrifice.

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39 Badawy, Egyptian Architecture, I, 90-101.

40 Fakhry, The Pyramids, pp. 16-19.

41 Goyon, Le secret des Bâisseurs, p. 268.

42 Ibid., pp. 269-270.

43 Hassan, Giza, IV, 83-95.

### V.2.3: MODERN STUDIES OF THE LOWER TEMPLE

The lower temple has received more attention from scholars than the upper temple. They have discussed its function by analyzing the texts and wall reliefs of the private tombs, without using archaeological evidence from the pyramid complex.

These scholars include Grdseloff, reviewed by Drioton, detailed studies from Hassan, Grinsell and Ricke and Schott. Edwards and Fakhry concurred with the opinions of Grdseloff, and Ricke and Schott. Finally, a recent study by Brovarski has criticised the theories of previous scholars concerning the function of the lower temple.

Grdseloff identified the function of the lower temple through the occurrence of two structures referred to in the texts of private tombs, the jbw, or "purification tent," and the w(bt, or "house of embalmment."<sup>44</sup> However, the term w(bt was identified in the previous chapter as the name of Khufu's workshop.<sup>45</sup>

The terms jbw and w(bt, in Grdseloff's opinion, identify the lower temple as a sh-ntr, or "pavilion of

<sup>44</sup> B. Grdseloff, Reinigungszelt, pp. 1 ff.

<sup>45</sup> See above, pp. 367-369.

the god," a structure mentioned in the Egyptian texts.<sup>46</sup> The origin of jbw was also identified as being a shelter for fishermen built in mudbrick at the edge of the water to protect them from crocodiles while they were sleeping.<sup>47</sup>

Grdseloff discussed six scenes, found in the Old Kingdom tombs, in order to reconstruct the order of the funeral rites in the Old Kingdom. These tombs are that of Mereruka, Ankhmahor, Qar, Idu and PepiAnkh. Each of these tombs is dated to Dynasty 6.<sup>48</sup> From the study of these scenes, Grdseloff indicated that there are two ceremonies connected with the funeral. The first consists of seven stages, and includes the departure from the house and the ritual purification inside the jbw. The second ceremony consists of four stages which include the embalming in the w(bt and the second visit to the jbw until the deceased reached his tomb.<sup>49</sup>

In the Old Kingdom, the writing of jbw has a different determinative from that used in the Middle Kingdom.<sup>50</sup> Further, it is clear that in the Old Kingdom,

<sup>46</sup> Grdseloff, Reinigungszelt, pp. 19-22.

<sup>47</sup> Ibid., see also E. Drioton, "Review of B. Grdseloff, Das Agyptische Reinigungszelt," ASAE 40 (1940), pp. 1007-1014; A. Gardiner, "The Eloquent Peasant," JEA 9 (1923), p. 13, nt. 1.

<sup>48</sup> Baer, Rank and Title, nos. 197, 94, 495, 79, 132.

<sup>49</sup> Grdseloff, Reinigungszelt, pp. 1-9; Drioton, "Review of Reinigungszelt," p. 1008; Hassan, Giza, IV, 71-78.

<sup>50</sup> Grdseloff, Reinigungszelt, pp. 21-22.

the purification tent is always located at the edge of the water.<sup>51</sup>

Grdseloff believed, based on an analysis of the private tomb scenes, that the royal jbw was a large rectangular structure of poles and matting, erected as a pavilion above the roof of the lower temple. He associated this theory with Khafra's lower temple, where the ritual purification and washing took place. Furthermore, he believed that the jbw was a temporary structure and was approached in Khafra's temple through an alabaster paved ramp starting from the T-shaped hall.

Grdseloff based his evidence on the existence of holes in the roof of the lower temple of Khafra, which he thought served as sockets for the construction of the pavilion or the purification tent. In addition, Grdseloff suggested that the w(b) "embalming" was done in the antechamber of the lower temple.<sup>52</sup> Finally, Grdseloff believed that the canopic chest of the deceased king, containing the viscera, was put inside the rooms with the two stories. He also identified the room, located on the left side of the alabaster paved ramp that

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<sup>51</sup> Drioton, "Review of *Reinigungszelt*," pp. 1009-1010.

<sup>52</sup> Grdseloff, *Reinigungszelt*, pp. 22-49.

reached to the causeway, as a room for storing food to be used as offerings for the king during the ceremonies.<sup>53</sup>

The above discussion of Grdseloff's hypothesis on the function of the lower temple showed that he based all his evidence on an analogy to Old Kingdom private tomb scenes. Drioton's review of Grdseloff's theory shows that he agreed with the main idea of his hypothesis, that the lower temple combined both the jbw and w(bt; however, he believed that Grdseloff's placement of the jbw and w(bt should be reversed.<sup>54</sup> He identified the jbw as being located in the antechamber and the w(bt as being on the roof. This means that the purification was performed in the antechamber and the embalmment was done on the roof.<sup>55</sup> Drioton also used evidence from the private scenes for his identification of the function of the lower temple.

Hassan wrote an excellent, detailed study similar to that of Grdseloff and Drioton, in which he identified the jbw and w(bt of the private individuals tombs. However, his identification of the royal funeral should be treated cautiously.<sup>56</sup> Unlike Grdseloff, who used evidence from tombs dated to Dynasty 6, Hassan uses data from several

<sup>53</sup> Ibid., cf. Hölscher's opinion on this room, see above, p. 203.

<sup>54</sup> Drioton, "Review of Reinigungszelt," pp. 1013-1014.

<sup>55</sup> Ibid.

<sup>56</sup> Hassan, Giza, IV, 69-102.

tombs that he feels date from the 4th Dynasty.<sup>57</sup> These tombs are those of Sekhem-ka-Ra, Debehen, Nefer and Kai. However, most of these tombs are not dated to Dynasty 4, as Hassan has suggested.<sup>58</sup> The jbw is also identified as a tent or pavilion and w(bt as a temporary structure.<sup>59</sup>

Hassan also discussed burial in the Old Kingdom, stating that it consisted of two parts. The first part consists of the funeral cortège and the delivery of the mummy to the embalming house. The second part is the reception of the mummy by the priests who would place it inside the tomb.<sup>60</sup> This process would take 70 days, from death to burial.<sup>61</sup> Furthermore, Hassan discussed the two ceremonies in which he agreed with Grdseloff and Drioton.<sup>62</sup>

Hassan counted the titles of the personnel who were connected with the journey from the east to the west bank, where the washing tent was located and the priests

<sup>57</sup> Ibid., p. 71.

<sup>58</sup> Baer, Rank and Title, nos. 503, for the date of Kai, mid-Dynasty 5, Sekhem-ka-Ra dated to Sahure, Nfr dated to mid-Dynasty 5 or later, Debehen is the only tomb of Hassan's group which is dated to the end of Dynasty 4.

<sup>59</sup> Hassan, Giza, IV, 70; W. Dawson, "Making a Mummy," JEA 13 (1927), p. 41.

<sup>60</sup> Hassan, Giza, IV, 70.

<sup>61</sup> Dawson, "Mummy," p. 41; however, in the tomb of Mersyankh, it took 272 days between the death and the burial of the queen, see Dunham and Simpson Giza Mastabas, I, 8; see also for mummification, D. E. Derry, "Mummification," ASAE, 41 (1942), pp. 240-265.

<sup>62</sup> Hassan, Giza, IV, 71-75.

performed the washing and ritual ceremonies. This tent was a temporary structure located beside the water and had two doorways.<sup>63</sup> In the second ceremony, Hassan indicated that the body would go for a second visit to the washing tent.<sup>64</sup> Grdseloff believed that the purpose of this visit was to perform the rite of the opening of the mouth in front of the mummy.<sup>65</sup> Hassan argues that this rite was never performed in the washing tent during the Old Kingdom, but instead was performed in what was called "the house of gold," which was a sculpture studio.<sup>66</sup> During the Old Kingdom, the first representation of the opening of the mouth ceremony is shown in the tomb of Methen,<sup>67</sup> and this rite has a solar origin.<sup>68</sup> Further, this rite was performed only in front of the statues and not the mummy.<sup>69</sup>

Hassan also discussed the embalming worksop, that he called, on the basis of the private tomb texts, the wt or

<sup>63</sup> Ibid., pp. 72-73; E. Brovarski, "The Doors of Heaven," p. 113, nt. 38 distinguishes from the drawing of the jbw in the tomb of Idu that it corresponds to the lower temple of Pepi II and the temporary structure of the jbw was set on its first terrace.

<sup>64</sup> Hassan, Giza, IV, 75.

<sup>65</sup> Grdseloff, Reinigungszelt, p. 17.

<sup>66</sup> Hassan, Giza, IV, 6.

<sup>67</sup> Junker, Giza, II, 65.

<sup>68</sup> A. M. Blackman, "The Rite of the Opening of the Mouth in Ancient Egypt and Babylonia," JEA 10 (1924), p. 59.

<sup>69</sup> Hassan, Giza, IV, 75-76; see also A. M. Blackman, "The House of Morning," JEA 5 (1918), p. 159; T. J. Baly, "Notes on the Ritual of Opening the Mouth," JEA 16 (1930), pp. 173-186.

w(bt nt wt. He indicated that the house of embalming was located beside the tomb and was built of stone or mudbrick, and shows representations of embalming houses of several tombs. In the courtyard of the tomb of Nefer he found remains of a basin and drain, which led him to believe that the embalming house should be located in this area.<sup>70</sup> This interpretation of the drain and the basin is unfeasible because it led Hassan to use it as a parallel for the upper temple as an embalming house.

Although Hassan applied his discussion of the jbw and w(bt of the private tombs to those of the royal tombs, he had a different interpretation than previous scholars.

Hassan believed that the jbw was located in the vicinity of the lower temple and the w(bt was located elsewhere.<sup>71</sup> With regard to Khufu's lower temple, he did not identify the location of the washing tent because the lower temple is not yet excavated. In Khafra's lower temple Hassan identified the washing tent as being located in the first chamber.<sup>72</sup> In Menkaura's lower

<sup>70</sup> Hassan, Giza, IV, 83-87.

<sup>71</sup> Ibid.

<sup>72</sup> Ibid., p. 89; cf. Hölscher, Chephren, p. 13; Borchardt, Ne-User-Ra, pp. 10-11, they believe that the lower temple is a gateway to receive the people who came to visit the site.

temple, Hassan identified the location of the washing tent as being in the open court of the temple.<sup>73</sup>

Grinsell also discussed the function of the lower temple within a general framework. He identified the lower temple as being used first for the transportation of the fine white limestone from Tureh and the granite from Aswan; this occurred before the temple was built. Grinsell stated that the lower temple was the last element in the pyramid complex to be built and the temple was connected with the Nile through a canal.<sup>74</sup> The author explained the temple's function on the basis of Grdseloff's hypothesis that the ritual washing of the king and the embalming ceremony was done in the lower temple, and it contained furniture, statues, offering vases, flint instruments, etc.<sup>75</sup>

Grinsell also discussed the temple layout, stating that it had two entrances, cult rooms, storerooms and basin and drainage channels connected with the funerary ceremonies. Furthermore, Grinsell indicated that the temple walls were decorated with reliefs of divine figures and scenes of the king smiting his enemies. This representation occurs in the temples of the 5th and 6th

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<sup>73</sup> Hassan, Giza, IV, 91-92.

<sup>74</sup> Grinsell, Egyptian Pyramids, pp. 21-32.

<sup>75</sup> Ibid., p. 23.

Dynasties.<sup>76</sup> At the time of Grinsell's writing, the reliefs of Lisht and those of Sneferu from Dahshur had not yet been located.

Finally, Grinsell discussed the meaning of the pyramid complex in a general manner, without introducing new material. He also discussed the Pyramid Texts and stated that:

...they provide a revealing glimpse into the minds of those who built the pyramids of the Old Kingdom.<sup>77</sup>

The function of the lower temple is also discussed by Rieke and Schott.<sup>78</sup> Rieke criticised Grdseloff's identification of the lower temple as *sh-ntr*, "the shelter of the god,"<sup>79</sup> which combined the two structures of *jbw* and *w(bt)*.

Rieke, Grdseloff, Reisner and Drioton believe that the lower temple represents the royal washing tent,<sup>80</sup> but each one has his own particular interpretation.

Rieke proposed, in opposition to Grdseloff's hypothesis, that the actual processes of embalmment and purification were performed on the terrace of the lower

<sup>76</sup> Ibid.

<sup>77</sup> Ibid., p. 94.

<sup>78</sup> Rieke, Bemerkungen, II, 86-92; Schott, Pyramidenkult, pp. 171-180.

<sup>79</sup> Ibid., p. 86; Grdseloff, Reinigungszelt, pp. 1 ff.

<sup>80</sup> See Rieke, Bemerkungen, II, 86-102; Grdseloff, Reinigungszelt; Reisner and Smith, Giza, II, 58-59; Brovarski, "The Doors of Heaven," pp. 109-110; see also summary in Edwards, The Pyramids of Egypt, pp. 110-111.

temple. Because it was thought that Ra was reborn every morning by washing in the so-called "lily lake" before he crossed the sky; the king was thought to have done the same.<sup>81</sup> This identification is based solely on Schott's interpretation of the Pyramid Texts. Ricke also indicated that the wide hall was used for ritual mummification; the deep hall used for the opening of the mouth ceremony in front of the king's statues; and the six rooms in the two stories located on the south of the temple, were used for the Buto and Sais burial. The coffin of the king, would be placed in the hall with his viscera kept temporarily in the four rooms; while the last two rooms would be used for the two crowns of Sais.<sup>82</sup>

Edwards concurred with the views of Grdseloff, Ricke and Schott concerning the function of the lower temple, and did not put forth any specific opinion of his own.<sup>83</sup> However, regarding the function of the lower temple, he did state that:

The precise use of the valley building in the performance of the funerary ritual is not entirely clear.<sup>84</sup>

<sup>81</sup> Ricke, Bemerkungen, II, 86-102.

<sup>82</sup> Ibid.

<sup>83</sup> Edwards, The Pyramids of Egypt, pp. 145-147.

<sup>84</sup> Ibid., p. 143.

Badawy agreed with Ricke and Schott, but he did not present any original ideas of his own, nor advocate those of other scholars.<sup>85</sup>

Fakhry on the other hand, followed the theories of Hassan and Grdseloff with regard to the function of the lower temple, but also did not develop any ideas of his own.<sup>86</sup>

Most recently, Brovarski studied the function of the lower temple, and criticized many of the earlier views.<sup>87</sup>

He discussed the term (3 wy pt, which Černy translated "the (two) doors of heaven," or shrine.<sup>88</sup> Brovarski stated that Černy, in discussing this term, used later sources; but he believes that this term has a more ancient origin, and can be seen through a study of the funerary scenes in Mereruka's tomb. There the funerary cortège travels across the river and lands in front of the lector priest, who performs the ceremonies. Brovarski also noted the accompanying hieroglyphic inscription: "the requirements of the craft of the lector priest." The most important point is the arrangement of funerary equipment which, as Brovarski

<sup>85</sup> Badawy, Egyptian Architecture, I, 90-98.

<sup>86</sup> Fakhry, The Pyramids, pp. 16-17.

<sup>87</sup> Brovarski, "The Doors of Heaven," pp. 107-115.

<sup>88</sup> Ibid., p. 107; see also J. Černy, "Note on (3wy pt Shrine," JEA 34 (1948), p. 120.

notes, "are atop the hieroglyph symbol for heaven with a single door leaves set up at either end."<sup>89</sup>

Brovarski believes that this scene consists of the hieroglyphic for sky and he reads the door leaves as meaning the "doors of heaven."<sup>90</sup> He also identified the shape of the jbw as being a large rectangular booth constructed of poles and matting with entrances at one end.<sup>91</sup>

Brovarski indicated that the lower temple has elements similar to the jbw, with two entrances; and it should be the entrance to the heavens, or the door of heaven.<sup>92</sup> He then identified the lower temple as the place for the washing tent, and believes it was set up on the terrace of the temple for the purification ceremonies.<sup>93</sup>

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<sup>89</sup> Brovarski, "The Doors of Heaven," p. 107, fig. I.

<sup>90</sup> Ibid.

<sup>91</sup> Ibid., pp. 108-109.

<sup>92</sup> Ibid., p. 110.

<sup>93</sup> Ibid.

V.2.4: ANALYSIS OF MODERN STUDIES ON THE UPPER AND LOWER  
TEMPLES

The conclusions about the function of the upper temple by Ricke and Schott, show that the pyramid does not serve as a ritual function for the burial and no one can trace from the Pyramid Texts, the rituals that were performed in the temples. Hassan also proposed that the court of the upper temple was the place for embalming. However, there is no evidence to support it.

The conclusions about the lower temple presented by Grdseloff, Drioton, Hassan, Grinsell, Ricke and Schott, and Brovarski are also unlikely for two important reasons:

1. The private burial is completely different from the royal burial,<sup>1</sup> and even the burial rites were completely different among private individuals; and, the stages of this rite can be seen from the structure of the royal and private tombs. Thus, any parallel between private tomb scenes, to establish the function of the lower temple is unfeasible.

Further, the architectural design of the private tombs and the pyramid complex is completely different.

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Therefore, Schott's comparison between the two is hypothetical.

Thus, the royal lower temple cannot be the private jbw and w(bt).

2. There is no archaeological or textual evidence to be found in the lower temple which shows any indication of the embalming or washing of the deceased king in the temple.

Therefore, Egyptologists have to look to the archaeological evidence to determine the function of the lower temple, as well as the location of the place for the washing and embalming of the king.

The architectural analysis of Ricke, Lauer and others, already discussed in the previous chapter, are accepted by this writer.

Brovarski proposed that the two doors of the lower temple are the doors of heaven. I concur that the north door has the lioness goddess Bastet and the southern door has the name of Hathor. These goddesses may be representative of Ra, welcoming the deceased king Horus when he arrives at the pyramid complex, or the two doors of heaven.

V.2.5: OVERVIEW OF MODERN STUDIES CONCERNING THE  
FUNCTION OF THE PYRAMID COMPLEX DURING THE OLD  
KINGDOM

Arnold studied the function of the pyramid complexes of the 5th and 6th Dynasties.<sup>1</sup> Brinks studied the development and function of the architectural components from Djoser to Pepi II.<sup>2</sup> Barguet made a comparison between the elements of the temple of Amon-Ra at Karnak and the pyramid complex; and indicated the development and similarities between the two components.<sup>3</sup>

Arnold's article refutes Ricke's and Schott's hypothesis that the pyramid temple had a ritual function; instead, he proposed that its function can be established based upon the various elements found within the pyramid complex. These elements are:

1. Wall reliefs
2. Architectural elements within the pyramid complex
3. Statuary
4. Relevant inscriptions

From the study of the above elements, the following themes within the pyramid complex can be indicated:

<sup>1</sup> Arnold, "Rituale," pp. 1-14.

<sup>2</sup> Brinks, Die Entwicklung.

<sup>3</sup> P. Barguet, Le temple d'Amon-Re à Karnak (Cairo: 1962).

1. The physical afterlife of the deceased king through the funerary cult.
2. His victories over his enemies in the hereafter, as seen from the scenes of the king smiting and capturing his enemies.
3. The continuance of his kingship, as represented by scenes of the sed festival, among others.
4. The deification of the king and his relationship to the gods.<sup>4</sup>

Each of these themes can be understood and established by studying the decoration and finds on the upper and lower temples and the causeway.

Arnold tried to relate the inscriptions of the reliefs with the layout of the funerary temples of Dynasty 5, in order to understand the rituals and how they developed from the ritual funerary temple. Arnold sees that the pyramid temples depict powerful cult scenes, and the funerary ceremonies, which were derived from the Pyramid Texts, were performed in them.<sup>5</sup>

Arnold criticised the old theory that proposed that the funerary procession went from the lower temple, through the causeway to the upper temple. He stated that it is difficult to imagine that the mummy of the king

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<sup>4</sup> Arnold, "Rituale," pp. 1-14.

<sup>5</sup> Ibid., p. I.

would go through the north door in the upper temple to the pyramid court, because of the small size of the door. Therefore, Arnold indicated that "the burial rituals of the Old Kingdom and the Middle Kingdom were executed on the edge of the fertile land or in the necropolis outside the pyramid complex and that the burial procession accordingly reached through the neighbouring entrance to the pyramid corridor."<sup>6</sup>

Arnold also used relevant inscriptions from the Old Kingdom to designate names for certain areas in the upper temples, such as "pr-wrw," the house of the great ones," for the lower room in the temple; and *wsḥt*, for the "open court."<sup>7</sup>

From the study of the wall reliefs, statues, architecture and relevant inscriptions of the pyramid complexes of Dynasties 5 and 6, Arnold noted five important aspects of the function of the pyramid complex:

1. A building to secure the continued existence of the body of the dead king through his death cult.

<sup>6</sup> Ibid., pp. 1-4.

<sup>7</sup> Ibid., p. 6; see also H. AltenMüller, Die Texte zum Begräbnisritual in den pyramiden des Alten Reiches, Xg Abh 24 (Weisbaden: 1972), p. 173; P. Posener-Kriéger. "Remarques sur l'ensemble funéraire de Neferirkare Kakai à Abusir," Festschrift of Siegfried Schott (1968), pp. 112-120.

2. A building to secure the continued existence of the king in the form of his statues (in the court and the statue niches).
3. A building for the victory of the king over his enemies, (seen in the statue programme, enemy figures, magazines on the southwest, and weapons).
4. A building for the maintenance of the king as a ruler (as represented by scenes of coronation and sed festivals).
5. A building for the security of the divinity of the king (with such representations of the king with the gods, the king as a divine child, and the king in statue groups).<sup>8</sup>

This study is very important because it can be related to the pyramid complexes of the 4th Dynasty. Further, the function of these pyramid complexes must be drawn from the wall reliefs, statues, relevant inscriptions, architecture and the Abousir Papyri, which is the only record that we have of the daily activities in the upper temple.

Brinks also wrote an important study in which he proposed that the pyramid complex is composed of four elements:

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<sup>8</sup> Arnold, "Rituale," pp. 13-14.

- A. The funerary cult complex, always located in the upper temple.
- B. The sed festival cult complex, located partially in the upper temple and the subsidiary pyramid on the southern side.
- C. The worship cult complex, repeated in both the upper and lower temples.
- D. The sun cult complex, a subsidiary building to the north of the lower temple.<sup>9</sup>

Brinks does not agree with Ricke and Schott, who stated that the pyramid complex was just for burial and not the residence of the king in the netherworld. Brinks suggested that the pyramid complex was not a house or building for the temporal burial celebrations and rituals of the dead king; but rather, it was the representation of the king's dogma or his doctrine, and is not just a palace for the king in the otherworld, as is suggested by Arnold.<sup>10</sup>

Brinks analysis and organization of the pyramid complexes at Giza shows how the four elements that he reconstructed fit within the pyramid complex.

In the Khufu pyramid complex, Brinks considers the so-called "Neben pyramid," located south of the great

<sup>9</sup> Brinks, Die Entwicklung, p. 157.

<sup>10</sup> Ibid., pp. 157-162; see also Arnold, "Rituale," p. 14.

pyramid, to have served a cult pyramid function for the sed festival. As I indicated in Chapter I, I agreed with the idea of the cult-pyramid function for the sed festival, but I do not agree that the so-called "Neben pyramid" functioned as a cult pyramid, or that it existed at all.<sup>11</sup> Brinks designated the cult area between the pyramid base and the upper temple wall as being a sacrificial site for the dead; and the upper temple court as being the sed festival court.<sup>12</sup> He reconstructed the structures that he thought existed on the site of the lower temple that is not yet excavated, and proposed that the lower temple is the worship cult complex, and the other structure to the north is the sun cult complex.<sup>13</sup>

The pyramid complex of Menkaura, as Brinks analyzed it, was not completed during Menkaura's reign, and the sed festival pyramid and its corridor were also not yet built. He also indicated that none of the three subsidiary pyramids located to the south of the main pyramid represent the sed festival grave complex, but rather, they are for the burial of the king's family.<sup>14</sup>

He reconstructed one stela on the sacrificial site at the pyramid base, and agreed with Ricke's

<sup>11</sup> See above, pp. 86-92.

<sup>12</sup> Brinks, Die Entwicklung, p. 121, pl. 5.

<sup>13</sup> Ibid.

<sup>14</sup> Ibid., pp. 127-128, pl. 8.

reconstruction of the southern storerooms.<sup>15</sup> He proposed that no sed festival complex was constructed. The court was decorated with a niched facade, instead of the sed festival reliefs.<sup>16</sup> The area down in the valley, according to Brinks, did not have a north building for the sun cult, but instead he believes that it was built on top of the worship cult temple. In his opinion, the two cult buildings down in the valley were built on top of each other because they were constructed for the worship of the gods. Thus, one building represents the two buildings to serve the dead king as a god.<sup>17</sup>

Brinks organization of the pyramid complex is unfeasible. This can be seen from his reconstruction of what is called the sun cult complex, which did not exist during Khufu or Menkaura's time. As discussed previously, the Sphinx temple cannot be connected with the elements of the pyramid complex of Khafra; it is a unique structure never repeated in any pyramid complex.<sup>18</sup> The most useful fact that Brinks indicated was that the pyramid complex was not only built for the worship of the king, but also for the worship of other gods.

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<sup>15</sup> Ibid., p. 129.

<sup>16</sup> Ibid., pp. 129-130, pl. 9.

<sup>17</sup> Ibid., p. 130, pl. 9.

<sup>18</sup> See above, pp. 222-227.

Barguet wrote a very important study on the comparison between the pyramid complex and the temple of Karnak. He indicated that the temple of Karnak gives important information that can be extended for the study of Egyptian temples.<sup>19</sup> He stated that the architectural elements in Karnak, such as the holy of holies and its vestibule of the Middle Kingdom; the throne of the purification of Amon-Ra and the purification basin, are identical to the pyramid complex.<sup>20</sup>

Barguet supported this statement by proposing several comparisons between the architectural elements of the two monuments. First, he stated that the offering room of the funerary temple, located on the east face of the pyramid, corresponds at Karnak to the offering rooms built by Hatshepsut and Thutmosis III, located against the east face of the Middle Kingdom temple.<sup>21</sup> Second, the purification throne of Amon-Ra, placed at Karnak on a huge base at the southwest angle of the interior precinct of the temple, corresponds to the subsidiary pyramid which stands in the same spot as at Karnak.<sup>22</sup> Lastly, the pure well at Karnak corresponds to the purification

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19 Barguet, Temple d'Amon-Re, p. 331.

20 Ibid.

21 Ibid., p. 332.

22 Ibid.

basin placed on the northeast angle of the pyramid of Pepi II at Saqqara.<sup>23</sup>

The elements cited by Barguet show the close relationship between the sacred part of Karnak and the pyramid. It also shows that the heart of the temple, where Amon-Ra rests in his horizon, can itself be identified with the pyramid.

Furthermore, Barguet notes that it is interesting that the two monuments are located in opposite directions; Karnak is placed on the east bank of the Nile, and the pyramid complex on the west bank.

Finally, Barguet made a parallel between the quay harbour of Karnak and the lower temple. In his opinion, the canal in the pyramid complex had at its end two stairways that functioned as a quay. At this site, the funerary procession began, from which the deceased was carried to the purification tent, and then to the lower temple, where the rituals on the corpse and the rite of the opening of the mouth were performed.<sup>24</sup> No similar parallel has been found at Karnak, but Barguet believes that the existence of the base of a chapel beside the

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<sup>23</sup> *Ibid.*

<sup>24</sup> *Ibid.*, pp. 333-334.

harbour quay of the temple of Montu at Karnak may represent the same as the area of the lower temple.<sup>25</sup>

This study illustrates the close relationship between Karnak and the pyramid complex, even though there is a large gap of time between the two monuments. The temple of Karnak was built by many kings from the Middle Kingdom until the Greek and Roman period. Yet the name of the temple, that of Amon-Ra, does not refer to any specific king. This should be the same with the pyramid complex. The pyramid complex should be referred to by the name of the god, not the king; and the pyramid should have only the name of the king. It should also be mentioned that the pyramid complex also has a parallel on the west bank with the natural pyramid, El Gurn, atop the burial place of the New Kingdom king. The funerary temple is now being separated at the edge of the cultivation.

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<sup>25</sup> Ibid., p. 334; see also on p. 340 a comparison of the pyramid complex of Pepi II and Karnak.

V.3: FUNCTION OF THE PYRAMID COMPLEXES OF KHUFU, KHAFA  
AND MENKAURA

V.3.1: INTRODUCTION

Above it was noted that Ricke and Schott attempted to trace in the Pyramid Texts, the rituals performed in the pyramid temples. Arnold, however, rejected Ricke and Schott's theory that the pyramid had a ritual function, and he has reaffirmed that the function of the pyramid temples; on the basis of its wall reliefs, architecture, statuary and relevant inscriptions, served for the promotion of the corporeal afterlife of the deceased king through the mortuary cult, the continuance of his kingship, his victories over his enemies, and his deification. All these elements were achieved through a programme of decoration and the building of the pyramid complex.<sup>1</sup>

I will utilize Arnold's approach, which dealt with the pyramid temples of Dynasties 5 and 6 and their

<sup>1</sup> Arnold, "Rituale," pp. 1-14; Smith, Art and Architecture, revised by Simpson, p. 440, nt. 31.

function;<sup>2</sup> and apply it to the temples at the Giza plateau through the following elements:

1. The Abousir Papyri, Egyptian names, and how they can be related to the Old Kingdom upper temples in general, the 4th Dynasty temples at Giza in particular.
  2. Comparison of the Old Kingdom lower temples and how they relate to the 4th Dynasty temples.
  3. Comparison of the Old Kingdom causeways and their architectural relation to the 4th Dynasty causeways.
  4. The programme of the decoration of the wall reliefs in Dynasties 5 and 6 and how they correlate to the reliefs in Khufu's temples.
  5. The statuary programme of the upper and lower temples of Menkaura.
  6. The programme of cult objects at the Giza temples.
- These elements are the main sources for the study of the function of the pyramid complex.

#### V.3.2: INTRODUCTION TO THE ABOUSIR POPYRI

The Abousir Papyri is the only published papyri that explains the activity in the upper temple. Other texts

<sup>2</sup> Arnold, "Rituale," pp. 1-14.

were found in 1982 at the temple of Neferefre, but are not yet published.

The Abousir Papyri was found in several fragments on the eastern side in the western rooms of the temple of Neferirkare.<sup>3</sup> These fragments encompassed almost 200 years of the organization of a royal funerary cult and its daily record dating from king Neferirkare of Dynasty 5 until the time of Pepi II of Dynasty 6.

The papyri informs us of different types of documents concerning temple activity, such as: duty tables for the month concerned with tasks which had to be performed daily, and duty tables compiled for special occasions, such as feasts. It also provides us with detailed inventories concerning the objects of normal use for the services, sketchy inventories for the sacred objects used on special occasions, and records of temple inspections, such as inspections of rooms, gates, boats and the pyramid court. Thus, the papyri gives both detailed and summary accounts. Most important, however are the monthly account tables which record the daily items of the temple.

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<sup>3</sup> Posener-Kriéger, Les archives, I, II.

Finally, it contains a list of the personnel of the temple and their duties in the cult of the king, and Egyptian names of the temple architecture.<sup>4</sup>

The recently discovered papyri of the temple of Neferrefre is very important for the comparison of the cult activities in the two temples.<sup>5</sup>

This 200 year span of the daily record of the Neferirkare papyri is important to this study because it tells us about the duties of the personnel of the temple and the Egyptian names of the temple elements. These will be discussed in this chapter and the following one.

It is important here to state that the papyri do not provide us with any religious writing, such as myths or the meaning of the cult. It gives us details without the meaning.

The discovery of these two papyri implies that each temple in the Old Kingdom should have its own inventory of the cult activities and phyles system.

#### V.4: THE ABOUSIR PAPYRI AND ARCHITECTURAL ELEMENTS OF THE UPPER TEMPLES

<sup>4</sup> Ibid; Posener-Kriéger, "Les nouveaux papyrus d'Abousir," SSEA 13 (1983), pp. 51-57; Posener-Kriéger and J. L. Cenival, The Abusir Papyri. Hieratic papyri in the British Museum, 5th series. (London: 1968).

<sup>5</sup> Posener-Kriéger, "Les nouveaux papyrus," pp. 51-57.

The Abousir papyri is the only source that explains the Egyptian names of the architectural components of the upper temple of Neferirkare of Dynasty 5 (plan: 28).<sup>1</sup> The distribution of the ancient names mentioned in the papyri are outlined in the above plan. The entrance of Neferirkare's temple, with four pillars in the front, was called *rwt ḥ3t*, "the frontal porch."<sup>2</sup> This area in front is also mentioned as *(rrt*, "exterior of the temple," because *(rrt* was not an architectural element in the papyri.<sup>3</sup> The entrance *rwt ḥ3t* opens onto a vestibule with twelve pillars, six pillars to the north and south of the hall. This hall is mentioned in the papyri as *pr-wrw*, "the house of the great ones."<sup>4</sup> This name of *pr-wrw* is also mentioned in the sun temple of Niuserra<sup>5</sup> and the vestibule of the upper temple of king Pepi II.<sup>6</sup> It is an element shown in the temples of the 5th and 6th Dynasties.

<sup>1</sup> Posener-Kriéger, Les archives, II, 493.

<sup>2</sup> Ibid., p. 496; see plan no. 27.

<sup>3</sup> Posener-Kriéger, Les archives, II, 511-514.

<sup>4</sup> Ibid., pp. 496-497; the name is mentioned on fragments 31-32.

<sup>5</sup> F. W. von Bissing and H. Kees, Untersuchungen zu den Reliefs aus dem Re-Heiligtum des Rathures, vols. II, III, (München: 1922), pl. 4, 18; F. von Bissing, Das Re-Heiligtum des Königs Ne-Woser-Re, II, (Leipzig: 1928), pl. 18.

<sup>6</sup> Jéquier, Pepi II, II, pl. 22; AltenMüller, Die Texte, p. 173.

On the western side of the pr-wrw there is a room directed north-south; it has stairs leading to the tp-hwt, "temple roof," which had guards night and day, as indicated by Posener-Kriéger.<sup>7</sup> The pr-wrw opens onto the open court through a door; the court is called wsht, "hall or court," in the papyri.<sup>8</sup> It has 37 pillars around the court sides, 35 pillars, called m hns, and two called wrt, "great," in the papyri.<sup>9</sup> No explanation is given concerning the names of these pillars. An altar existed in the northwest corner of the court, but no names are given to it in the fragments of the papyri.<sup>10</sup> However, its name is known from the early period as htp nswt wsht, "the royal offering of the wsht."<sup>11</sup> The term wsht is not only known from the Abousir Papyri, but also from the Old Kingdom as it is always referred to as the large open court within the Egyptian temples.<sup>12</sup>

<sup>7</sup> Posener-Kriéger, Les archives, II, 499; Ricke, Bemerkungen, II, 78 named the vestibule as the gate of Nun.

<sup>8</sup> Posener-Kriéger, Les archives, II, 499.

<sup>9</sup> Ibid., see L. Borchardt, Das Grabdenkmal des Königs Nefer-ir-k3-ra, (Leipzig: 1909), pp. 21-22 on his description of the pillars and their colour; cf. Ricke, Bemerkungen, II, 76.

<sup>10</sup> Posener-Kriéger, Les archives, II, 500.

<sup>11</sup> Ibid., P. Spencer, The Egyptian Temple: A Lexicographical Study, (London: 1984), p. 71; see also W. Barta, Die altägyptische Opferliste von der frühesten bis zur griechisch-römischen Epoche, Mas 3 (Berlin: 1963).

<sup>12</sup> Spencer, The Egyptian Temple, p. 77; see also N. Swelim, Some Problems on the History of the Third Dynasty, (Alexandria: 1983), pp. 42-123 on the development of the early open courts.

To the southern side of the court are rooms assumed by Posener-Kriéger to be priests' houses.<sup>13</sup> (plan: 27) To the west end of the court was a door, mentioned in the papyri as sb3 n hnw, "the door of the interior."<sup>14</sup> The pyramid complex as a whole was accessible only to the personnel of the funerary establishment. The identification of this door shows that only a limited number of the personnel could enter the inner part of the temple.<sup>15</sup>

This door opens onto the transversal corridor, called (rrt, "temple approach or portico."<sup>16</sup> This corridor opens onto the five niches, not mentioned in fragments 31-32; but, a name found in another fragment is tpht, which means "region", but referred to the central niche.<sup>17</sup> In the five niches are statues of the king; in the center niche is a statue of the king in Osirid form. Posener-Kriéger believes that the other two niches should have had two statues of the king, one as king of Upper Egypt and the other as king of Lower Egypt. She did not know what the other two niches contained.<sup>18</sup> In the hall in front of the five niches is a bench for offerings,

<sup>13</sup> Posener-Kriéger, Les archives, II, 500 ff.

<sup>14</sup> Ibid., fragment 69, text 4.

<sup>15</sup> Ibid., pp. 574-576.

<sup>16</sup> Ibid., p. 501, pl. 3-4 gives it this name.

<sup>17</sup> Ibid., p. 502, fragment 27 O.

<sup>18</sup> Ibid., p. 502.

such as the equipment and the clothes needed for the opening of the mouth ceremony.<sup>19</sup>

To the south of the five niches are the magazines, *pr-šn( ntj m ḥnw ḥwt-ntr*, "the magazines which are within the god's temple," mentioned as south and north magazines in the papyri.<sup>20</sup>

To the south of the five niches (plan: 27) is a corridor turning to the west and opening into a room which led to two other rooms situated on an east-west axis.

These rooms are the library in the temple of Pepi II.<sup>21</sup> Posener-Kriéger believes that these two rooms could be for sacred boats, but she does not know if the boat of Hathor could be there or not.<sup>22</sup> To the north of these rooms the offering hall *zh*, "booth or shrine" is located. Its ceiling is decorated with stars, and at its western wall is a decorated door, in front of it an offering table in the form of the *ḥtp*.<sup>23</sup>

At the southwest corner of the *zh* are three rooms designated by Posener-Kriéger as the hall of treasure because gold vessels and other precious objects referred

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19 *Ibid.*

20 *Ibid.*, pp. 514-515.

21 Jéquier, *Pepi II*, II, pl. 52.

22 Posener-Kriéger, *Les archives*, II, 503.

23 *Ibid.*, p. 504.

to in the inventory, were found there.<sup>24</sup> To the south of these rooms are four other rooms, one of which contained the archives. Therefore, Posener-Kriéger identified this as a library.

Finally, at the north end of the zḥ is a hall, half of it is roofed.<sup>25</sup> This hall has a door that opens onto the pyramid court and is mentioned in the papyri as the north door.<sup>26</sup> Posener-Kriéger suggested that this hall could have been used as a storeroom for the slaughtered animals offered on the altar of the wsḥt or at the zḥ.<sup>27</sup>

Thus, the elements that we can consider from the Abousir Papyri for the comparison of the upper temples of the Old Kingdom are: rwt-ḥ3t, pr-wrw, wsḥt, pr-šn( m ḥnw ḥwt-nṯr, tpḥt and zḥ. (plan: 28)

#### V.4.1: COMPARISON OF THE ABOUSIR PAPYRI MAIN

##### ARCHITECTURAL ELEMENTS WITH OLD KINGDOM UPPER

##### TEMPLES

<sup>24</sup> Ibid., p. 505.

<sup>25</sup> Ibid., p. 507; Borchardt, Das Grabdenkmal, p. 12 believes that the north part is the covered part; cf. Ricke, Bemerkungen, II, 78.

<sup>26</sup> Posener-Kriéger, Les archives, II, 507.

<sup>27</sup> Ibid., p. 508; cf. Ricke, Bemerkungen, II, 78 believed that this hall was for the festivals of the rites of Buto.

The architectural elements found in the Abousir Papyri to be discussed in association with the Old Kingdom upper temples are:

rwt-ḥ3t	temple entrance
pr-wrw	house of the great ones
wsḥt	court
tpḥt	shrines
(rrt	corridor
zh	hall of offering
pr ḥn(	magazines

The temple entrance rwt-ḥ3t of the temple of Neferirkare is a unique element that did not occur in any other temple from Dynasty 4 to Dynasty 6.<sup>28</sup> The entrances of all the Old Kingdom temples are connected directly with the causeway on the temple's middle axis, except in the upper temple of Khafra of Dynasty 4 and Teti of Dynasty 6, where the entrance is located to the southeast of the temple.<sup>29</sup> (plan: 30)

The pr-wrw is an element that occurs clearly in all the upper temples of Dynasties 5 and 6. In Dynasty 4, the pr-wrw occurred in only the upper temples of Khafra and Menkaura. (plans: 30, 31) The pr-wrw of Khafra and

<sup>28</sup> See below, p.487.

<sup>29</sup> See C. M. Firth and B. Gunn, The Teti Pyramid Cemeteries, I, (Cairo: 1926); J. P. Lauer and J. Leclant, Le temple haut du complexe funéraire du roi Têti, (Cairo: 1972).

Neferirkare are the only ones which had pillars. The temple of Neferirkare had twelve pillars called nhbt, "bud of lotus"<sup>30</sup> (plan: 27); Khafra's temple had ten pillars.

The literal meaning of the pr-wrw is "the house of the great ones." Kees and Bissing thought that the pr-wrw are the gods who attended the sed festival; thus, the hall was connected with this festival.<sup>31</sup>

Posener-Kriéger believes that the pr-wrw in the upper temple of Pepi II can explain the meaning of this hall; the trip of hunting the hippopotamus is represented on the walls of the pr-wrw of Pepi II and illustrates two rows of officials as if they are the great ones represented in this hall.<sup>32</sup> Bleeker suggested that the pr-wrw is connected with the sed festival, which shows the seated king in the palanquin, as well as officials, singers, priests and all ranks of servants, with depictions of the gods headed by Wpwawat.<sup>33</sup> Thus, the great ones can mean that both officials and gods attended the king's ceremony.<sup>34</sup>

<sup>30</sup> Posener-Kriéger, Les archives, II, 497.

<sup>31</sup> Bissing and Kees, Re-Heiligtum, III, 3.

<sup>32</sup> Posener-Kriéger, Les archives, II, 497-499; see Ricke, Bemerkungen, II, 78.

<sup>33</sup> C. J. Bleeker, Egyptian Festivals: Enactments of Religious Renewal, (Leiden: 1967), p. 101.

<sup>34</sup> See below, p. 508.

The court wsht is a solid feature in all the Old Kingdom upper temples, always having pillars and sometimes an altar in the middle of the court, or in the northwest corner. The pillars in the temple of Neferirkare have names; thirty-five pillars are called m hns, and two are called wrt.<sup>35</sup> These designations in the Abousir Papyri do not give any indication of their meaning.<sup>36</sup>

The transverse corridor, which follows directly the court, is called (rrt in the papyri, but the same term refers to the front of the temple.<sup>37</sup> Spencer has noted that the early examples of the (rrt show that "it could refer to a temple 'approach' or 'portico' in the Old Kingdom and the First Intermediate Period."<sup>38</sup> The term (rrt also has another meaning throughout the Egyptian history.<sup>39</sup> The (rrt is an element that occurs in all the Old Kingdom temples before the niches, with the exception of Khufu and Menkaura's upper temples, which have a portico instead. (plans: 29, 31)

The door, sb3 n hnw, mentioned in the papyri, is the door that separated the public portion of the temple from

<sup>35</sup> Posener-Kriéger, Les archives, II, 499-500.

<sup>36</sup> Ibid., p. 373, nt. 5.

<sup>37</sup> Ibid., p. 501.

<sup>38</sup> Spencer, Egyptian Temple, p. 168.

<sup>39</sup> Erman and Grapow, Wörterbuch, I, 41, 14-24; cf. Faulkner, Dictionary, p. 45.

the inner part. It existed in all the temples of the Old Kingdom, except that of Khafra, which had five doors before the five niches, and that of Userkaf, which had two doors. (plan: 30)

The five niches, *tp̄t*, are common features in all the upper temples of the Old Kingdom, except that of Menkaura, which has one long niche instead of five, and that of Djedkare and Pepi II (plan: 31).<sup>40</sup> Perhaps these niches were introduced for the first time in the temple of Khufu.

The offering hall, *zh̄*, occurred in all the upper temples from the time of Sahure until Pepi II. In the temple of Pepi II the *zh̄* was constructed against the pyramid,<sup>41</sup> which is a different location from that of the other 5th and 6th Dynasty temples. In Dynasty 4 and the beginning of Dynasty 5, it seems that the *zh̄* was between the pyramid base and the temple wall. This same layout also occurred in the pyramid of Meidum, the Dahshur Bent Pyramid, the pyramid of Khufu and Menkaura of Dynasty 4, and was still in the same location in Userkaf's pyramid. In Menkaura's pyramid it seems that the *zh̄* replaced the five niches; and in Khafra's, the *zh̄* was built behind the five niches (plans: 30,31), and still had an offering

<sup>40</sup> See Stadelmann, *Pyramiden*, p. 183, 197.

<sup>41</sup> *Ibid.*, p. 197; R. Stadelmann, "Totentempel," *LÄ* 45, VI 5, (1985), pp. 694-706.

place between the pyramid base and the temple wall.

(plans: 11, 15)

The magazines had a variable layout in the Old Kingdom upper temples. In the temple of Neferirkare, they are located on the southern side, and in other 5th and 6th Dynasty temples, are either connected around the western portion of the temple, or around the pr-wrw, as is the case with the temples of Niuserra, Djedkare, Unas, Teti and Pepi II.

In Dynasty 4 the layout of these magazines differs. Khufu's temple has only two rooms flanking the portico, and they could have been used to store the equipment and the cloth that were used for the opening of the mouth ceremony and the festivals. The magazines may be located at the workshop that I believe to be located southeast of the pyramid. Khafra's temple has five rooms located directly behind the five niches and they also may have been used for the clothes and equipment for the niches.

However, the magazines may also be located in the area of the workshop west of the pyramid, known as the workmens' barracks.<sup>42</sup> Menkaura has five magazines to the north of his temple and also the area on the south side could have magazines, as restored in the plan 15. Roth

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<sup>42</sup> See Maragioglio and Rinaldi, L'Architettura, V, 96.

has suggested that the five phyles are identified with the five magazines in the temples of this period.<sup>43</sup>

The room with six pillars in the temple of Neferirkare (plan: 27) that Posener-Kriéger suggested was used as a slaughterhouse,<sup>44</sup> does not occur in any upper temple of Dynasties 4-6.

A room with a single pillar exists to the south between the five shrines and the *zh* in the temples of Dynasties 5 and 6. This room is decorated with scenes.<sup>45</sup> Arnold compared this room with an apartment in the royal palace at Memphis used by the king on the occasion of the sed festival.<sup>46</sup> This room never occurred in the temples of the 4th Dynasty.

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<sup>43</sup> Roth, Phyles.

<sup>44</sup> Posener-Kriéger, Les archives, II, 507-508.

<sup>45</sup> See below, p. 512.

<sup>46</sup> Arnold, "Rituale," pp. 1-14.

V.4.2: THE DIFFERENT LAYOUT OF DYNASTY 4 UPPER TEMPLES

Khufu and Menkaura's upper temples introduced the portico, or recess located on the west side of the court. It does not occur in the 5th and 6th Dynasties.

The pr-wrw was introduced in Khafra's temple and continued in use throughout the Old Kingdom; his pr-wrw had pillars, similar to those in the temple of Neferirkare.

Khafra's temple has five doors leading to the five niches, a feature different from all other temples.

Menkaura is the only king in the Old Kingdom to have had one niche instead of five, and remains of the temple walls south of this long niche cannot be used to try to reconstruct five niches.

The zp in Dynasty 4 is located between the pyramid base and the temple wall, except in that of Khafra, where it has two different locations.

Magazines in Dynasty 4 are not as numerous as in Dynasties 5 and 6 and they have a different location.

Thus, the above points indicate that the monuments of Dynasty 4 represent a transitional stage between earlier temples and late 5th and 6th Dynasty temples.

V.5: COMPARISON OF THE OLD KINGDOM LOWER TEMPLES

There are six lower temples that have been excavated in the Old Kingdom;<sup>1</sup> and these are: the temples of Sneferu, Khafra, Menkaura of Dynasty 4, Sahure, Niuserra of Dynasty 5 and Pepi II of Dynasty 6. Arnold noted that the lower temples of Sahure, Niuserra, and Pepi II differ in their plans and permit little generalization.<sup>2</sup> The same situation occurs in the three temples of Dynasty 4.

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.

The entrance to the temple of Neferirkare was called in the Abousir Papyri the *rwt h3t*, which has four pillars in front of the temple.<sup>3</sup> Posener-Kriéger suggests that this unique structure could be the designation of the lower temple of Neferirkare.<sup>4</sup> Therefore, possibly *rwt h3t* is the name of the lower temple of the Old Kingdom in general.

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1 Arnold, "Rituale," p. 12.

2 Ibid.

3 Posener-Kriéger, Les archives, II, 496.

4 Ibid.

The entrance of the Old Kingdom lower temple is almost identical in all the temples, while that of Khafra has two entrances. Sneferu's has a different plan: The portico is the same in all the temples, except in that of Khafra; it has a different shape. There is no portico in Sneferu's temple. Additional rooms occur in that of Sahure and Niuserra. In that of Menkaura, a portico is located. However, in Khafra's there is a long hall with pillars located at the temple forepart.

Magazines are numerous in that of Menkaura and Pepi II; others do not have magazines. Khafra's rooms, located behind the five niches, have a different layout from the others and cannot be identified as magazines.

Menkaura's lower temple is similar in plan to the later Old Kingdom temples, except for the presence of the court and magazines; its unique court is similar to the Sphinx temple. The significance of this courtyard in Menkaura's temple doubly emphasizes the worship of Ra, rather than Osiris, who never occurred in the monuments of the Old Kingdom until the end of Dynasty 5.<sup>5</sup> (See discussion of statues.)

The lower temple had nothing to do with the mummification processes or the rituals, as discussed

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<sup>5</sup> See Baer, Rank and Title, p. 297, nt.; cf. J. G. Griffiths, The Origins of Osiris, Mäs 9, (Berlin: 1966).

above.<sup>6</sup> Neither does it have a relationship with Anubis, as suggested by Altenmüller.<sup>7</sup> It should not be identified with the so-called mrt building of Hathor, as proposed by Helck.<sup>8</sup>

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6 Arnold, "Rituale," p. 12.

7 H. Altenmüller, "Die Bedeutung der Gottes Hallen des Anubis im Begräbnis ritual." JEOL 22 (1971-72), p. 307.

8 Arnold, Rituale, pp. 12-13.

V.6: COMPARISON OF THE OLD KINGDOM CAUSEWAYS

The only complete causeways that we have from the Old Kingdom are those of Khafra, Sahure and Pepi II. All the causeways look similar in plan.<sup>1</sup>

The plan of the causeway shows that it is only a corridor linking the upper with the lower temples; the entrance on the lower end of each temple is narrow and scholars have suggested, therefore, that it was unsuitable for the passage of the burial procession of the king. Its shape and architecture confirm this idea. Furthermore, the temple of Neferirkare has no causeway, and this can confirm that the pyramid complex continued to have a function after the procession and the burial of the king took place.

<sup>1</sup> See G. Goyon, "Les narires de transport de la chaussée monumentale d'Ounas," BifAO 69 (1971), pp. 11-41; S. Hassan, "The Causeway of Unis in Sakkara," ZAs 80 (1975), pp. 136-144; M. A. M. Raslan, "The Causeway of Ounas Pyramid," ASAE 61 (1973), pp. 151-169; É. Drioton, "Une Représentation de famine sur un bas-relief égyptien de la v<sup>e</sup> Dynastie," BIE 25 (1942-43), pp. 45-54.

V.7: THE PROGRAMME 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 several 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 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 the Old Kingdom wall reliefs. They repeat from one royal temple in the pyramid complex to another, and they are repeated within each temple as well. The scenes therefore follow a programme, as do other aspects of the funerary establishment. By programme, I mean a systematic organization of the relevant elements (scenes in wall

reliefs, statuary, objects, architecture and personnel) so that they can fulfill a set of specific functions. The overall purpose of every programme is to confirm the perfect nature of each king's governance, and the special relationship this creates between himself and the gods, culminating in his own deification.

The wall reliefs in particular illustrate these fundamental ideas by depicting the governmental activities and rituals of each king and the special relationship with the divine world which thus created the subject matter.

The wall reliefs of Khufu's temples (the only ones of Dynasty 4 for which we have detailed evidence) have never been studied as a programme. Arnold, who summarized the 5th and 6th Dynasty scenes with regard to subject matter, did not analyze the pattern of these scenes and how they related to the temple location. To make this pattern clear and so understand better the rather incomplete remains of Dynasty 4, I will concentrate on the scenes of Sneferu of Dynasty 4, Sahure of Dynasty 5, and Pepi II of Dynasty 6.

The scenes from Khufu will be studied separately in comparison with these reliefs to establish the pattern of the scenes in his pyramid complex.

### V.7.1: THE SIGNIFICANCE OF THE SED FESTIVAL

The sed festival is a subject that occurs on the wall reliefs of the Old Kingdom temples, as well as during the entire span of Egyptian history. The meaning and significance of this festival is a subject of debate among scholars. It played an important role in Egyptian history for the living king, which is known since the time of Narmer of Dynasty 1. The wall reliefs of Niuserra, Sahure and Pepi II illustrate the activity of the king during this festival and picture the king as the primary figure.<sup>1</sup>

The Egyptian term for this ceremony is *hb sd*, which is translated wrongly in a Greek text as a regnal jubilee that the king celebrated every thirty years after his accession in order to renew his power and strength.<sup>2</sup> The sed festival is not a regnal jubilee because it was celebrated at irregular intervals, there being no fixed years for its celebration.<sup>3</sup> Its origins date back to Dynasty 1; Narmer's macehead shows the king seated in a

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1 K. Martin, "Sedfest (hb-sd)," pp. 782-790; W. Kaiser, "Die kleine Hebseddarstellung im Sonnenheiligtum des Neuserre," in Ricke festschrift BABA 12 (1971), pp. 87-105.

2 C. J. Bleeker, Egyptian Festivals, p. 114.

3 Ibid., H. Bonnet, Reallexikon der Ägyptischen Religionsgeschichte (Berlin: 1952), p. 158.

chapel, in front of him men are dancing, gods are shown, and captives and cattle are pictured as booty.<sup>4</sup> During the Old Kingdom and throughout Egyptian history, the temple reliefs contained representations of this festival. In the solar temple of Niuserra the depiction of the sed festival shows it is connected to a solar function.<sup>5</sup> The reliefs also show its religious significance and ideas of kingship through the scenes that always depict the king seated in his office with the crown of Upper Egypt and the crown of Lower Egypt. Sometimes, the king sits in two chapels and wears one crown in each.<sup>6</sup>

The scenes illustrate three types of rituals involved in this festival: the donning of the sed robe, the king sitting on his throne in the chapel wearing his crown, and finally, the cultic dance, when the king took off his robe and danced in his short kilt.<sup>7</sup> The rituals differ because there was one ritual for Upper Egypt and another for Lower Egypt; however, the robe is a very distinctive feature that always occurs in any scene depicting ritual activity involving the sed festival.

4 Bleeker, Egyptian Festivals, p. 98.

5 Kaiser, "Hebseddarstellung," pp. 87-105.

6 Bleeker, Egyptian Festivals, p. 98; see also E. Hornung and E. Staehelin, Studien zum sed fest (Basel: 1974), pp. 20-25.

7 Bleeker, Egyptian Festivals, pp. 101-106; Martin, "Sed fest," pp. 782-790.

The relationship of the sed festival to other festivals and to the king's activities can be seen through the wall reliefs; it can relate to the Libyan defeats, the victory and glory of the king, his coronation, his appearance in front of the gods, and also to the strength of the unification of Upper and Lower Egypt. Bleeker, in the conclusion of his study, explained that this festival "marked a critical phase in the king's relationship to the gods."<sup>8</sup> He pointed out that there were four significant elements concerning the sed festival:

1. The festival is a ritual which made a highly dramatic impact, but it is not a sacred drama; "it must have enthralled the people who were actively involved, as well as the onlookers, who were more passively affected by the fascination of this colorful cultic manifestation."<sup>9</sup>
2. The sed festival has also a magical aspect; "the king celebrated rituals which were not merely of a spiritual quality, but rituals which were also aimed at evoking divine life."<sup>10</sup>
3. The ritual pattern in this festival is to renew the office of the pharaoh as the high priest.

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<sup>8</sup> Bleeker, Egyptian Festivals, p. 120.

<sup>9</sup> Ibid., p. 122.

<sup>10</sup> Ibid.

4. The element of mystery in the sed festival is in the king's glory when he wears the sed robe.

There are four scholars who also commented on the function of the sed festival. Brinks believes that it represents the king as a ruler by the renewed presentation of the scepter, as well as the bow and arrow.<sup>11</sup> Bonnet described it as an overwhelming presentation of royal power.<sup>12</sup> Hornung pointed out that the sed festival was to guarantee the royal power.<sup>13</sup> Arnold suggested that the sed festival was a renewal rite for the life and strength of the king and to guarantee his royal power.<sup>14</sup>

Since it is frequently represented in many locations of the complex, the sed festival is an important element in the pyramid complex. (plans: 32-35)

So far as the wall reliefs are concerned, the following subjects either directly concern the sed-festival; or depict the powers that are renewed through the festival and which entitle the king to carry out the festival.

1. The king celebrating a good government; this can be established through the scenes of the offering estates to

11 Brinks, Entwicklung, p. 159.

12 Bonnet, Reallexikon, p. 159.

13 Hornung and Staehelin, Sed fest, pp. 20-25.

14 Arnold, "Rituale", p. 11.

secure offerings for the cult and his victory over enemies. These scenes are repeated throughout the pyramid complex.

2. The king appears on a throne with his sed festival robe to represent his government rule or himself as a ruler. This scene appears in various places of the upper and sometimes the lower temples.

3. The king received by the gods as a divine equal. This appears in many places in the complex.

4. The king appears celebrating a dance; he is shown taking off his robe and wearing only a skirt, and dancing joyfully because he accomplished what the gods required of him.

5. The final stage after the depiction of the king's activities, the gods are shown giving benefits to the king, by giving him offerings and accompanying him to the offering chapel, or *zh*, which is the last room in the temple.

The (*h*) in the pyramid complex is the palace where the king left his robe before he performed his dance.

V.7.2: THE PROGRAMME OF SNEFERU WALL RELIEFS

Unfortunately, reliefs have survived only from the lower temple of Sneferu, and, therefore, we do not know if the scenes were repeated elsewhere in the complex.<sup>1</sup>

The lower temple is rectangular with its axis directed north-south; it is a very simple structure.<sup>2</sup> The long narrow hall of the temple is entered through the doorway; it is decorated with sculptured friezes on the eastern and western walls. On the west wall, the frieze depicts the royal estates of Upper Egypt; they are females with the names of the nomes of Upper Egypt.<sup>3</sup> The same reliefs are represented on the eastern wall, but with royal estates of Lower Egypt. (plan: 32) Above the friezes are reliefs with scenes representing the king in front of different gods.<sup>4</sup> No reliefs have been found on the magazines flanking the narrow hall or the courtyard.

The walls of the portico were also adorned with royal estates. The pillars of the portico were decorated with scenes of the sed festival and the king making

<sup>1</sup> See A. Fakhry, The Monuments of Sneferu at Dahshur II: The Valley Temple, 2 pts. (Cairo: 1961).

<sup>2</sup> Fakhry, The Pyramids, p. 80.

<sup>3</sup> Fakhry, Valley Temple, I, 19-58.

<sup>4</sup> Ibid., figs. 18, 25; A. Fakhry, "The Excavations of Sneferu's Monuments at Dahshur, Second Preliminary Report," ASAE 52 (1954), pp. 563-594.

ceremonial visits. Other pillars depict the king standing in front of the gods or showing Sneferu embraced by the lion goddess.<sup>5</sup> The sed festival scene shows the king wearing his robe and the crown of Upper Egypt while holding in his hand the flail.<sup>6</sup> Another related scene shows the king wearing the skirt and dancing with the flail in his right hand.<sup>7</sup> (plan: 32)

The repetition of scenes within the lower temple suggests that the wall reliefs were used only in the lower temple, and not additionally in the upper, although this cannot be proved in the present state of our knowledge. The chapel façades were decorated with high reliefs; above the opening of each chapel the names of the king were carved, flanked by emblems and stars representing the sky.<sup>8</sup>

The programme of Sneferu's wall reliefs include scenes depicting royal estates to assure offerings for the king's cult from Upper and Lower Egypt, and in the same location, the reliefs depict the king in front of the gods to show his relationship to the divinity. The royal estates are repeated again in the same building at

5 Fakhry, Valley Temple, pp. 59 ff.

6 Ibid., fig. 72.

7 Ibid., fig. 63.

8 Ibid., pp. 111-122; cf. K. Sethe, "Der Horus- und der Nbtj-name des königs Cheops," ZAS 62 (1927), pp. 1-3 for comparison of the names.

the portico. After that, the king is shown celebrating the sed festival to show both his victory on establishing the offerings and his divinity. In the same area of the sed festival scenes, the king is shown with depictions of himself and the gods that also attend the sed festival. Finally, the king is shown putting his titles and names on the final register. (see plan: 32)

### V.7.3: THE PROGRAMME OF SAHURE WALL RELIEFS

The pyramid complex of Sahure is a very good 5th Dynasty example by which to discuss the programme of the wall reliefs. The pyramid complex has the elements of the lower temple, causeway and upper temple.<sup>1</sup>

The decoration in the lower temple of Sahure contained subjects of wall reliefs, different from other Old Kingdom wall reliefs.<sup>2</sup> On the north wall of the first portico located to the south are hunting scenes of the king, including different types of animals and birds.<sup>3</sup> In the first portico of the lower temple, located to the east, the ceiling is decorated with stars and contains two scenes: The one on the southwest wall shows a sed festival scene with the king seated, wearing his robe and holding a flail in his hand. Around him are hieroglyphic inscriptions, and in front of him are scenes of priests and a priestess giving offerings to animals.<sup>4</sup>

The second scene on the same wall, located on the pillars of the hall, as is the case in Sneferu's lower

<sup>1</sup> Stadelmann, Pyramiden, pp. 164-172; cf. J. Baines, "The Destruction of the Pyramid Temple of Sahure," GM 4 (1973), pp. 9-14.

<sup>2</sup> Borchardt, Sahure, II.

<sup>3</sup> Ibid., pl. 15.

<sup>4</sup> Ibid., pl. 45.

temple, contains scenes of dedicatory inscriptions with the king's names and titles.<sup>5</sup>

The other hall, located on the west of the lower temple, has scenes on the southeast wall showing gods and goddesses; one of them is Khnum, and the goddess in front is holding Sahure with two hands,<sup>6</sup> as if the goddesses are giving birth, attesting to the divine origin of the king.

On the southwest wall of the same hall are scenes portraying the god in his holy place and the king as god in his sanctuary; in front of him is a priest. Another register shows Shesat in her sanctuary with other deities. The last register shows officials slaughtering animals.<sup>7</sup> Other scenes depicted on the northwest wall include the king in the shape of a giant sphinx, trampling Libyans and Asiatics; under the sphinx's legs lie two foreigners, and in front of him another one is shown to be frightened. Above this scene is another that shows ships under sail in two registers, and in the last register is a group of soldiers; above them is the cartouche of Sahure.<sup>8</sup> (plan: 33)

<sup>5</sup> Ibid., pls. 69, 64.

<sup>6</sup> Ibid., pl. 18.

<sup>7</sup> Ibid., pl. 19.

<sup>8</sup> Ibid., pls. 8-10; vol. I, p. 33.

The causeway has scenes on the east end of the north walls depicting in the upper register, four gods and goddesses with the king. Held in their left hand is a rope holding down Libyan and Asiatic captives. Also, each of the gods and the king are trampling captives. The same scene is repeated in the third and fourth registers, but with different gods and goddesses and different captives; in front of them are hieroglyphs in three rows.<sup>9</sup>

The upper end of the vestibule of the upper temple pr-wrw has reliefs showing royal estates bringing offerings to the king.<sup>10</sup> On the northeast wall of the corridor before the court wshw are illustrated scenes of ships under sail, and a portion of a scene showing men carrying offerings.<sup>11</sup> On the other side of the south wall of the same corridor are scenes showing the king in the presence of his officials and courtiers.<sup>12</sup>

On the north wall of the corridor behind the court are scenes of the king hunting and fishing; lotus and papyrus are also depicted.<sup>13</sup> There are also scenes on the south corridor behind the court. On its north wall

<sup>9</sup> Borchardt, Sahure, II, pls. 5, 6, 7, 18; see more details of the captives on pls. 67.

<sup>10</sup> Ibid., pl. 16.

<sup>11</sup> Ibid., pl. 14.

<sup>12</sup> Ibid., pl. 32.

<sup>13</sup> Ibid., pl. 16.

there are scenes in two registers representing eight gods, such as Thoth and Horus, as well as a representation of nome estates.<sup>14</sup> On the same wall to the east are large-scale representations of the king wearing the Atef crown and giving offerings to Bastet; behind him are his courtiers.<sup>15</sup> (plan: 33)

On the south wall of the southern corridor behind the court, again the king is depicted on a large scale, but here he holds his arrow; behind him is the palace façade and his courtiers; in front of him appear many different types of animals.<sup>16</sup> The same wall shows the king hunting gazelles; behind him is depicted his successor, Neferirkare is depicted. There are different types of animals represented in this scene, such as horned creatures, deer, and antelopes. In the lower register people work in the palace of the king.<sup>17</sup> There are other scenes in the area south of the courtyard, just before the cult pyramid. On the west wall, there are gods and goddesses and the king; one of the deities is the Nile god. Also included are scenes of royal estates and people slaughtering animals. This later scene continues onto the south wall.<sup>18</sup> (plan: 33)

<sup>14</sup> Ibid., pls. 20-21.

<sup>15</sup> Ibid., pls. 33-36.

<sup>16</sup> Ibid., pl. 17.

<sup>17</sup> Ibid., pl. 17.

<sup>18</sup> Ibid., pls. 28-29.

The north wall of the open court illustrate Asiatics with foreign pottery vessels, animals and birds.<sup>19</sup> Scenes of the goddess Seshet registering the number of foreign captives are on the south wall. A Libyan chieftain and his sons and wife stand nearby in front of the goddess. In the second register animals are taken as booty and their numbers are recorded: 123,440 head of cattle, 223,400 asses, 232,413 deer and 243,688 sheep. The third register shows the king standing, before him are two chieftains and their wives.<sup>20</sup>

On the north side of the corridor behind the court towards the sanctuary, we find the king accompanied by his courtiers, witnessing the departure of twelve seafaring ships to a land whose name is not written<sup>21</sup>; it is thought to be Syria and Palestine.<sup>22</sup> On the south side, we see the king and his courtiers watching the return of the ships laden with cargo and carrying a group of Asiatics, who are not prisoners, but are commercially employed, or connected with diplomatic errands.<sup>23</sup>

To the northwest of the same corridor is a room in which there are scenes of the king at the sed festival, holding the flail and sitting in his robe; before him are

19 Ibid., pls. 3, 5.

20 Ibid., pls. 1, 4.

21 Ibid., pl. 11.

22 Edwards, The Pyramids of Egypt, p. 163.

23 Borchardt, Sahure, II, pls. 12-13.

priests and a priestess giving offerings to horned animals.<sup>24</sup>

In the offering room, or *zh*, are scenes of Horus and Anubis bringing gifts to the king.<sup>25</sup> These reliefs are on the west, north and south walls of the room. Finally, in one of the southern magazines are reliefs showing the king holding an investiture. Edwards thought that this room contained specimens of gold decorations given by the king to his officials, perhaps for distinguished service.<sup>26</sup>

The discussion above details the subjects of the wall reliefs. The distribution of the scenes are shown in plan 33, but the remarkable fact of this programme is that, the scenes are repeated in different areas of the pyramid complex. For example, the scene of the king and the gods capturing Libyans and Asiatics on the lower end of the causeways is also shown in the lower temple.<sup>27</sup>

In the *pr-wrw*, royal estates are shown as offerings to the king. This scene is also depicted in the lower temple. The scene of the king hunting and fishing shown

<sup>24</sup> Ibid., pl. 45.

<sup>25</sup> Ibid., pl. 23.

<sup>26</sup> Edwards, The Pyramids of Egypt, p. 164.

<sup>27</sup> See J. Osing, "Libyan, Libyer," LÄ 23, III, 7 (1979), pp. 1015-1033; on the shape of the king as a sphinx, see H. Goedicke, "A Lion-Cult of the Old Kingdom Connected with Royal Temple," RdE II (1957), pp. 57-60; V. Schweitzer, "Löwe und sphinx im Alten Ägypten," Ägfo 15 (1948), pp. 25-32.

on the north corridor behind the court, is also found in the southern portico of the lower temple. The gods and representative nomes in the southern corridor are found also in the lower temple and on the pr-wrw. (plan: 33)

The scene of the king with his courtiers giving offerings to Bastet is also shown on the upper temple twice. All these repeated scenes can be seen on Sahure's programme. He is shown hunting in the marsh to show his power, and he brings animals to be slaughtered for the gods. Also, he bestows all offerings from the estates before the gods. The goddess Seshat witnesses the number of Asiatics and Libyans that the king captured, and the king sends ships to bring back offerings from foreign lands. He is attended by his courtiers in the palace, showing the loyal foreigner who came to give tribute to him. The king rewards his officials for their good services. Lastly, there are scenes of the sed festival to show that the ruler did all of the above things based on Maat. Therefore, the king in the zḥ receives offerings from Horus and other gods because they are satisfied with what he did in his lifetime; thus, he has earned divinity.

The meaning of the repetition of the scenes as shown in the plan is that, it is a grant duty of the king to the gods; the king also intended to depict the perfect

life which he wished to live in the otherworld as a  
divine god.

V.7.4: THE PROGRAMME OF PEPI II WALL RELIEFS

The pyramid complex of Pepi II has all the architectural elements with which to reconstruct the wall reliefs reconstructed to their original positions.<sup>1</sup>

On the entrance to the lower temple are reliefs depicting the names and titles of Pepi II.<sup>2</sup> In the vestibule of the lower temple were fragments that, when reconstructed, show the king trampling the Libyans and Asiatics, and fowling in the marshes; he also appears with gods and goddesses.<sup>3</sup> (plan: 34)

The king represented as a sphinx, and also as a griffin trampling under his feet the Asiatics and Libyans, is seen on the east end of the causeway. There also are captives being led to the king by gods and goddesses. The goddess Seshat records the number of victims and booty acquired.<sup>4</sup> (plan: 34)

On the upper end of the causeway there are large scale, representations of the king seated on a throne and wearing the crown of Upper and Lower Egypt. In front of him is a large procession of royal estates carrying

<sup>1</sup> Jéquier, Pepi II, II.

<sup>2</sup> Jéquier, Pepi II, III, 4.

<sup>3</sup> Ibid., pls. 5-9.

<sup>4</sup> Ibid., pl. 12, 15.

offerings in the presence of Horus, Hathor and other gods and goddesses.<sup>5</sup>

The pr-wrw of the upper temple has scenes of the king hunting hippopotami in a boat made of reeds; behind him are his officials and courtiers.<sup>6</sup> There is also a scene of the king smiting two foreigners.<sup>7</sup> The pillars of the wsht court are decorated on the outer face with figures of the king and gods.<sup>8</sup> (plan: 34)

On the corridor after the court to the south, we find the king in the act of smiting a captured Libyan chieftain on the head; behind the chieftain are his two sons and his wife begging for forgiveness.<sup>9</sup> This scene is a replica of one in Sahure's upper temple; even the names of the wife and sons are repeated here exactly, despite the fact that Sahure and Pepi II are separated by a period of almost 200 years.

Another scene in the same area depicts the king, during the sed festival, wearing the crown of Upper and Lower Egypt and holding in his hand the flail; he is shown running four times. In another register connected with the festival the king stands near a high pole supported by four wooden stays; two men climb the stays

<sup>5</sup> Ibid., pls. 19-23.

<sup>6</sup> Ibid., pl. 32.

<sup>7</sup> Ibid., pl. 36

<sup>8</sup> Ibid., pl. 35.

<sup>9</sup> Jéquier, Pepi II, II, pl. 8.

while attendants hold ropes attached both to the stays and the pole.<sup>10</sup> This scene also occurred later in the New Kingdom and the Greek and Roman Period.<sup>11</sup> There is a relief of the king vanquishing his enemies in the south room. Jéquier has pointed out that this scene also occurred in the time of Amenhotep II at Karnak.<sup>12</sup> The king stands in the center, and behind him is a ka statue, while Seshat records the number of slaughtered captives.<sup>13</sup>

In the room with one pillar scenes occur on all four sides; the king is received by deities of Egypt and by high officials greeting him. The number of gods and goddesses represented are 100, there are 45 officials bowing before the king; other representations in the same room show butchers slaughtering animals.<sup>14</sup> (plan: 34)

The ceiling of the offering room, zḥ, is decorated with golden stars. Its north, south and east walls have reliefs of the king sitting in front of an offering table, his ka statue is behind him. In front of them, is a procession of gods, priests, and offering bearers.

10 Ibid., pls. 37, 42, 45.

11 Edwards, Pyramids of Egypt, pp. 182-183.

12 Jéquier, Pepi II, II, pl. 36.

13 Ibid.

14 Ibid., pl. 46.

The lowest register represents the typical scene of the unification and Nile gods.<sup>15</sup> (plan: 34)

These reliefs are set in a programme that illustrates different subjects so that the king can be assured divinity. The repeated scene of the Libyans on Sahure and Pepi II indicates that the artisans, when they started to decorate the pyramid complex, knew exactly what they would do. Therefore, the scenes did not always record historical events from the king's life, but simply followed the programme.

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<sup>15</sup> Ibid., pl. 61-70.

### V.7.5: THE PROGRAMME OF KHUFU WALL RELIEFS

The wall reliefs of Khufu's pyramid complex come from two main sources:

#### 1. Giza

There are fragments of reliefs found at Giza beside the upper temple, causeway, and queen's pyramids.<sup>1</sup> The subject matter is the sed festival.<sup>2</sup> Because of their provenience, it is generally assumed that all these fragments were originally part of scenes in the upper temple.<sup>3</sup>

#### 2. Lisht

Many fragments of wall reliefs were found re-used at the pyramid of Amenemhet I at Lisht.<sup>4</sup> The subjects of these reliefs are: funerary estates, foreign captives, representations of ships, animals, and the sed festival.<sup>5</sup> Goedicke assigned these blocks to the upper and lower temples on the basis of the placement of other Old Kingdom wall reliefs.<sup>6</sup>

<sup>1</sup> Reisner and Smith, Giza, II, figs. 5, 6A, 13; Hassan, Giza, X, pls. V-VII, Hayes, Scepter, I, 64; Goedicke, Re-used Blocks, pp. 8-9; see discussion on Lauer, "Note complémentaire," pp. 111-123

<sup>2</sup> Goedicke, Re-used Blocks, p. 9.

<sup>3</sup> Reisner and Smith, Giza, II, figs. 5, 6A, 13; Hassan, Giza, X, pls. V-VII.

<sup>4</sup> Goedicke, Re-used Blocks.

<sup>5</sup> Ibid., pp. 151-157.

<sup>6</sup> Ibid.

There are other sources of reliefs belonging to the pyramid complex of Khufu. A fragment with a scene of the sed festival depicting a white hippopotamus was found built into the wall of a staircase inside Bab el futtuh in Cairo.<sup>7</sup> Herodotus described the causeway of Khufu as one carved with figures.<sup>8</sup>

The subject matter and location of the reliefs will be studied and assigned locations based on parallels with other Old Kingdom reliefs and comparisons to Goedicke's placement. In the scene which includes Khufu's titulary, there is a representation of a hawk's wing hovering above the king's names; beside the cartouche appears the head of a foreigner, thought to be Libyan.<sup>9</sup> Goedicke assigned this scene to the lower temple of Khufu and suggests that a statue of the king should be placed against the wall under Khufu's names, combining the use of both reliefs and sculpture.<sup>10</sup> Goedicke assumed that, if the plan of Khufu's temple is similar to that of Khafra then this scene should be placed on the west wall of the antechamber's north wing.<sup>11</sup> (plan: 35)

<sup>7</sup> Ibid., p. 9.

<sup>8</sup> Herodotus, Histories, II, paragraph 124, 424-427.

<sup>9</sup> Goedicke, Re-used Blocks, pp. 12-13.

<sup>10</sup> Ibid., p. 13.

<sup>11</sup> Ibid.

The representation of the foreigners does not occur on the lower temple of Sneferu,<sup>12</sup> but they are represented on the lower end of the causeways of Sahure and Pepi II.<sup>13</sup> Such a scene occurs first in Khufu's complex, and may be the origin of the depiction of foreigners in this manner. Therefore, the best location for this fragment would be at the lower end of the causeway. (plan: 35)

The subject matter of other scenes include depictions of royal estates, both male and female, bringing offerings.<sup>14</sup> Similar ones are found in Sneferu's temple, but only female estates are represented, and they are shown in the portico and central hall of the lower temple.<sup>15</sup>

The royal estates also flank the side entrance of Sahure's causeway and used alot on the upper part of Pepi II's causeway.<sup>16</sup> Therefore, the royal estates should be carved on the walls of the first hall of the lower temple, based on a parallel with Sneferu's temple, as assigned by Goedicke. (plan: 35)

<sup>12</sup> See plan, no. 32.

<sup>13</sup> Ibid.

<sup>14</sup> Goedicke, Re-used Blocks, pp. 13-17.

<sup>15</sup> Fakhry, "The Excavations of Sneferu's," p. 577.

<sup>16</sup> Borchardt, Sahure, II, pls. LXIV-LXVI; Jéquier, Pepi II, III, pls. XIX, XXVIII; see also plans 33-34.

Other subjects of the royal reliefs portray a procession of oxen, above which are the names of Khufu.<sup>17</sup> This scene is identified by Goedicke as a representation of captives or royal offerings.<sup>18</sup> I believe that this scene represents the royal offerings that came through the royal domain of the foreign countries. The names of Khufu above the oxen indicates that the king brought the offerings from foreign countries and led them to the temples and are led by him. Goedicke suggests that this example came from the lower temple, but this scene should be placed on the causeway to repeat the scene of the royal offerings in the lower temple; and also the foreign captives on the causeway. (plan: 35)

These names of Khufu, categorized as dedicatory scenes, were placed by Goedicke in the lower temple.<sup>19</sup> I agree that the scene should be placed in the first hall of Khufu's lower temple, (plan: 35) based upon similar scenes in the temples of Sneferu and Sahure.<sup>20</sup>

Other fragments have hieroglyphic inscriptions and are part of a papyrus boat. Such a scene is found in Sahure's lower temple,<sup>21</sup> where the activity of the king and a representation of the royal vessel is represented.

17 Goedicke, Re-used Blocks, pp. 18-19.

18 Ibid., p. 19.

19 Ibid., pp. 19-20.

20 See plans 32-33.

21 Goedicke, Re-used Blocks, pp. 20-22.

(plan: 35) The boat may have been used by the king for his sporting excursions into the marshes.<sup>22</sup> Therefore, this fragment came from the lower temple.

The sed festival scenes are numerous and represent different ceremonies. They are connected with the upper temple, based on the scenes that are found in the eastern field.<sup>23</sup> Following Goedicke's suggestion, the sed festival scenes, which are associated with the walls of the court of the upper temple, depict Wep-wawet as a man with a canine head; this particular scene has no parallel in any other temple.<sup>24</sup> The king is also shown in a short kilt where he performs ceremonies in the festival. He also stands with officials of his retinue, as well as other officials at the festival.<sup>25</sup> Above them is the title hrp (h, "controller of the palace."<sup>26</sup> Furthermore, there is a representation of the semat priest at the sed festival.<sup>27</sup>

On the other wall of the court is a scene representing the goddess Meret performing an act in the sed festival; it is labelled Meret of Upper Egyptian

<sup>22</sup> Ibid., p. 22.

<sup>23</sup> See Smith, HESPok, p. 157, Reisner and Smith, Giza, II, figs. 5, 6; Lauer, "Note complémentaire," pp. 111-123.

<sup>24</sup> Goedicke, Re-used Blocks, pp. 29-30.

<sup>25</sup> Ibid., pp. 31-38.

<sup>26</sup> Ibid., p. 38.

<sup>27</sup> Ibid., p. 41.

Lands.<sup>28</sup> Meret is always connected with the sed festival. She can represent the goddess of music and she receives the king when he approaches the temple to perform the ceremonies at the sed festival.<sup>29</sup> This depiction suggests the association between Meret and Hathor, also a goddess of music.

The arrangement of the sed festival scenes in the court of Khufu can be understood as: Meret receiving the king and introducing him to perform the ceremonies of the sed festival, an official of the king's retinue, and the king with a member of his suite.<sup>30</sup>

The fragment that was found in Bab el Futuh showing the sed festival with a white hippopotamus, and is associated with Khufu's monument,<sup>31</sup> occurs in the pr-wr of Pepi II. This location may relate to the portico of Khufu's upper temple, and be therefore, its original provenience.

The other wall of the portico may have had scenes showing offerings of the gods to the king, since that is what is depicted in other 4th and 5th Dynasty temples.<sup>32</sup> However, no fragments of such reliefs occur in Khufu's

<sup>28</sup> Ibid., pp. 36-38.

<sup>29</sup> A. Blackman, "On the Position of Women in Ancient Egyptian Hierarchy," JEA 7 (1921), pp. 8-14.

<sup>30</sup> Goedicke, Re-used Blocks, pp. 32-38.

<sup>31</sup> See plan, no. 35.

<sup>32</sup> Ibid.

blocks. The lack of reliefs showing gods giving offerings may be due to the fact that the new cult of Khufu as Ra would have equated the king with the god.

There are other scenes found at Lisht that show members of the royal suite and an attendant with a sunshade. Goedicke placed this scene in the upper temple;<sup>33</sup> but the upper temple of Khufu is not the only source of scenes, based on parallels with other temples, in which the scenes are always repeated. Also, the upper temple has less wall space because it is not as complex as those of the 5th and 6th Dynasty temples. Therefore, I suggest that this scene may be depicted in the second hall of the hypothetical lower temple, especially as later similar scenes are distributed between the two temples.

There are other nautical scenes, one of which shows the stern of a boat being paddled; Goedicke places it in the upper temple.<sup>34</sup> However, I suggest instead that it should be placed in the upper end of the causeway, because plans of later temples differ from the plan of Khufu's upper temple. This scene may represent the activity of the king. For the location of scenes of

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<sup>33</sup> Goedicke, Re-used Blocks, pp. 56-57.

<sup>34</sup> Ibid., pp. 95-96.

ships under sail;<sup>35</sup> Goedicke suggests the lower temple, for which it is a suitable place.

The programme of the royal reliefs seems to have been fixed at the time of Khufu and followed through to other monuments during the Old Kingdom.

In the lower temple are scenes of the royal estates bringing offerings, and Khufu's titles are depicted on the first hall of the hypothetical lower temple. The second hall depicts scenes of royal activities, such as the king sporting in the marshes, ships under sail, and scenes of the royal members of the suite.

The causeway has in its lower end, the king's titles, and a scene repeated from the lower temple. Also shown is a representation of Libyan captives, illustrating the king's victory over foreigners. In the middle of the causeway there is a scene of a procession of oxen, representing foreign offerings as an indication of the king's power. The royal estates of the lower temple and the foreign representations are depicted in the lower end of the causeway.

The scene of a boat being paddled, which appears on the upper end of the causeway is also repeated on the lower temple. The plan of the upper temple shows that scenes should only be present in the court and the

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<sup>35</sup> Ibid., pp. 100-104.

portico. The fragments found beside the temple indicate that the upper temple should have the scenes of the sed festival and the king with his officials.

The lower temple of Khafra is not decorated with royal reliefs, and we do not know if this temple was intended to be decorated or not. It could be suggested that the granite wall of the temple was cased with limestone and decorated. However, we do not have any evidence to support this hypothesis.

There is only one relief directly associated with Khafra, found refused at Lisht. It shows the cartouche of Khafra, his royal title nswt bity, and also a falcon wearing the double crown.<sup>36</sup> This fragment led Rieke to reconstruct the scenes of Khafra's court, based on the titles and the depiction of Horus.<sup>37</sup> Two fragments found at Giza and Bubastis depict the same scene.<sup>38</sup>

It is impossible to reconstruct the programme of the wall reliefs of Khafra, since we do not have more blocks; but, we do know that there are other blocks still in the core of the pyramid of Amenemhet I that could have belonged to Khafra. I believe that Khafra should have followed the same formula as that of Khufu in regard to

<sup>36</sup> Ibid., pp. 23-24.

<sup>37</sup> Rieke, Bemerkungen, II, 50 ff; cf. Goedicke, Re-used Blocks, p. 24.

<sup>38</sup> Goedicke, Re-used Blocks, p. 24; Hölscher, Chephren, p. 55, fig. 45.

the program of wall reliefs in his pyramid complex. In Khafra's zḥ, however, there should be scenes showing Khafra in front of Khufu as Ra. Menkaura's pyramid complex does not have any scenes because it was completed with mudbrick. It may have been planned before Menkaura's reign to have been decorated, but no programme was begun, due to Menkaura's death.

V.8: THE PROGRAMME OF STATUARY IN THE MENKAURA PYRAMID  
COMPLEX

There is no pyramid complex in the Old Kingdom that contained intact statuary except that of Menkaura. The upper and lower temples of Menkaura were found to contain statues and statuettes distributed in various places of the temples.<sup>1</sup> Tables 17-18 give a list of all the statues and statuettes that were found within these temples, including information about the stratigraphic position, material, and size of the object.<sup>2</sup> At the same time, Tables 19-20 give a list of all the large statues that could have been set in the original programme of Menkaura and Shepseskaf. Therefore, it is useful to list them in separate tables.

The distribution plans (36-38) indicate the exact position of all the statuary that was found within the upper and lower temples, so that one can distinguish between the stratigraphic position of the large statues.<sup>3</sup>

Seven statues and statuettes found in the upper temple are made of slate and alabaster.<sup>4</sup> There are only two statues that we have to consider because of their

<sup>1</sup> Reisner, *Mycerinus*, pp. 108-114.

<sup>2</sup> See Table, nos. 17-20.

<sup>3</sup> See plan, nos. 36-37.

<sup>4</sup> See Table, no. 17.

large size,<sup>5</sup> and these could be statues made the original programme of Menkaura's cult.

The first statue is over life-sized and made of alabaster. It is inscribed with the name of Menkaura and was found broken in many pieces, it is now restored and exhibited at the Museum of Fine Arts, Boston.<sup>6</sup> There is no doubt that this large statue was originally made by the king for his programme, because the worship of Menkaura would never have produced such a statue after the death of the king. Moreover, the workshops in the Old Kingdom provided the cult with cult objects and statuettes, not with large statues.

The statue was found in the northern magazines;<sup>7</sup> an unlikely location for it. It must have been placed in the temple and subsequently damaged, the pieces being collected and then stored in the rooms of the northern magazine. Smith felt that this statue could have been placed in the upper temple in a niche;<sup>8</sup> a feature that Reisner suggested was in the granite casing of this room.<sup>9</sup> I do not feel that this room would have contained

<sup>5</sup> Ibid., 20.

<sup>6</sup> W. S. Smith, Ancient Egypt as Represented in the Museum of Fine Arts (Boston: 1952), p. 44.

<sup>7</sup> See Table, no. 20.

<sup>8</sup> Smith, Art and Architecture, revised by Simpson, p. 116; Smith, HESPOK, p. 35.

<sup>9</sup> Reisner, Mycerinus, p. 29; cf. Maragioglio and Rinaldi, L'Architettura, VI, 52.

this huge statue, because the proportions of the statue are too big for the proposed architectural setting. Rather, it should have contained a statue or cult object of Ra and Hathor. The statue is suited for the temple portico, on the offering room entrance. It is possible that there was another statue of the same size.

The other statue,<sup>10</sup> which represents the king seated, is a typical type of the Old Kingdom. Based on Ricke's restoration of the statues around Khafra's upper temple court, I suggest that this seated statue was part of a similar programme in Menkaura's court.

The statuary programme of Menkaura's lower temple, whether initiated by him or executed by his successor Shepseskar, is more clear. However, there has been no systematic study, of the statuary programme 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 programme for the wall reliefs, there undoubtedly would be one for the statuary.

Table 18 shows 44 statues and statuettes that were found in the lower temple. These are all that have survived, and we do not know how many of them were part of the original temple programme. The small statuettes

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<sup>10</sup> Table, no. 20.

are not discussed here because they could have been made later in the Old Kingdom.

Table 19 shows the number of large statues that were found in the temple. The most important of these are the triads, representing Menkaura, Hathor, and one of the Upper Egyptian nome goddesses. Most of these pieces were found in fragmentary condition, except for the five triads. They are the best preserved and show a high artistic style of the Old Kingdom.<sup>11</sup>

The distribution Plan 36 shows the location where these triads were found. Four statues were found in the so-called thieves' hall in the corridor of the southern magazines. Another triad was found on the court of the temples; and, fragments of three nome triads were also found; pieces of one in the thieves hall; and pieces of the second triad in the portico.<sup>12</sup> The third was found in small alabaster 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, we have seven triads that are securely allotted.

The characteristic style of the four well-preserved triads represents the king always wearing the crown of

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<sup>11</sup> See J. Wilson, "The Artist of the Egyptian Old Kingdom," *JNES* 6 (1947), P. 231.

<sup>12</sup> Plan, no. 36.

Upper Egypt and he appears with Upper Egyptian nome representatives. No triads have been found with the king and Lower Egyptian nome representatives, nor does he wear the crown of Lower Egypt. Another important aspect of the characteristic style of the triads is that they always 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 the other, she is touching his arm with her right hand, while the left is embracing him; in the third triad, Hathor is touching his hand. Finally, the fourth one is depicting the hands of the king and the goddesses away from each other. These attitudes indicate a relationship among the triads.

The king is shown in these triads as being equal to Hathor in size. The inscriptions on the triads identify the king: "He is beloved of Hathor, mistress of the sycamore shrine, in all her seats."<sup>13</sup>

Fischer noted that Hathor as mistress of Dendera, is different from Hathor, mistress of the sycamore shrine.<sup>14</sup> But Allam indicated that the two are the same, since he found inscriptions at Giza giving Hathor the two

<sup>13</sup> Reisner, *Mycerinus*, p. 109.

<sup>14</sup> H. Fischer, *Dendera in the Third Millennium B.C. Down to the Theban Domination of Upper Egypt* (Locust Valley: 1968), p. 26, no. 97; cited by W. Wood, "A Reconstruction," p. 86.

epithets.<sup>15</sup> Hathor, therefore, held these two epithets, when her cult was important in the Old Kingdom and especially at Giza. Smith and Edwards suggested that Menkaura intended to have 42 triads, each one showing the king with a different nome goddess or god.<sup>16</sup>

Wood has two objections to this theory. First, she noted that all the triads show the king wearing the crown of Upper Egypt and wondered why none of the Lower Egyptian triads do not survive in the temple. She pointed out that, if the Lower Egyptian nome statues exist, then they should be made of limestone, not alabaster, referring to the alabaster fragments Reisner found. The second point Wood made is that the suggested number of life-sized triads to have existed in the court is unlikely.<sup>17</sup>

Wood believes that the eight chapels placed at the beginning of the temple would be the likely place for the triads: the four complete ones,<sup>18</sup> and the other fragmentary ones.<sup>19</sup> She based this reconstruction on the existence of the representatives of the estates in the entrance corridor of Sneferu's lower temple.<sup>20</sup> There is

<sup>15</sup> Allam, Hathorkult, pp. 21-22.

<sup>16</sup> Smith, Ancient Egypt, 44; Edwards, The Pyramids of Egypt, p. 138.

<sup>17</sup> Wood, "A Reconstruction," pp. 82-83.

<sup>18</sup> Ibid.

<sup>19</sup> Terrace, "A Fragmentary Triad," pp. 40-49.

<sup>20</sup> Wood, "A Reconstruction," p. 87.

no doubt that the northern corridor, portico, or the long hall could be a place for the triads. The most likely place for the triads would be these eight chapels, as Wood suggested, or the court.

I feel that the eight chapels would be unlikely because it is difficult to imagine that the triads represent only Upper Egyptian nomes. The inscriptions on one of them reads: "I have given to you all things which are in the south, all food, all offering, since thou hast appeared as king of Upper and Lower Egypt forever."<sup>21</sup> This inscription indicates that the representation of nome representatives on wall reliefs, have the same function as the representation of estates. Their purpose is to grant the king with offerings for the continuation of his cult and cult of the gods. The estates apply not only to the lower temple, the upper temple as well.

In general, I believe that throughout the Old Kingdom (including Dynasty 4) reliefs and statues go together in the same programme; but, due to an historical accident, there are no reliefs in Menkaura's temple. It seems to me that in Menkaura's complex, the triads are related to both the royal estates and shows the relationship between the king and the gods, since both nome representatives and the goddess Hathor appear.

<sup>21</sup> Reisner, Mycerinus, p. 109.

I believe therefore, that there was a set programme of 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 m. east-west and 41 m. north-south, which could accommodate any number of statues. The number of triads should not be restricted to 42 because we never see 42 royal estates of Upper and Lower Egyptian nomes in the wall reliefs of the temples. The number of the estate representatives of Upper and Lower Egypt differ. It is impossible to know for certain how many triads were in the court. Undoubtedly, at least sixteen, judging from the eight remaining Lower Egyptian triads and the eight proposed Upper Egyptian parallels. The fragments of triads found in the court may support the assumption that the triads were originally there.

Shepseskaf put statues instead of reliefs in Menkaura's pyramid complex because it would be less time consuming, and the statues could convey the same ideas that reliefs would have.

In the previous chapters, I argued that Menkaura did not follow his father and grandfather's new cult. He, through the influence of the priests of Heliopolis, returned to the worship of Ra. For this reason, Menkaura planned his lower temple to have an open court to emphasize his link with Ra. This court is not a regular

architectural feature of Old Kingdom lower temples. It is unique to the sun god, and its plan may have influenced Menkaura in the design of the Sphinx temple, which is nearby and has a solar design. The statues of Hathor found with the sun disk is an element that illustrates the link between Ra, Hathor and Menkaura.

The anteroom, located before the sanctuary hall, was intended to be for four seated alabaster statues of Menkaura because the bases of these statues were found in situ.<sup>22</sup> Wood suggested that the paired statue of Menkaura 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 Ra. The proper place for the pair statue should be the vestibule at the temple entrance.

Wood suggested also that the wooden statues that were found in the temple could be part of the original programme of the temple dedicated to the goddess Hathor, Mistress of the Sycamore tree. She based her hypothesis on the opinion that the wooden statues were of royal workshop origin rather than private.<sup>23</sup>

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<sup>22</sup> See Table, no. 19; Wood, *A Reconstruction*, p. 85.

<sup>23</sup> Wood, "A Reconstruction," p. 93; see also Lucas, *Materials and Industries*, p. 121.

I suggest the following programme of the statuary: the triads represent the king standing with his queen, (identified with Hathor); further, they represent the estates and the divinity of the king as Horus with Hathor and Ra. The standing and the seated statues, as a whole, represent the king in his palace. The seated statues in the temple anteroom and the offering room which shows the king's relationship to the gods.

In comparison with the wall reliefs that show the king smiting his enemies, one might expect that there should be statues to parallel this subject. The king's names in the reliefs are paralleled to 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 programme of the king.

Edwards calculated that the pyramid complex of Khafra alone contained between one and two hundred separate statues.<sup>24</sup> It also has been calculated that there were found three to four hundred fragments of royal statuary made of alabaster and diorite.<sup>25</sup> The only statuary programme that I suggest for Khafra is in the

<sup>24</sup> Edwards, The Pyramids of Egypt, p. 149.

<sup>25</sup> Hassan, Giza, VI<sup>1</sup>, 61.

lower temple, which contained 23 seated statues of the king placed on the T-shaped hall of the temple; one of them was found almost intact in a hole at the temple vestibule and seems to have been cut in a later period. This hole can be compared with the thieves hole of Menkaura's lower temple.

No statuary programme can be established for Khufu because no statues have yet been found at Giza, except for alabaster bases found inscribed with the king's name.<sup>26</sup>

The discovery of the triads of Menkaura and Hathor might suggest that every pyramid complex was dedicated to the deities of Ra, Hathor and Horus. On the triad, the king is Horus. Hathor is the mother and the wife of the king, and Ra is represented as the sun disk above the head of the goddess.

Schott indicated that there was a special relationship between Neith, Hathor, and the Giza necropolis, and the two goddesses were considered to be Ra's daughters.<sup>27</sup> A greater amount of evidence is available for the existence of a Hathor cult at Giza rather than for that of Neith, who is associated with it

<sup>26</sup> Smith, HESPOK, p. 20.

<sup>27</sup> S. Schott, "Ein kult der Göttin Neith," Das Sonnenheiligtum des Userkaf," BABA 8 (1969), p. 127.

only through a few titles. Neith may have these priests, because she was the daughter of Ra.

Hathor had priests and a priestess at Giza whose names are listed in the appendix. Hathor's name is also inscribed on the entrance of Khafra's temple and the symbol of Hathor is shown in the reliefs of Khufu at Light.<sup>28</sup>

The relationship between Hathor and Ra is clear since the earliest times because she acted as the sun eye and exercised the functions of Ra.<sup>29</sup>

Bleeker, in his conclusion on the Hathor cult, stated:

it would be fitting after Hathor as a sun-eye, especially fitting since the offer is made by the pharaoh, who ideologically is the son of the sun god. It is a homage to Hathor who is a royal goddess, because she gave birth to Re, the mythical king and because ideologically she is the mother of the pharaoh.<sup>30</sup>

Furthermore, the name of Hathor in Egyptian is Ht-Hr, and means the house of Horus and she was called the royal mother and linked with the king's life.<sup>31</sup> She is

<sup>28</sup> Goedicke, Re-used Blocks, pp. 38-39.

<sup>29</sup> C. J. Bleeker, Hathor and Thot: Two Key Figures of the Ancient Egyptian Religion (Leiden: 1973), p. 53; see also M. L. Buhl, "The Goddesses of the Egyptian Tree Cult," JNES 6 (1947), p. 80; E. Wente, "Hathor at the Jubilee, in Studies in Honor of J. A. Wilson, SAOC 35 (Chicago: 1969), pp. 83-91.

<sup>30</sup> Bleeker, Hathor and Thoth, p. 53.

<sup>31</sup> Ibid., pp. 25, 51.

the king's guardian and assists him in the ceremonies of the sed festival.<sup>32</sup> Ra 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 Ra.<sup>33</sup> The triads of Merkaura are the strongest evidence at Giza to support the existence and importance of the gods Ra, Hathor and Horus.

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<sup>32</sup> Ibid., p. 52.

<sup>33</sup> See for Ra: E. Winter's "Zur Deutung" pp. 222-223; W. Kaiser, "Zuden Sonnenheiligümern der 5 Dynastie," MDAIK 14 (1956), pp. 104-116; E. Hornung, Conceptions of God in Ancient Egypt: The One and the Many, translated by J. Baines (Ithaca, New York: 1985), pp. 100-142.

V.9: THE PROGRAMME OF CULT OBJECTS OF THE MENKAURA  
PYRAMID COMPLEX

Two kinds of objects were stored in the pyramid complex of Menkaura. 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 death. The pyramid complex of Menkaura is a good example for the study of this programme because it is the only pyramid complex at Giza in which such objects were found in the temples. Furthermore, one can see the pattern and the distribution of objects throughout the magazines in the upper and lower temples, perhaps as a model for the Old Kingdom. As I indicated above, there was a programme assigned for the architecture, wall reliefs and statuary. Also, there appears to be one for the cult objects as well.

The archaeological circumstances of the objects in Menkaura's temples can be understood from Reisner's statement on the archaeology and dating of the objects in the lower temple:

Thousands of fragments of statues, stone vessels, pottery, and other objects were found scattered over the temple site in all deposits, but especially in the floor debris of the court. A few of the pottery vessels may perhaps be ascribed to the

second temple or the later houses, but the majority were of Dynasty IV. The masses of utensils found in the southern magazines and in the portico, by their inscriptions and by comparison with the objects found at the pyramid temple, were proved to be of the time of Mycerinus or Shepseskaf.<sup>1</sup>

Most of the cult objects found in the pyramid temples of Menkaura are dated to Dynasty 4. Menkaura's lower temple contained the majority of them:

Thus it is clear that a considerable plundering of the magazines had taken place previous to the construction of the second temple and indeed before the building of the second series of house walls in the court. Fragments of statues, a fine copper jar, and other objects were found in the water-borne debris in the middle of the court. It was also evident that the destruction of the statues had already begun in the period of the first plundering of the magazines.<sup>2</sup>

The cult objects that were found in the northern magazines consist of: stone vessels, pottery, flint wands, flint implements, sets of model vessels made of stone and other objects.<sup>3</sup> Reisner, who indicated that these objects are broken and from disturbed contexts, believes that many objects of the same type were missing.<sup>4</sup>

<sup>1</sup> Reisner, Mycerinus, p. 45.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid., p. 42.

<sup>4</sup> Ibid.

Statues were found stored in the southern magazines; no cult objects were found there.<sup>5</sup> 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 as Reisner, who called them statue rooms, suggested. These magazines would have contained objects other than statues.

In the court of Menkaura's lower temple were found about 537 stone vessels and other objects.<sup>6</sup> Steindorff suggested that some of these stone vessels may actually have come from Khafra's pyramid complex. He based this hypothesis on the fact that very few stone vessels were found in Khafra's temples and on the impression that some of these vessels bear the name of Khafra.<sup>7</sup> Reisner, however, felt that none of these objects bore Khafra's name. He disregarded Steindorff's theory and believed that all these objects belonged to Menkaura's temple and are dated to Dynasty 4.<sup>8</sup> I concur that the objects found scattered in the lower temple of Menkaura are dated to Dynasty 4. The cult objects among them, however, would

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5 Ibid.

6 Ibid., p. 104.

7 Steindorff in Hölscher, Chephren, p. 104.

8 Reisner, Mycerinus, p. 104.

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 Menkaura, are more clear and may suggest the pattern of the placement of cult objects.

There were Old Kingdom potsherds of: jars and 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 finally, numerous fragments of stone vessels in the southern magazines of the upper temple.<sup>9</sup>

In the northern magazines of the upper temple were found 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 models of dishes and jars, a few pottery jars and bowl stand, broad flint knives, and fragments of alabaster statues.<sup>10</sup>

Similar artefacts were found scattered in the court and the inner part of the upper temple, and because of

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<sup>9</sup> Ibid., pp. 15-16.

<sup>10</sup> Ibid., pp. 17-18.

their similarity may have belonged originally to the northern and southern magazines.<sup>11</sup> These artefacts of the upper temple are dated by Reisner to the 4th Dynasty.<sup>12</sup>

The type of the objects in the southern magazines, especially the offering tables, suggests that they have a different function than those of the northern magazines. 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 artefacts to the original temple of Dynasty 4.

The interpretation of the cult objects in the royal temples, as discussed by Reisner, is that the objects served to supply the spirit with daily necessities of life in the other world.<sup>13</sup> These supplies were meant to provide the king with food and drink to use in the next life. Therefore, such items would be stored in jars to be ready for the king to use at any time, a type of magical supply. There are also other objects needed in the temples to maintain the daily offerings of the king, such as: flint implements for the opening of the mouth

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<sup>11</sup> Ibid., pp. 19-24.

<sup>12</sup> Ibid., pp. 103-105.

<sup>13</sup> Ibid., p. 98.

ceremony, stone offering slabs and perhaps stone bowls. Recently, Arnold has agreed with Reisner in regard to the necessity of these supplies that the king needs to use in the next life.<sup>14</sup>

The results of the excavation of the royal temples in Dynasty 5 show that similar equipment was found in the temple magazines. "These were manifestly not necessary to the ordinary food offering and magic recitations, but may have been intended for special ceremonies and formulas which have escaped us."<sup>15</sup> The records in the Abousir Papyri also indicate the importance of magazines in the funerary temple of Neferirkare.<sup>16</sup>

A number of objects that were found written in the inventories include: gold cups and plates, an offering table, (ḥtp), and another offering table (called ḥrt), a ḥ3ts vessel, ḥnwt cups, and cloths to use for offerings in front of the statues.<sup>17</sup> These objects were inspected daily.<sup>18</sup> At the same time, there were other fresh offerings coming to the temple to be used in the sanctuary, such as quantities of beef killed each month, beer, and bread. These quantities were served to feed

<sup>14</sup> Arnold, "Rituale," pp. 11-12.

<sup>15</sup> Reisner, Mycerinus, p. 101.

<sup>16</sup> Posener-Kriéger. Les Archives, II, 514-515.

<sup>17</sup> Posener-Kriéger. Les Archives, I, 171-187.

<sup>18</sup> Ibid., pp. 162-187.

the personnel of the temple after their use in the cult.<sup>19</sup>

There are no distinctions in the Abousir Papyri between objects to be used by the king in the next life and objects used for offerings. The objects mentioned in the Abousir Papyri imply that there were two kinds, those of the palace, and those of the offerings.

Perhaps the palace objects are the more expensive items, such as gold cups and plates, as well as the hn box. The inspection of the objects indicates that the personnel wanted to be sure of the existence of these objects for the king to use in the beyond.

There are numerous objects mentioned in the Abousir Papyri that were used for the offering cult, such as: offering tables, ritual knives, offering plates, vessels and basins.

There is no scholar who has identified the function of the northern and southern magazines, and the Abousir Papyri also does not aid in this determination. However, the plan of Menkaura's magazine and the objects found in them can clarify the programme of the cult objects.

The objects found in the southern magazines of the upper temple, such as: offering tables, model dishes and stone vessels, indicate that these magazines in the south

<sup>19</sup> Posener-Kriéger, Les Archives, II, 634.

of the upper and lower temples were to be used for the daily offerings and other rituals performed in the temple sanctuary in front of the statues. Also, the pots in these magazines would contain fresh offerings, such as: beef, beer and bread that came from the funerary domains. These pots with the offerings were not kept there, but were to be used directly for the offerings. The fresh offerings were used as payment to feed 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 they were returned and stored in the magazines after being used. The fresh offerings were 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, made it likely that they were to be used by the king in the afterlife. These objects are the same that the king used in the palace during his lifetime. Therefore, he needed all the objects he had in his life to exist and prosper in the next life. Thus, these northern magazines should also have contained: tables, games, boxes, chairs, clothing, writing materials, weapons, and beds. Fortunately, the wooden fragments that were found in the upper and lower

temples of Menkaura confirm the existence of such objects. Thus, in conclusion, the analysis of the objects of Menkaura's temples indicates that the southern magazines were intended to serve the offering cult of the king and the gods. The northern magazines and their objects were used by the king in the palace, and were required by him for use after death.

V.10: OVERVIEW AND CONCLUSION OF THE FUNCTIONS OF THE  
PYRAMID COMPLEX

The correlated study of the wall reliefs, statuary, cult objects and architecture can help to explain the function of the pyramid complex.

All these different programmes are tied together and the ways that they relate to each other, help us to understand the functions of the pyramid complex.

Ricke and Schott, and most other scholars, 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. These theories are no longer likely because their evidence is based on a parallel to private scenes and an analysis of the pyramid texts. The scenes of the private tombs are unlikely because of the differences of the plans of the royal tomb and those of the private tombs. The pyramid texts were written mainly to record the beliefs of the ancient Egyptians and may not provide any information about the function of the pyramid complex.<sup>1</sup>

There are architectural features in the temples of the Giza necropolis, pointed out in Chapters I-III, that do not agree with the theory that the pyramid complex was

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<sup>1</sup> See above, pp. 444-445.

used for the funeral procession of the king. The doors of the upper temples that led to the pyramid court are so narrow that they could not have allowed the coffin of the king and the funeral procession to pass through to the burial chamber inside the pyramid. These doors could only have allowed room for one person to go through for inspection purposes, as is indicated in the Abousir Papyri.<sup>2</sup>

At Giza, we have the most complete lower temple; that of Khafra. The corridor and its door that led to the causeway are also not wide enough to accommodate the procession to the king. Furthermore, the layout of the causeways in the Old Kingdom indicates that they are not a ceremonial way for the procession of the king.

The lower temple is also not a place for rituals or the process of mummification. The holes on the roof of the lower temple of Khafra are not for the poles of the washing tent, as some have suggested, but rather are associated with the construction of the temple. Similar holes found around the platforms of the pyramids at Giza indicate the same function.<sup>3</sup> The ground plan, wall reliefs, cult objects and the statuary programmes found

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<sup>2</sup> Posener-Kriéger, Les Archives, II, 565-588; see also Arnold, "Rituale," pp. 2-3 for the same analysis of the temple of Teti.

<sup>3</sup> Lehner, "A Contextual Approach," pp. 8-18.

in the lower temple do not indicate any association to the mummification ritual or process. Therefore, the lower temple has nothing to do with mummification. The mummification of the king's body was done in the workshop at Giza. The washing and the mummification ritual was done in the so-called washing tent, or purification tent. The tent was set outside the lower temple and was connected with a basin and well. Archaeological evidence found north of Menkaura's lower temple indicates the existence of these elements, which should also be attached to every pyramid complex in the Old Kingdom.<sup>4</sup>

The funeral procession of the king had to go outside the pyramid complex to the burial chamber of the pyramid through the court that surrounded the pyramid.

I have applied Arnold's approach of the function of the pyramid complexes of Dynasties 5 and 6 to my study of the function of the pyramid complex of Dynasty 4 at Giza.<sup>5</sup>

<sup>4</sup> See above, pp. 310-312; these archaeological elements have been discussed recently, see B. Gebler-Löhr, Die heiligen seen ägyptischer Tempel: Ein Beitrag zur Deutung Sakraler etsBaukunst im Alten Ägypten (Hildesheim: 1983), pp. 62-63, pl. I a/b; cf. B. Grdseloff, "Nouvelle données concernant la tente de purification," ASAE 51 (1951), pp. 129-142.

<sup>5</sup> See above, pp. 462-465.

The function of the pyramid complex, as indicated in this chapter, can be established through the programmes of the following elements:

1. Wall reliefs
2. Statuary
3. Cult objects
4. Architecture

These elements were discussed above separately, but here we will see how they correlate.

The programme of wall reliefs and its developments can be seen in Plans 32-35. In the time of Sneferu, the whole programme occurred only in the lower temple. In Khufu's time, it was used throughout the pyramid complex, and it is the first time that the programme of the wall reliefs took this direction. In Dynasties 5 and 6, the programme was fully developed in its final form.

The subject matter dealt with in the scenes can be listed as follows:

1. Dominating scenes

These portray the king dominating disorderly elements of the universe, such as wild creatures or foreigners. These scenes associate the king with the natural world and that 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.

## 2. Scenes of the king's identification with the gods

The function of these scenes is to 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.

## 3. Sed festival scenes

These are the most important scenes, showing 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 to show his kingship and his power over Upper and Lower Egypt. After that, he takes off his robe, puts it in the palace (h) and then performs his dance to celebrate his success, good government, and to show that he accomplished what the gods required of him.

## 4. Offerings from the gods to the king

This is the last scene in the sequence of the wall reliefs. It always occurs in the offering room, and shows the king receiving offerings and divinity. He is accepted by all the gods and becomes equal to them, because he accomplished what they required for him to do on earth; he is now a god.

The most important fact is that all these scenes focus only on the king. The scenes of the first three categories, however, are also scenes suitable for decorating walls of the king's palace. The only subject that would not be represented in his palace 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, one can notice that certain scenes are always repeated on the pyramid complex; sometimes one scene can be repeated three times. This is to emphasize the domination of the king over his enemies more than once. The repetition emphasizes the importance of the activity.

In addition, there is evidence that shows that the wall reliefs have a programme that was developed early in the Old Kingdom. One might suggest that this programme 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, is copied exactly on the temple of Pepi II. Even the same name of the wife and sons are the same in both temples, despite

the fact that they are separated in time by two hundred years.

There are other scenes found in the wall reliefs that have a parallel to New Kingdom scenes at Karnak.<sup>6</sup> Furthermore, the development of the scenes from Sneferu to Pepi II show the repetition of scenes with some additions in each period.

Therefore, we must be careful in interpreting historical events from these representations, because it may be programatically depicted on the pyramid complex to show the ideal life that the king would like to live in the beyond. But, at the same time, some scenes, such as those of foreigners, may have some validity.

The statuary programme indicates a formula for the placement and type of statuary and how the statues relate to other programmes. My interpretations of the triads of Menkaura suggest that the pyramid complex was dedicated to the gods Ra, Hathor and Horus. The triads are the focus of the cult. The sun god Ra is the creator god who keeps the world running. Hathor is the daughter and wife of Ra, as she is the wife and mother of the king. She gives birth to him and is also his wife because she will be the mother of the next king. The king is in the pyramid complex because he is Horus, and the triads are there

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<sup>6</sup> Edwards, The Pyramids of Egypt, p. 182.

because they are essential to the kingship. The triads of Menkaura not only suggest that the pyramid complex was dedicated to the king and these deities, but also the king's relationship to the gods, as was the case in the reliefs. The statuary programme also shows the power of the king and the king as a ruler through the representation of sm3 t3wy, "unification of Upper and Lower Egypt" on the base of the statues, paralleling the dominating and ruling motifs in the reliefs.<sup>7</sup>

The correlation of the wall reliefs and the statuary can be seen from the reconstructed court of Khafra's upper temple.<sup>8</sup> The king is seated in the court and above him are his Horus titles and the srh "palace façade." It also suggests that the king is seated in his palace.

The court with its statues and five niches in the upper temple can also suggest that the upper temple is a building to secure the continued existence of the king in the form of an extensive statue programme.<sup>9</sup>

The programme 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 programmes of the temple and the palace.

<sup>7</sup> See Khafra statue in Smith, Art and Architecture, revised by Simpson, p. 110, fig. 107.

<sup>8</sup> See reconstruction in Ricke, Bemerkungen, II, pl. 2.

<sup>9</sup> Arnold, "Rituale," pp. 13-14.

The programme of objects in the magazines in the upper and lower temple of Menkaura are as follows:

The southern magazines contained the objects used in the cult.

The northern magazines contained the palace objects that the king would use in the beyond.

The architectural programme correlates with all the other programmes of the wall reliefs, statuary and cult objects. It provides the space for the 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 are cult buildings for the king and the gods.

Based on the development of the programmes, the plan of the architectural elements of the pyramid complex took its shape in Dynasty 4, 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 are directed to the east to follow the worship of Ra. The open court is another feature to indicate that Ra was worshipped in the pyramid complex, because the sun rises and sets in the open court.

Khufu's upper temple is the first to contain the five niches; four were to house his four statues to represent him as Ra and Horus, and the last niche was for a cult statue for Hathor. The upper temple of Khafra also had five niches for three statues of Khafra representing himself as king of Upper and Lower Egypt and Horus. The other two niches were for statues of Khufu as Ra and Hathor. Menkaura's upper temple had only one niche for the triad statues.

I noted above that Khufu identified himself with Ra. This statement can be justified by the fact that no wall reliefs have been found of Khufu with other gods because he is attempting to identify himself as Ra, who is united with Horus.<sup>10</sup> Khafra accepted his father Khufu as a god and worshiped him as Ra in his pyramid complex and the so-called Sphinx temple, but Menkaura did not follow these directions; he accepts the king as a god, only as a manifestation of Ra, but not to be god himself. Menkaura's concept was followed in the Old Kingdom.

The existence of Hathor as one of the triad of deities at Giza is discussed earlier in more detail. One of the most important pieces of evidence we have for this fact is the existence of priests and a priestess of Hathor at Giza, at least as early as Khufu's reign.

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<sup>10</sup> See above, pp. 514-523.

Hathor is also assisted by Neith, because the latter was also the daughter of Ra, but Neith did not have a main cult at Giza, as did Hathor.

The three gods were worshiped all over the pyramid complex. There is no evidence of any temple of other gods elsewhere in Dynasty 4. 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 worshiped in the lower temple as indicated by the suggested statuary programme of the king in the lower temple of Khafra and Menkaura. Hathor is worshiped in the chapels of the Queen's pyramid because she is identified with the wife of the king. Ra is worshipped in the upper temple; he is the universal god who accepts all that the king did in the last element of the programme of the pyramid complex. He also protects the king who is buried in the horizon of Ra (pyramid).

The architectural programme shows that Menkaura's lower temple court was influenced by the plan of the so called Sphinx temple. This temple does not occur later in the Old Kingdom.

Finally, the Egyptian names that are found in the Abousir Papyri, such as: pr-wrw, waht, tpht and zh can be seen in the temples of Dynasties 4 to 6.

The architectural programme was formulated apparently to create a pyramid complex in which the triad can be worshipped and in which the myth of the kingship can be celebrated. The triads of deities are worshipped there because of their connection with kingship.

I feel that there was strong evidence for a programme that developed early in the Old Kingdom for the wall reliefs, statuary, cult objects and the architecture, and all these elements interrelate.

The evidence cited above suggests that the pyramid complex is as much a palace, as it is a temple. Or, to put it another way, the pyramid complex is a combination of a temple and a palace.

Chapter VI:

THE PERSONNEL OF THE FUNERARY ESTABLISHMENT OF KHUFU,  
KHAFA, AND MENKAURA

This chapter is divided into the following sections:

1. Introduction.
2. The personnel and their titles.
3. Duration of the cult of Khufu, Khafra and Menkaura.
4. Function and meaning of the titles.
5. Chronological organization of the funerary cult.
6. Discussion and conclusion.

### VI.1: INTRODUCTION

This chapter is an examination of the individuals who have titles connecting them directly with Kings Khufu, Khafra and Menkaura or with their pyramids. The previous chapters dealt with each pyramid complex at Giza in regard to its structure and architectural details, as well as to the archaeological remains related to the funerary establishment of each king. The function of each pyramid complex was analyzed utilizing the evidence provided by wall reliefs, statuary, cult objects, architectural components, relevant inscriptions, and temple records (Abousir Papyri).

As a result of these studies, it would appear that the upper temple was dedicated to the cult of Ra, the queens' chapels to the cult of Hathor and the lower temple to the cult of the king (as the god Horus).<sup>1</sup> Thus the triad Ra, Hathor and Horus were the principal divine forces of this period; the goddesses Neith, Bastet and Maat have associations with them in the pyramid complex.<sup>2</sup>

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<sup>1</sup> See above, pp. 554-556.

<sup>2</sup> Ibid., pp. 534-536.; also Appendix, nos. 20, 26, 37, etc.

VI.2: THE PERSONNEL AND THEIR TITLES<sup>3</sup>

VI.2:1: THE PERSONNEL OF KHUFU'S CULT

There were 115 individuals who held titles connected with the cult of Khufu or his pyramid. Most of them were buried at Giza around the pyramid of Khufu; individuals were interred at Abousir, at Saqqara and at Sheikh Said. Five tombs at Saqqara and one at Abousir can be dated to Dynasties 5 to 6, that at Shiekh Said to Dynasty 6.<sup>4</sup>

Since their tombs were not located at Giza, the seven individuals may have received these titles after the death of Khufu, or they may have inherited the positions and were more involved with the cult of other kings, their association with Khufu's cult being secondary. Pth-mr-stj.f for example buried at Abousir, was jmj-ht hmw-k3 Queen Khentkawes and jmj-r3 for the pyramid of Neferirkare at Abousir,<sup>5</sup> the titles perhaps being responsible for his place of burial. Srf-k3, buried at Sheik Said, perhaps his birth place, was hm-ntr of Userkaf and Khufu.<sup>6</sup> These titles appear to have been

<sup>3</sup> See general Appendix and Tables.

<sup>4</sup> See Table, no. 14.

<sup>5</sup> See Appendix, no. 29.

<sup>6</sup> Ibid., 102.

his primary mortuary designation and one would have expected his burial to be in the Memphite area.<sup>7</sup>

Of the five individuals buried at Saqqara two were there ostensibly because they were officials of the cult of Sahure and Niuserra.<sup>8</sup> The title of another priest, who was attached to the cult of Khufu, was found on a lintel in Saqqara,<sup>9</sup> but may originally derive from Giza. The remaining two may have been buried at Saqqara for family reasons.<sup>10</sup>

At Giza, there were eight priests of Khufu who were also priests of other gods and goddesses such as Ptah, Maat and Hathor and they date from Dynasties 4-6.<sup>11</sup> Three women had the role of *hmt-ntr* of Khufu as well as that of Neith and Hathor.<sup>12</sup> Such a combination might indicate that women were in charge, or at least participated, in the cult of Khufu during the 4th and 5th Dynasties; moreover, it suggests the importance of the

<sup>7</sup> Kanawati, Administration, pp. 116-117 dates this tomb to late Dynasty 6, his dating based on his own assumptions about the size and costliness of the tomb; however Baer, Rank and Title, p. 127 [457]; pp. 48-51, dated the tomb to early Dynasty 5 or later, this dating is preferable because it is based on archaeological evidence.

<sup>8</sup> See Appendix, nos. 124, 132.

<sup>9</sup> Porter and Moss, Bibliography, III<sup>2</sup>-2, 756; see Appendix, no. 52.

<sup>10</sup> See Appendix, nos. 80, 130.

<sup>11</sup> See Table, no. 5A.

<sup>12</sup> Ibid., 5B.

cults of the three deities. There is no evidence of *hmt-ntr* Khufu in Dynasty 6.

The tomb of *Mrjtjt.s*,<sup>13</sup> a *hmt-ntr* Khufu and Hathor at Giza is dated to the time of Khafra. She was the daughter of Khufu and the wife of *3ht-htp* who was a *hm-ntr* of Khufu.<sup>14</sup> Since the title *hmt-ntr* of Khufu was held by a king's daughter, it must have been an important role in Dynasty 4. Her husband *3ht-htp* may have been a *hm-ntr* of Khufu because of her position. Another woman buried in Giza, *N-sdr-k3j* was also *hmt-ntr* of Khufu and Hathor and her father *Mr-jb/k3-nj-njswt* held similar titles. In addition he had important governmental designations.<sup>15</sup>

The tombs of 12 priests of Khufu and of other kings at Giza are dated from Dynasties 5 to 6.<sup>16</sup> The tomb of *H(.f-Hwfw II hm-ntr* of Khufu and *Jst-jb-ra* dates from the 4th to the 5th Dynasties.<sup>17</sup> He may have started his career in one funerary establishment and then later worked in another one. There is no evidence for a priest of Khufu in Dynasty 6.

Seven of the eight *hmnw-ntr* of the cult of Khufu, who were also in both the cult of Khafra and Menkaura, or who

<sup>13</sup> See Appendix, no. 37.

<sup>14</sup> *Ibid.*, 1.

<sup>15</sup> *Ibid.*, 34, 60.

<sup>16</sup> See Table, no. 6.

<sup>17</sup> See Appendix, no. 83.

were in the cult of Khufu and another Giza king, were buried at Giza. Only one of those at Giza can be dated to Dynasty 4 in the time of Khafra.<sup>18</sup> The remaining tombs from both Giza and Saqqara date from Dynasties 5 to 6. These ḥm-ntr had the privilege of being in the cult of more than one king at Giza and of sharing in the products of the funerary domains of each king.

The most common title in the funerary establishment of Khufu is ḥm-ntr Khufu; there were 83 dating from Dynasty 4 to the end of the First Intermediate Period.<sup>19</sup>

w(b nswt comes next; there are 47 occurrences. When it occurs in sequence with ḥm-ntr, it precedes it, but it can also stand alone. The tombs of the personnel who held this title, are dated from Dynasty 4 through the First Intermediate Period, the largest number occurring in Dynasties 5 and 6. There were also ten w(b nswt who cannot be dated exactly.<sup>20</sup>

Next in popularity was ḥm-ntr mddw-Hr "Priest of Horus mddw",<sup>21</sup> there were 13 whose tombs date from the

<sup>18</sup> See Table, no. 16.

<sup>19</sup> *Ibid.*, I; the existence of priests of Khufu during the First Intermediate Period supports my hypothesis (see above, pp. 101-111) that the funerary equipment of Hetepheres I were moved by the priests of Khufu in this period, from the pyramid G1a during the destruction of the pyramid complexes of Khufu and Khafra at that time.

<sup>20</sup> See Table, no. 4.

<sup>21</sup> The Horus name of Khufu.

5th Dynasty into the First Intermediate Period.<sup>22</sup> The tombs of two are not dated owing to a lack of evidence. Since it appears that the title did not exist prior to the 5th Dynasty, the ḥm-ntr of Khufu may have performed the rituals in front of the four statues in the niches just as the later priests, ḥm-ntr mddw-Hr and the other names of Khufu's did.<sup>23</sup>

The least frequent title was shd w(bw 3ht-Hwfw "inspector of w(b-priests of Khufu's pyramid".<sup>24</sup> Only nine individuals are attested and date from Dynasty 6 into the First Intermediate Period.<sup>25</sup>

There are, in addition, 13 unique titles associated with the cult of Khufu, these offices occurred only once and date from Dynasties 5-6.<sup>26</sup> There are other titles that also occurred within the context of Khufu's priesthood, but they did not contain the name of Khufu or his pyramid; these are assumed to be mortuary titles because of their meaning and are limited to only one individual who was associated with Khufu's cult. Those designations are attested in Dynasties 5 and 6.<sup>27</sup>

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22 See Table, no. 1.

23 Ibid.

24 Ibid.

25 Ibid.

26 Ibid.

27 Ibid., 4.

One of these, Ḥntj-š was introduced in Dynasty 5 during the reign of Unas.<sup>28</sup> Its holders were people working in the transportation of the products of the temple, as well as in the service of the cult.<sup>29</sup> The Ḥntjw-š may have appeared as workers in the funerary domains of Khufu grgt which were directed by (ḡ-mr. The earliest occurrence of the title ḡmj-r3 njwt 3Ḥt-Ḥwfw "overseer of the pyramid city of Khufu" was in Dynasty 5.<sup>30</sup>

#### VI.2.2: THE PERSONNEL OF KHAFFRA'S CULT

There are 31 individuals who were associated in the funerary establishment of Khafra.<sup>31</sup> Only five ḥmw-nṯr of Khafra held titles in the service of other kings.<sup>32</sup> Eleven individuals were in the cult of Khafra as well as that of Khufu and Menkaura. Five were with Khafra and Khufu, four with Khafra and Menkaura only and two with all three kings.<sup>33</sup> The dates of the tombs of these

<sup>28</sup> Baer, Rank and Title, p. 272; cf. Helck, Beamtentitlen, pp. 107-108.

<sup>29</sup> Posener-Kriéger, Les Archives, II, 577-581.

<sup>30</sup> See Table, nos. 10A-10B; there were eight individuals who held this important office, five titles occurred with the city determinative after the pyramid name and three occurred without the city determinative.

<sup>31</sup> See Index, no. 2.

<sup>32</sup> See Table, no. 7.

<sup>33</sup> Ibid., 16.

eleven individuals range from Dynasty 4-6. Two of them are dated to Dynasty 4, but the majority belong to Dynasty 6.<sup>34</sup>

There is a coordination of the cults of more than one king in these titles held by the personnel at Giza, indicating service in several funerary establishments.

The three names of Khafra: Hr-wsr-jb, wr-m-nbtj and H(.f.r( occur after hm-ntr, but titles using the first two can be dated to Dynasty 6, while those with H(.f.r( (Khafra) are from the 4th to the 6th Dynasties.<sup>35</sup>

Perhaps the priests of Khafra, like those of Khufu, were in charge of the statues of all the names of the king during the 4th and 5th Dynasties, while in the 6th Dynasty, there were specific priests for the first two names.<sup>36</sup> Since there were hm-ntr of only three names of the king, there may have been only three statues of Khafra in the five niches in the upper temple, the other two niches being reserved for the statues of Khufu and Hathor.<sup>37</sup> Two hmw-ntr of Khafra and Khufu were buried at Saqqara.<sup>38</sup>

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34 Ibid.

35 Ibid., 13B.

36 See Posener-Kriéger, Les Archives, II, 501-504.

37 See above, pp. 153.

38 See Table, no. 14.

Nine individuals were in charge of the pyramid city of Khafra, six of their tombs date from Dynasty 5 into the First Intermediate Period and three are not dated.<sup>39</sup>

The most common surviving title is ḥm-nṯr Khafra, 15 individuals who held this title, their tombs date from Dynasty 4-6,<sup>40</sup> another official was ḥm-nṯr of the statue of upper Egypt of Khafra's pyramid.<sup>41</sup> He was also ḥm-nṯr of Khafra, and his tomb dates to Dynasty 5. Because of the great number of his titles associated with the funerary cult of Khafra and his governmental rank, it would appear that he was an important official.<sup>42</sup>

Less common are w(b nswt and šḥd w(bw, occurring only six times in the cult of Khafra.<sup>43</sup> W(b nswt can appear alone or in sequence: four times with ḥmw-nṯr of Khafra<sup>44</sup> and two times with other titles.<sup>45</sup>

In summary, there are 15 titles connected with the funerary establishment of Khafra, 11 of them occur with the name of his pyramid and four with his own.<sup>46</sup>

<sup>39</sup> Ibid., 11A-11B, the determinative of the city occurs only in the title of one individual, his tomb dates to Dynasty 5.

<sup>40</sup> Ibid., 2.

<sup>41</sup> See Appendix, no. 59.

<sup>42</sup> See his titles in ibid., it is difficult because of the lack of other titles of most of the other ḥmw-nṯr of Khafra to determine their ranking.

<sup>43</sup> See Table, no. 4.

<sup>44</sup> See Appendix, nos. 45, 53, 84, 109.

<sup>45</sup> Ibid., 55, 121.

<sup>46</sup> See Table, no. 2.

### VI.2.3: THE PERSONNEL OF MENKAURA'S CULT

There are 25 individuals who served in the funerary establishment of Menkaura, ranging in date from the 4th to the 6th Dynasties.<sup>1</sup> The name and date of one more individual is unknown.<sup>2</sup>

There were two ḥmw-ntr of Menkaura, one of them was also ḥm-ntr of Maat, Osiris and Hathor, and the tomb dates from the very end of Dynasty 5 to the beginning of Dynasty 6; another is ḥm-ntr of Hathor only and the tomb is from Dynasty 6.<sup>3</sup>

A ḥm-ntr Menkaura and Khafra occurs in Dynasty 4 and also in Dynasties 5 to 6. There is one ḥm-ntr of both Menkaura and Neferirkare; his tomb dates to Dynasties 5 and 6.<sup>4</sup> On the other hand an exceedingly interesting fact is that ḥm-ntr of Menkaura and Khufu do not appear to exist in Dynasty 6. We find no ḥm-ntr of a king of Dynasty 6 specifically associated with the cult of Menkaura, despite the fact that Pepi II issued a decree providing privileges for the priests of Menkaura's pyramid city.<sup>5</sup>

<sup>1</sup> See Index, no. 3.

<sup>2</sup> See Appendix, no. 146.

<sup>3</sup> See Table, no. 8.

<sup>4</sup> Ibid., 9.

<sup>5</sup> Goedicke, Königliche, pp. 148-154; Wildung, Die Rolle ägyptischer, pp. 216-217.

In regard to the titles combined with the names of the king, only the nomen of Menkaura was used after ḥm-ntr,<sup>6</sup> and this fact parallels the use of only a single niche in his temples, rather than the five in the temples of his predecessors. The tomb of Mnw-ḥm, who was ḥm-ntr of Menkaura m ḥnw and Hathor, as well as w(b of Userkaf's pyramid, is buried at Saqqara and the tomb dates to Dynasty 6.<sup>7</sup> Five individuals were in charge of the pyramid city of Menkaura, three date from the 6th Dynasty into the First Intermediate Period and two remain undated.<sup>8</sup>

The archaeological evidence indicate the existence of Menkaura's pyramid city from Dynasties 4 to 6; but the titles, which occur only in Dynasty 6, suggest that the city functioned during that time only.<sup>9</sup> The pyramid city is one of the most important elements in the pyramid complex and the funerary cult of the king could not exist without it. How then did Menkaura's funerary establishment function in Dynasties 4 and 5? The answer to this query is perhaps one of the following solutions:

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<sup>6</sup> See Table, no. 13C.

<sup>7</sup> See Appendix, no. 32.

<sup>8</sup> See Table, nos. 12A-12B; two of the titles omit the city determinative and the three remaining, all have the city determinative.

<sup>9</sup> See above, pp. 314-316.

1. It is possible that the title *jmj-r3* of the pyramid city of Menkaura, although from an undated source, might have come from the 4th or 5th Dynasties.
2. Perhaps the *jmj-r3* of the pyramid city of Khufu or Khafra of Dynasty 5 was also in charge of the pyramid city of Menkaura, without any reference to that function in the title.
3. The *hm-ntr* of Menkaura might also include the pyramid city among their responsibilities in Dynasties 4 and 5.

12 *hmw-ntr* of Menkaura occur from the 4th to the 6th Dynasties.<sup>10</sup> *w(b nswt* appears only together with *hm-ntr*. *Shd w(bw* occurs also within the context of Menkaura's cult, but not with the king's name or his pyramid.<sup>11</sup>

There are 11 titles that occur only once in the cult and four of them have no parallel in the Old Kingdom.

#### VI.2.4: COMPARISON OF THE PERSONNEL OF KHUFU, KHAFA, AND MENKAURA

The previous sections primarily deal with information derived from the data presented in the appendix and the tables of the personnel of Khufu, Khafra, and Menkaura.

<sup>10</sup> See Table, no. 3.

<sup>11</sup> Ibid., 4.

Some similarities and differences exist among the personnel of these kings, and these factors may be reflected in the archaeological material discussed in the previous chapters.

In regard to women in the cult, they held the title *ḥmwt-ntr* of Khufu and also of Hathor and Neith, and they held high positions during the 4th and 5th Dynasties.<sup>12</sup> No women have been attested with these positions in the funerary cult of Khafra or Menkaura. The title *ḥm(t)-ntr* was given to princes and princesses in Dynasty 4 but not those of later Dynasties.

There were 115 members involved in the cult of Khufu during the Old Kingdom, more than three times that of Khafra and Menkaura. The large size of the cult of Khufu indicates its importance.<sup>13</sup>

The new title *ḥntjw-š* was introduced for the first time at the end of the 5th Dynasty. *Ḥntjw-š* occurred within the context of Khufu's personnel, but it does not include the name of Khufu or his pyramid. In the reign of Khafra *ḥntj-š* is followed by the name of the pyramid. There is no (*ḏ-mr In rsj*) in Dynasty 6.<sup>14</sup> Since (*ḏ-mr In rsj*) was in charge of the funerary domains of Khafra, this

<sup>12</sup> *Ibid.*, 5B.

<sup>13</sup> Perhaps this can be used as evidence in support of Khufu's identification with Ra.

<sup>14</sup> See Table, no. 2.

suggests, therefore, that the *hntj-s* title was a replacement of (*ḏ*-mr *Tn rꜥj* of Khafra. While in Khufu (*ḏ*-mr *grgt* remained in Dynasty 6 and *hntj-š* occurred to work with the transportation of products to the temples.<sup>15</sup>

It is noteworthy that the offices *grgt*, *grgt mḥti*, *Tn rꜥj* and *hntjw-š* are not attested in the reign of Menkaura. Further, the decree of Shepseskaf implies that the cult of Menkaura did not have its own field of domains but was dependent on the circulation of the products from Shepseskaf's temple.<sup>16</sup> Perhaps this situation was responsible for Pepi II's ordering a decree for the pyramid city of Menkaura and no such decree for Khufu and Khafra.

Finally, there are many unique titles which exist in the cult of Khufu and some that are limited to the reign of Khafra and Menkaura. These offices are indicated in tables 1-3.

<sup>15</sup> *Ibid.*, 1-2; see also the discussion in Chapter 4.

<sup>16</sup> Goedicke, *Königliche*, pp. 16-21.

VI.3: DURATION OF THE CULT OF KHUFU, KHAFA AND MENKAURA

Information from the appendix indicates that there were four individuals who participated in the cult of Khufu during the Old Kingdom and who survived into the First Intermediate Period.

VI.3.1: 3HT-HTP [#5]<sup>1</sup>

This individual was ḥm-nṯr of Khufu, and "inspector of w(b-priests of the pyramid of Khufu," as well as "director of those who are in the phyles;" his wife held the title of "inspector of ḥmw-nṯr."<sup>2</sup> Baer suggests a date from the end of the reign of Pepi II to the 8th Dynasty.<sup>3</sup>

VI.3.2: JMJ-ST-K3J [#9]

This individual was ḥm-nṯr and w(b-priest of Khufu. He has, in addition, governmental titles, and may have been part of the king's court and the palace personnel in

<sup>1</sup> Appendix no. 5.

<sup>2</sup> Ibid., no. 5

<sup>3</sup> Baer, Rank and Title, pp. 52, 240, 287 [8].

the capital. His wife was priestess of Hathor.<sup>4</sup> His tomb dates from Dynasty 6 into the First Intermediate Period.<sup>5</sup>

VI.3.3: NJSW-S(NH [#40]

He was hm-ntr of Khufu, "inspector of w(b-priests," and "director of those who are in the phyle"; his wife was hmt-k3 of a private cult.<sup>6</sup> Baer assigns him to a period extending from Teti or Pepi II to Dynasty 8.<sup>7</sup>

VI.3.4: KO-N.S. [#116]

He was w(b-priest and hm-ntr of two of Khufu's names and a hntj-s.<sup>8</sup> Baer dates his tomb from Dynasty 6 into the First Intermediate Period.<sup>9</sup>

In regard to the cult of Khafra, there is only one individual who was connected with his cult in Dynasty 6. Nfr-jh3 [#50] was in charge of the pyramid cities of

<sup>4</sup> See Appendix, no. 9.

<sup>5</sup> Baer, Rank and Title, pp. 56-57 [36].

<sup>6</sup> See Appendix, no. 40.

<sup>7</sup> Baer, Rank and Title, pp. 87, 240, 291 [235].

<sup>8</sup> See Appendix, no. 116.

<sup>9</sup> Baer, Rank and Title, pp. 137-138 [501].

Khafra and Menkaura,<sup>10</sup> his tomb is dated by Baer from the time of Pepi II to the 8th Dynasty.<sup>11</sup>

There is no official of the cult of Menkaura whose tomb can be dated to the First Intermediate Period.<sup>12</sup> Since the four officials of the cults of Khufu and Khafra that are attested during the First Intermediate Period is a number too small to maintain the service, it is likely that the cults were no longer functioning then and that the titles were honorific. The lack of officials for the cult may have occurred since the pyramid complex of Khufu and Khafra, in all likelihood, were destroyed in the First Intermediate Period. It is clear that the statues of Khafra in the lower temple were deliberately cut to pieces, and this may have occurred at the same time.

Moreover, the archaeological evidence indicates that the cult of Menkaura had ceased completely by the end of the Old Kingdom.<sup>13</sup>

It has been suggested that the pyramid complex of Khufu was opened during the Middle Kingdom in the time of Sesostri I, because it is mentioned specifically in the inscriptions of the statue of Ttj-m-z3.f,<sup>14</sup> who was

<sup>10</sup> See Appendix, no. 50.

<sup>11</sup> Baer, Rank and Title, pp. 90-91, 240, 291 [257].

<sup>12</sup> See Table, no. 15.

<sup>13</sup> Kemp, "Old Kingdom," pp. 92-94; Helck, "Bemerkungen," p. 108.

<sup>14</sup> Helck, "Bemerkungen," p. 107; Wildung, Die Rolle ägyptischer, pp. 162-163.

appointed to an office in the pyramid city of Khufu. This does not necessarily mean a new organization was set up or even that the pyramid city was still functioning. Moreover, the city name is determined with the desert sign not the city sign, indicating that the pyramid complex of Khufu may not actually be referred to. Furthermore, since Amenemhet I used a number of wall reliefs that originally came from the temples of Khufu and Khafra in the core of his pyramid, it is likely that the site was already in a state of ruin.

The name of Khufu however, is mentioned in other periods in contexts, such as that in the Westcar Papyri in the Middle Kingdom, where the king is referred to in unflattering terms. His name also occurs in passing on the stela of Amenhotep II in his temple northeast of the Sphinx.<sup>15</sup>

It is not until after the First Intermediate Period that the cult was referred to in the 26th Dynasty.<sup>16</sup> Then, there are two *ḥmw-ntr* of the cult, since two officials would hardly be enough to maintain the cult. *Nfr-jb-ra* and *Psmtk-mnh* may have received their designations as a mark of honour.

<sup>15</sup> Wildung, *Die Rolle ägyptischer*, pp. 163-192; for all the periods that Khufu's name occurred.

<sup>16</sup> *Ibid.*, pp. 184-186; Hawass, "Khufu Statuette," pp. 390-391.

There was no mention of Khafra's pyramid at all in the Middle Kingdom.<sup>17</sup> But his name is documented in the Westcar Papyri, in an inscription from the Wadi Hammamat, and in the stela in the temple of Amenhotep II in the vicinity of the Sphinx.<sup>18</sup> There is no archaeological evidence for its continuation after the First Intermediate Period, but the cult was referred to in the 26th Dynasty.<sup>19</sup>

Menkaura's cult had also ceased at the end of the Old Kingdom. That his cult was maintained during the late Old Kingdom, is shown through the existence of personnel with titles in his funerary cult and the decree of Pepi II.<sup>20</sup>

It may be noteworthy that the name of Menkaura was mentioned also in many texts throughout different periods.<sup>21</sup> The names of a few priests of Menkaura, dating to the 26th Dynasty were found in the Isis temple at Giza.<sup>22</sup>

17 Helck, "Bemerkungen," p. 107.

18 Wildung, Die Rolle ägyptischer, pp. 204-209.

19 Ibid., p. 210.

20 See above, p. 314-315.

21 Wildung, Die Rolle ägyptischer, pp. 217-222.

22 Ibid., pp. 222-223.

## VI.4: FUNCTION AND MEANING OF THE TITLES

### VI.4.1: INTRODUCTION

The responsibilities of those individuals who worked in the funerary establishments of Khufu, Khafra and Menkaura are comprised of the following:

- A: Those centering around the cultic activities.
- B: Those dealing with the administration of individuals working in the funerary establishment.

In the former group we find that *w(b nswt* "w(b priest" and *ḥm-nṯr* "priest," are the most common and designate those people who were actually involved in the cult.<sup>1</sup> They were organized into a strict hierarchy, and there were administrative heads of sections whose titles have one of these at their root.<sup>2</sup> These titles fall into the latter group. The designation of priestly and administrative titles is made for the purpose of distinguishing between the two categories of participants in the funerary establishment. The lines are not always so distinct, since all the titles are in essence priestly, and some of the *ḥm-nṯr* and *w(b* may reform administrative duties.

<sup>1</sup> The *hntjw-s* will be discussed separately.

<sup>2</sup> See Table, nos. 1-4.

VI.4.2: RANKING OF THE TITLES IN THE CULT

The sequence of titles is based on the demonstrated hierarchy of the  $\text{hntjw-š}$ . The lowest level  $\text{hntj-š}$  followed by  $\text{jmj-ht}$ ,  $\text{šhd}$  and the highest is  $\text{jmj-r3}$ .<sup>3</sup> The same sequence was suggested by Junker,<sup>4</sup> and is also also in the organization of ka-priests.<sup>5</sup> The title  $\text{hrp}$  attested at Giza is not included in this hierarchy. Fischer has suggested that the Memphite priestly title of  $\text{šhd sm}$  is inferior to  $\text{hrp sm}$ .<sup>6</sup>

Therefore, the sequence of the titles of the Old Kingdom are:

The lowest titles:

$\text{hm-ntr}$

<sup>3</sup> J.L. de Cenival, "A propos de la stèle de chéchi: Etude de quelques types de titulatures privées de l'Ancien Empire." *RdE* 27 (1975), p. 63, n. 8.

<sup>4</sup> Junker, *Giza*, VIII, fig. 28; Helck, *Beamtentitlen*, p. 107; Stadelmann, "Die  $\text{hntjw-š}$ ," pp. 156-157, they suggested the same sequence with the office of  $\text{hntjw-š}$  pr-(3, Helck put the office  $\text{jmj-r3}$  st as the highest but Stadelmann put  $\text{jmj-r3}$  as the highest office and  $\text{jmj-r3}$  st stands before it.

<sup>5</sup> T.G.H. James, *The Mastaba of Khentika called Ikhekhi*. (London: 1953), pl. 21, p. 5; see also the same sequence in A. Mariette, *Les Mastabas de L'ancien Empire*. (Paris: 1889), p. 352, he put the lowest title as  $\text{zs hm-k3}$ ; cf. H. Goedicke, "Cult-Temple and state during the Old Kingdom in Egypt"; in E. Lipinsk (ed.), *State and Temple Economy in the Ancient Near East*, OLA 5 (Louvain: 1979). p. 127, no. 90; H. Goedicke, *Die Privaten*, pp. 230 ff.

<sup>6</sup> H. Fischer, "A Group of Sixth Dynasty Titles Relating to Ptah and Sokar," *JARCE* 3 (1964), pp. 25-29; the same sequence is suggested by Posener-Kriéger, *Les Archives*, II, 574.

hm-k3  
 w(b  
 hntj-š

The order of the highest titles:

jmj-r3  
 hrp  
 šd  
 jmj-ht

The title jmj-r3 k3t was one of the highest governmental designations in Dynasty 4,<sup>7</sup> but it was not until the beginning of Dynasty 5 that the jmj-r3 of the pyramid city occurs in the administration of the funerary establishment. Shortly thereafter, there was an expansion of offices in the cult and an administrative hierarchy resulted. It would appear that the administration of the cult during this time was headed by the jmj-r3 of the pyramid city and this person ranked above all the individuals who held the title jmj-r3 in any department in the cult.

<sup>7</sup> N. Strudwick, The Administration of Egypt in the Old Kingdom. (London: 1985), p. 337; see also H. W. Helck, "jmj-r3", ZAS 79 (1954), pp. 76-77; the vizier had the same rank, see Strudwick, The Administration, p. 338; H. Kees, "Beiträge zur Geschichte des Vezirats im Alten Reich," NGWG n.f. 4, nr. 2 (1940), pp. 39-54; the title jmj-r3 ranked very high from the beginning of the Old Kingdom and probably remained so since it has been suggested that the structure of the upper level of the Egyptian administration during the Old Kingdom has remained the same, see Strudwick, The Administration, p. 346.

### VI.4.3: PRIESTLY TITLES

In the following discussion w(b is translated as "w(b-priest" and ḥm-nṯr as "priest."

The hierarchy from the highest to lowest utilizes Fischer's translation.<sup>8</sup>

jmj-r3	overseer
hrp	director
shd	inspector
jmj-ht	supervisor

#### 1. w(b-priest

Many scholars have discussed the function of this title which occurs in almost all tombs of individuals who were connected with the royal cult.<sup>9</sup> The title w(b always precedes the title ḥm-nṯr in the Old Kingdom, but was lower in the hierarchy than ḥm-nṯr.<sup>10</sup> This pattern occurs throughout the Old Kingdom, while an example of either title alone is not common. Therefore, there clearly was a close connection between the two designations. W(b is a general term for priest, and any

<sup>8</sup> Fischer, Dendera, pp. 233-236.

<sup>9</sup> See Appendix, nos. 1-156.

<sup>10</sup> See E. Brovarski, "Tempelpersonal", LX 43 VI<sup>3</sup> (1985), p. 388; A.M. Blackman, "Priest, priesthood," in J. Hastings, Encyclopaedia of Religion and Ethics. (New York: 1918), p. 297.

priest must begin his career in the funerary cult as  
w(b.11

W(b means "pure" or "clean one," and it became the most common word for priests and is even retained in Coptic.<sup>12</sup> The most important feature which is found in the appendix is in a string of titles where w(b precedes hm-ntr.

Junker suggested that the w(b was in the service of both the living and the deceased king, w(b can be viewed by nswt or the name of a king.<sup>13</sup>

Helck concluded that the w(b-priests were workmen who had been involved with the renovations of the pyramid city and had retained their original phyles. They acted as priests at the monthly services for the king's funerary cult. In return, they shared in the divine offerings of food, clothing, and so forth.<sup>14</sup> It has been pointed out that the "inspector of w(b-priests" refers not to the residence of the king, but to the cult of the deceased king,<sup>15</sup> Helck noted that the w(bw were of a lower class status, however some individuals who held

11 Blackman, "Priesthood," p. 297.

12 Ibid., Brovarski, "Tempelpersonal", p. 388.

13 Junker, Giza, VI, 15.

14 Helck, "Bemerkungen", p. 91; idem, Beamtentiteln, pp. 128-129.

15 Helck, Beamtentiteln, p. 129; Kees, "Vezirats", p. 42.

this title were, however, clearly of high rank.<sup>16</sup> Posener-Kriéger noted in the table of service of the Abousir Papyri, that three individuals designated as w(bw-priests were a team in the cult service and the names of two of them appear elsewhere designated as ḥmw-ntr.<sup>17</sup> This indicates that although ḥm-ntr and w(b occur separately in this text, in at least two cases, both titles were held by a single person. The function of w(b was always assured by the ḥm-ntr.<sup>18</sup>

W(b-ḥntj-š in the Abousir Papyri appears to be equivalent to the group ḥm-ntr ḥntj-š, and the w(bw were not a part of the temporary personnel of the temple of Neferirkare,<sup>19</sup> but constitute part of the regular staff.

Roth in her study of the phyle, notes that the w(bw were not phyle members, and served in monthly rotation during some periods.<sup>20</sup> She notes Posener-Kriéger's remarks in the Abousir Papyri that they "occur as a group in distribution lists with a group of ḥntjw-š, the two groups always receive the same quantities".<sup>21</sup> She further suggests that the w(bw might have served in the phyles at the Abousir temples because of the parallels

<sup>16</sup> See examples in the Appendix.

<sup>17</sup> Posener-Kriéger, Les Archives, II, 581-582.

<sup>18</sup> Ibid. p. 582; Junker, Giza, VI, 13-14.

<sup>19</sup> Posener-Kriéger, Les Archives, II, 582.

<sup>20</sup> Roth, Phyles.

<sup>21</sup> Ibid.

with the  $\text{hntjw-š}$  and because they also seem to have had counterparts in the palace.<sup>22</sup>

$\text{w(b}$  seems to change over time in the Old Kingdom; common in tombs of Dynasty 4, they are less so in those of Dynasties 5 and 6.<sup>23</sup>

In Dynasty 4, the grades of "overseer", "director", "inspector" and "supervisor" of  $\text{w(b-priest}$  do not appear at all.<sup>24</sup> But in the Abousir Papyri the title  $\text{šd w(bw}$  occurs.<sup>25</sup>

$\text{w(bw}$  could also serve in the funerary cult of more than one king simultaneously.<sup>26</sup>

At the top of the hierarchy of  $\text{w(bw}$  of Khufu's cult during the Old Kingdom at Giza was the  $\text{hrp}$  "director." He was assisted by the  $\text{šd}$  "inspector."<sup>27</sup> In Dynasty 4 in Khufu's funerary establishment, there were only  $\text{w(bw}$   $\text{nswt}$ ,  $\text{hmw-ntr}$  and  $\text{(d-mr grgt}$ .<sup>28</sup>

In Khafra and Menkaura's funerary establishment, the  $\text{w(bw-priests}$  had as their superior a  $\text{jmj-r3}$  "overseer" who was assisted by a  $\text{hrp}$  "director", who was seconded by

<sup>22</sup> Ibid.

<sup>23</sup> Perhaps the change is due in part to the appearance of the title  $\text{hntj-š}$ , see Baer, Rank and Title, pp. 264-267.

<sup>24</sup> See below, p. 615.

<sup>25</sup> Posener-Krieger, Les Archives, II, 582; Roth, Phyles.

<sup>26</sup> See Appendix.

<sup>27</sup> See Table, no. 1.

<sup>28</sup> See below, p. 615.

an shd "inspector".<sup>29</sup> The only title that is not attested is gmj-ht "supervisor."

## 2. Hmw-ntr "priests"

Hm-ntr means "god's servant"<sup>30</sup> and one can observe the numerous occurrences of this title and its compounded forms in the appendix of this study. The hm-ntr was probably a simple priest, employed in the pyramid complex.<sup>31</sup> The title "god's servant" was used in the royal funerary establishment because the king was regarded as an embodiment of the god, and the deceased king in his pyramid was identified with a god. Thus, his cult was patterned on the model of other divinities, and he was served by a hm-ntr.<sup>32</sup> It is important to note that there is no evidence of a priest for a living king, because the king became truly divine only after his death. There were hm-ntr of kings, but not of others in the royal family. Private individuals, the queens and the king's mother had their own priests known as a hm-k3, "servant of the k3."<sup>33</sup>

<sup>29</sup> See Table, nos. 2-4.

<sup>30</sup> Blackman, "Priesthood," p. 297; Brovarski, "Tempel personal", p. 388.

<sup>31</sup> Junker, Giza, VI, 7.

<sup>32</sup> Ibid.

<sup>33</sup> Ibid., p. 5; U. Luft, "Illahunstudien, III: zur sozialen Stellung Des Totenpriesters im Mittleren Reich". Oikumene 5 (1986), pp. 117-153.

Ḥm-ntr is commonly coupled with the prenomen or birth name of a king. At Giza there are, in addition, priests of the three other names of Khufu (mddw-Ḥr, mdd-r-nbtj, Bjkwjj-nbw) and also priests for the two names of Khafra (Ḥr-wsr-jb, wr-m-nbtj), as well as a priest of the statue of Upper Egypt of Khafra's pyramid.<sup>34</sup>

These titles, which do not appear in the case of later rulers, may show the power of these early Dynasty 4 kings and the relationship with a designated divine power and the king's unique manifestation. This can be carefully defined in the great titulary which would be announced at the ascension of the king to the throne.<sup>35</sup> This programme is not only established by the king's titles, but also by wall reliefs, statuary, cult objects and architectural elements which confirm the king's divine and earthly power. The titles of the name of the king may also indicate rituals for each name or a special cult.

Helck suggested that the ḥmw-ntr were born by a middle class people.<sup>36</sup> Posener-Kriéger shows that ḥm(w)-ntr were less numerous than the ḥntjw-š in the Abousir

<sup>34</sup> See Table, nos. 13A-13B; see also M.A. Murray, Index of Names and Titles of the Old Kingdom, I (London: 1908), 29.

<sup>35</sup> Junker, Giza, VI, 9.

<sup>36</sup> Helck, Beamtentiteln, pp. 127-128.

Papyri and were named before them in sequence,<sup>37</sup> but she does not feel that the facts indicate a clear difference between the ḥm-ntr and ḥntj-š.<sup>38</sup> The sequence may indicate that the ḥmw-ntr were superior to the ḥntjw-š.<sup>39</sup> The papyri mentions that the ḥmw-ntr had the privilege to penetrate directly into the offering room in order to perform the divine services, while the wꜥb and ḥntj-š could not do so, they being placed outside the intimate part of the temple.<sup>40</sup>

Roth agrees with Posener-Kriéger that the priests were organized in a phyle system, as were the ḥntjw-š, but each had his own hierarchy, the phyles were directed by a phyle director or hrp gmjw z3, literally "director of those who are in the phyle."<sup>41</sup> The Abousir Papyri indicated that the hierarchy was directed by an overseer assisted by a supervisor.<sup>42</sup>

Roth points out that "the ḥmw-ntr, then, were much less closely bound to the ḥntjw-š with whom they worked so closely, and with whom they shared the phyle organization."<sup>43</sup> This was probably because the priests

37 Posener-Kriéger, Les Archives, II, 575-576.

38 Ibid.

39 Ibid., p. 575.

40 Ibid., p. 576.

41 Roth, Phyles.

42 Posener-Kriéger, Les Archives, II, 577.

43 Roth, Phyles.

held office with more than one king, while the  $\text{hntjw-š}$  were a single mortuary establishment.<sup>44</sup>

During the Old Kingdom, the organization of priests seems to have differed from king to king at Giza. Only an "inspector" is attested for Khufu and for Khafra only a "supervisor," while Menkaura had an "overseer" and "inspector."<sup>45</sup> It is uncertain to what extent this corresponds to the nature of the surviving evidence as to what we should postulate for priests in a dynastic hierarchy that included an  $\text{jmj-r3 hmw-ntr}$ , a  $\text{šd hmw-ntr}$ , and an  $\text{jmj-ht hmw-ntr}$ , as well as ordinary  $\text{hmw-ntr}$  of the king.

### 3. Function of w(b-priests and priests

The priest of the funerary cult can be described as someone separated from the people and devoted to this service of the god.<sup>46</sup> The w(b-priest washed three times each day and their mouths were rinsed with natron in an attempt to be ritually clean. Each day they sprinkled the statue of the god with water, fumigated it with incense,

<sup>44</sup> Ibid.

<sup>45</sup> See Table, nos. 1-3; cf. W. Helck, "Priester, priester organisation, priestertitel," LA 31 IV 7 (1982), pp. 1086-1087; on the priestess see H. Fischer, "priesterin," LA 31 IV 7 (1982), pp. 1100-1105.

<sup>46</sup> Blackman, "Priesthood," p. 293.

clothed and anointed it,<sup>47</sup> they opened the doors of the shrines (such as those enclosing the five niches of Khufu and Khafra's upper temples) and on certain festivals they took the statues out and carried the image of the god in its sacred boat.<sup>48</sup> The income and support of the priests came from two main sources:

1. Funerary domains, both close to the pyramid complex and other estates spread throughout Upper and Lower Egypt.
2. Gifts to the temples and other sources.<sup>49</sup>

The overseer of priests received the largest stipend and daily rations.<sup>50</sup> Royal decrees written in certain temples gave them immunity from compulsory state labor.<sup>51</sup> The priests, in return for these privileges, performed different tasks around the temples, both ritual as well as menial.<sup>52</sup> It was the duty of the overseer of priests" to perform daily ceremonies in the temple sanctuary.<sup>53</sup>

<sup>47</sup> Ibid., p. 300; see also A.H. Gardiner, Late-Egyptian Miscellanies. BAE 7 (Brüssels: 1937), p. 17, R.A. Caminos, Late Egyptian Miscellanies. (London: 1954), pp. 52-54.

<sup>48</sup> Blackman, "Priesthood", p. 301.

<sup>49</sup> Ibid., p. 298; Brovarski, "Tempelpersonal," p. 388.

<sup>50</sup> Brovarski, "Tempelpersonal," p. 388; Sethe, Urk, I, 26, 6; one-tenth of the share was assigned to the priest of Hathor; see also P Manuelian, "An Essay in Document Transmission: Nj-k3-(nh) and the Earliest hj-rnpt." JNES 45, 1 (1986), pp. 1-18 cited by Brovarski.

<sup>51</sup> Brovarski, "Tempelpersonal," p. 388; see Pepi I and II's decrees in Goedicke, Königliche, pp. 55-128.

<sup>52</sup> Brovarski, "Tempelpersonal," p. 388.

<sup>53</sup> Ibid., pp. 389-390.

From the Old Kingdom we have evidence that PepiAnkh "overseer of priests of Hathor at Cusae (modern Meir), performed the offering for the goddess with his own hands.<sup>54</sup>

According to the Abousir Papyri, priests and ḥntjw-š stood watch at the temple annex and storerooms as well as the crrt and the terrace, they also accompanied the ḥntjw-š on the ritual tour of the pyramid.<sup>55</sup> The "round of ḥm-ntr" was the name given to the circuit around the pyramid.<sup>56</sup> The ḥmw-ntr, according to the papyri, were also responsible for censuring the statues on the day of the festival of the month; and the morning and evening rituals as well.<sup>57</sup>

The higher administrative titles, the shd and jmj-ḥt ḥmw-ntrs, performed the more noble acts in the temple, such as the opening of the mouth ceremony.<sup>58</sup>

The ḥmw-ntrs and most of the other temple personnel of Abousir were organized under a phyle system, although the w(bw were not. The phyles were divided into two "divisions" to make a total of ten phyle divisions as Roth indicates; each phyle division contained 20 people

54 Ibid., Sethe, Urk, I, 22.

55 Posener-Kriéger and Cenival, Abousir, pls. 3 and 4.

56 Ibid.

57 Ibid.

58 Posener-Kriéger, Les Archives, II, 575.

and served for one month at a time.<sup>59</sup> The duties of the phyle members are indicated by Roth as follows:

1. guarding the temple, both day and night
2. carrying the cult statue
3. transport of the temple goods for the cult
4. two daily processions around the pyramids<sup>60</sup>

We do not have direct evidence for a phyle organization in the temples of the 4th Dynasty like those at Abousir, but it may exist in Dynasties 5 and 6, based on the occurrence of the title hrp jmjw/z3 at Giza.<sup>61</sup>

Roth suggested that the five storerooms in the temples of Khafra and Menkaura implied a five phyle system.<sup>62</sup> However, her parallels are of private tombs and such comparisons are not always reliable.

Roth also discusses the evidence for the phyle system by the organization of work crews in Dynasty 4. She concludes that the gangs of workmen were divided into at least four phyles.<sup>63</sup> Roth believes a division of the phyles may have been called a "10," a group found in two Old Kingdom titles, "great one of tens of Upper Egypt" and "overseer of tens."<sup>64</sup> She shows that officials who

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59 Roth, Phyles.

60 Ibid.

61 See Table, nos. 1-4.

62 Roth, Phyles.

63 Ibid.

64 Ibid.

had the title "overseer of the phyles of Upper Egypt" usually also held the title, "great one of the tens of Upper Egypt;" she concludes that since the latter title was the much more common of the two, it was probably a lower term in the same hierarchy as the former, and thus, a "ten" was a smaller unit within a phyle.<sup>65</sup>

The tables show that in Dynasties 5-6 there is the title "scribe of the phyles of Khufu's pyramid," and in Dynasty 5 there is a "director of the phyle of the pyramid of Khafra."<sup>66</sup> They do not occur in Dynasty 4 in connection with the pyramids.

The overseer of the priests was appointed to his office by the king himself,<sup>67</sup> who in turn appointed other priests to offices lower than his.<sup>68</sup> He also gave many of his duties to the inspectors<sup>69</sup> who had to keep account of the temple; as a temple; such as a scribe. They were responsible for the daily operations in the temple, such as overseer of the department of the temple.<sup>70</sup>

<sup>65</sup> Ibid.; see E. Brovarski, "Inscribed Material of the First Intermediate From Naga-ed-Der." Ph.D dissertation (University of Chicago: 1987) on the function of the "great one of the tens of Upper Egypt."

<sup>66</sup> See Table, nos. 1-2.

<sup>67</sup> Brovarski, "Tempelpersonal," p. 387; Sethe, Urk, I, 26, 11; 84, 15; 254, 4.

<sup>68</sup> Brovarski, "Tempelpersonal," p. 387.

<sup>69</sup> Ibid.

<sup>70</sup> Ibid.

The purpose of ḥmt-ntr of Hathor in Dynasty 4 was to maintain the cult of the goddess, with the assistance of women who would sign and dance during the feast of Hathor, which was celebrated in the pyramid complex during the Old Kingdom, as is indicated in the Abousir Pyramid.<sup>71</sup>

#### 4. Unique priestly titles

Four unique titles at Giza, which have no parallels elsewhere, have to do with the personnel of the funerary cults of Khufu, Khafra and Menkaura.

##### A. Ḥm-ntr Ḥwfw ḥntj 3ḥt-Ḥwfw

This title occurs three times. One occurrence dates to Dynasty 5 or Dynasty 6, the second to Dynasty 6, and the third is undated.<sup>72</sup>

Simpson translated this title as "priest of Khufu who presides over Akhet-Khufu."<sup>73</sup> The presence of this specific title may suggest that the pyramid complex was dedicated not only to the cult of the king, but also to other cults in the pyramid complex.

<sup>71</sup> Posener-Kriéger, Les Archives, II, 553-554, other feasts were celebrated in the pyramid complex, such as the feasts of Ra and Horus. The celebration of the feasts took place outside the temple so that the public could witness the sacred objects of the gods (ibid., pp. 554-561).

<sup>72</sup> See Table, no. 1.

<sup>73</sup> W. K. Simpson, Mastabas, 41, 34.

B. Hm-ntr of the Statue of Upper Egypt of Khafra

This title is held by nswt-nfr at Giza, whose tomb dates to early Dynasty 5 and was connected directly with the cult of Khafra.<sup>74</sup> The title occurs last in a sequence of titles which are written in six short columns, with the name of the pyramid of Khafra in a single line above,<sup>75</sup> as in honorific transposition. I have failed to find parallels of this title in any cult of any king during the Old Kingdom. The statue may have been located in the southern niche of the pr-wrw of the temple of Ra, as I have indicated in the previous chapter.<sup>76</sup> The title is written with a logogram of a figure sitting on a low chair, wearing the white crown and holding the flail in his hand.<sup>77</sup>

C. jmj-r3 w(bw h3stjw Mnk3wr( ntrj

This title, written , comes from unpublished rock-cut tomb in the Mycerinus quarry cemetery.<sup>78</sup> The deceased (nh-nb.f is also a w(b-priest and priest of Menkaura, as well as "overseer of the private apartments of the great house," "supervisor of the great house," "scribe of the dockyard" and "inspector

<sup>74</sup> Baer, Rank and Title, pp. 96-97, 282 [292].

<sup>75</sup> Junker, Giza, III, 169, fig. 30.

<sup>76</sup> See above, pp. 477.

<sup>77</sup> Junker, Giza, III, 169, fig. 30.

<sup>78</sup> Porter and Moss, Bibliography, III<sup>1</sup>, 294.

of the oarsman of the boat."<sup>79</sup> Baer does not assign a date to this tomb,<sup>80</sup> but Porter and Moss date it to Dynasties 5 and 6.<sup>81</sup> The non-priestly titles of the deceased show he was connected with the palace and dockyards. I have not found parallels for his title elsewhere. Porter and Moss do not record the title,<sup>82</sup> and although Baer lists it with a question mark, he does not discuss it,<sup>83</sup> nor does Helck.<sup>84</sup> The plural nisbe  $\text{h}3\text{stjw}$ , even without a determinative, probably means "foreigner."<sup>85</sup> One possible translation of the title would be "overseer of w(b-priests of the foreigners, of the pyramid of Menkaura." However, there does not seem to be any evidence for foreigners working in the service of the cults of Menkaura, Khufu and Khafra.<sup>86</sup> The decree of Pepi I at Dahshur mentions "pacified" Nubians who served as policemen or guards.<sup>87</sup>

Still, it is unlikely that foreigners would be assigned their own w(b-priests, therefore "overseer of

<sup>79</sup> See Appendix, no. 21.

<sup>80</sup> Baer, Rank and Title, p. 64 [97].

<sup>81</sup> Porter and Moss, Bibliography, III<sup>1</sup>, 294; see also G. Reisner and C.S. Fisher, "Preliminary Report on the Work of the Harvard-Boston Expedition in 1911-13," ASAE 13 (1913), p. 251.

<sup>82</sup> Porter and Moss, Bibliography, III<sup>1</sup>, 294.

<sup>83</sup> Baer, Rank and Title, p. 250, Table 1.

<sup>84</sup> Helck, Beamtentiteln, pp. 144-146.

<sup>85</sup> Erman and Grapow, Wörterbuch, III, 234.

<sup>86</sup> See Table, nos. 1-4.

<sup>87</sup> Goedicke, Königliche, pp. 56, 62.

w(b-priests and foreigners of Menkaura's pyramid" is probably preferred.

It is also possible that (nh-nb.f was of a Nubian origin and perhaps considered by the Egyptians as Nubian, thus the translation "overseer of w(b-priests (foreigner) of the pyramid of Menkaura." In support of this translation is the existence of Nubian policemen in the pyramid city of Sneferu, only one of whom could have been appointed to serve in the cult of the king.

There is a fourth possibility though, which is to take H3st in its original meaning of "hill mountain country" or "desert"<sup>88</sup> and understand H3stjw as "mountain dwellers" or "desert dwellers," which is an allusion to all the persons who served the cults of Khufu, Khafra and Menkaura on the Giza plateau.

D. Hm-ntr Mn-k3wr( m hnw

This title is listed by Mariette<sup>89</sup> and Murray.<sup>90</sup> The tomb of Hm-mnw probably dates to Dynasty 6, since his father Tp-m-(nh evidently lived in mid-Dynasty 5.<sup>91</sup>

The word hnw is defined by Goelet as an organization and a place.<sup>92</sup> The literal translation of this title, "priest of Menkaura in the residence," suggests that

88 Erman and Grapow, Wörterbuch, III, 234, 7.

89 Mariette, Mastabas, D11.

90 Murray, Index, I, 30.

91 Baer, Rank and Title, p. 151 [559].

92 Goelet, Two Aspects.

there was a cult for Menkaura within the residence at Memphis in Dynasty 6. Unfortunately, there is no other evidence for such a practice.<sup>93</sup>

The area for the worship of the king was in an area which is called the lower temple, and ḥm-ntr of the king should be there. The designation m ḥnw however, indicates an area other than the lower temple. Perhaps a better translation would be "priest of Menkaura in the organization (of the pyramid complex)."

##### 5. Priests and w(b-priests of the king and the pyramid

There was a w(b-priest of the king and one for the pyramid; ḥm-ntr could also function similarly.<sup>94</sup> These titles are attested with Khufu, Khafra and Menkaura and also with the name of their pyramids. Junker suggested that ḥm-ntr with a king's name occurs in Dynasty 4 and 5, but it is not until the time of Neferirkare that we find a ḥm-ntr of the pyramid.<sup>95</sup> Junker found it difficult to distinguish the roles of ḥm-ntr of the king and ḥm-ntr of the pyramid, because the king was deceased and the cult for him and the pyramid must have been the same.<sup>96</sup>

<sup>93</sup> The decree of Pepi II indicates only that Menkaura's cult was maintained in Dynasty 6 at Giza.

<sup>94</sup> See Table, nos. 1-4.

<sup>95</sup> Baer, Rank and Title, pp. 264-265.

<sup>96</sup> Junker, Giza, VI, 12.

However, the cult of the pyramid clearly included other gods.<sup>97</sup> Baer suggested that in the time of Djedkare, the office of a hm-ntr of the king was replaced by that of the pyramid, and this change was reflected by the personification of the pyramid that took place at the beginning of the 5th Dynasty.<sup>98</sup>

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<sup>97</sup> See above, pp. 534-536.

<sup>98</sup> Baer, Rank and Title, p. 265; see also C. Wilke, "Zur Personifikation von Pyramiden," ZAS 70 (1934), pp. 56-83; A. Gardiner, "An Unexplained Passage in the Inscription of Weni," JEA 41 (1955), p. 121, cited by Baer; see also J. Osing, "Zur Syntax der Biographie des Wnj," Orientalia 46 (1977), pp. 165-182.

VI.4.4: ADMINISTRATIVE TITLES IN THE FUNERARY CULT AT  
GIZA

The administrative titles are those connected with the running of the funerary cult of the kings at the Giza necropolis. Most of these titles are functional and their translation explains the role of the priests.

A. Common titles

1. The *jmj-r3* of the pyramid or *jmj-r3 njwt* of the pyramid occurred with all three kings at Giza. It means "overseer of the pyramid city" and is considered to be the highest rank in the hierarchy of priests in the pyramid complex.<sup>1</sup> The *jmj-r3* was in control of all the personnel who lived in the pyramid complex, as well as the priests who were in charge of the cult within. The king personally appointed officials to this position because of the extent of its responsibility. The overseers in turn could appoint any individual to assist him and could even turn some of the responsibilities over to other individuals.<sup>2</sup> There is one inspector, "*shd*" of the pyramid of Khafra, who assisted the overseer of the

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<sup>1</sup> Helck, "Bemerkungen," p. 94; Brovarski, "Tempel personal", pp. 387-388; Strudwick, The Administration, pp. 171-299.

<sup>2</sup> See Brovarski, "Tempelpersonal", p. 387.

pyramid city of Khafra in his duties.<sup>3</sup> The overseer of the pyramid city was in charge of all the departments in the pyramid complex, such as the services of the cult, the funerary domains, the palace (ḥ), the workshop, the estates or the fields in Upper and Lower Egypt, the workmen's camp, the office of the scribes and the phyles, the dairy herd and finally the delivery of the funerary domains to the pyramid and the palace. The "overseer" of the pyramid complex was appointed by the living king, as his representative by serving the organization and supervising the administration of the cult of the deceased king.

2. The ḥrj-sšt<sup>3</sup> occurs and is connected directly with the pyramid name of Khufu, Khafra and Menkaura.<sup>4</sup> Simpson translates ḥrj-sšt<sup>3</sup> as "privy counsellor."<sup>5</sup> Fischer translates it as "privy to the secrets of"<sup>6</sup> and Faulkner as "master of the secrets."<sup>7</sup> Unfortunately, the exact meaning and function of this title is not clear. The title, when written alone, might be considered an honorific title;<sup>8</sup> but when coupled with the name of a certain pyramid, it may well have been functional.

<sup>3</sup> See Table, no. 2.

<sup>4</sup> Ibid., 1-3.

<sup>5</sup> Simpson, Mastabas, 41, 1.

<sup>6</sup> Fischer, Dendera, pp. 137-138.

<sup>7</sup> Faulkner, Dictionary, p. 249.

<sup>8</sup> Helck, Beamtentiteln, pp. 43-44.

Kanawati classifies ḥrj-sšt3 as a title of lower officials when it stands by itself, but when modified by other words, he considers it to be a title of higher officials.<sup>9</sup> He does not, however, explain on what grounds he makes this distinction. Literally, the title refers to "one who presides over the secrets" of the pyramid of Khufu, Khafra and Menkaura. However, the role that this official played or what his duties were is not clear.

The other titles held by the person who was ḥrj-sšt3 of one of the Giza pyramids, are not very illuminating to the function of the "privy counselor." The overseer of the treasury, Nfr was the overseer of the scribes of Khufu's pyramid.<sup>10</sup> Because of the association with the scribal title, the ḥrj-sšt3 may have been responsible for keeping the secrets of the pyramid. The scribe is the one who would record such information and the title ḥrj-sšt3 would follow his scribal office in sequence.

In Khafra's pyramid complex, two individuals held this title. The tomb of the first one, Nswt-nfr, dates to Dynasty 5 and he held many important offices such as both the priestly and administrative positions in the

<sup>9</sup> Kanawati, Administration, pp. 15-27.

<sup>10</sup> See Appendix, no. 46; N. Strudwick, "Three Monuments of Old Kingdom Treasury Officials," JEA 71 (1985), pp. 43-44.

funerary establishment and also governmental designations.<sup>11</sup>

Ttj, whose tomb is undated was also hrj-sšt3. He held two important offices in Khafra's pyramid, as the "overseer of the pyramid" and "director of the phyles."<sup>12</sup>

Two individuals were "privy counsellor" of Menkaura's pyramid. The first, Wt3's tomb dates to Dynasties 5-6. His only other recorded title is w(b-priest.<sup>13</sup> Srhw, whose tomb dates to the same period, has other titles such as jmj-r3 ḡ3t Mn-k3w-r( ntrj and šḥd w(bw. Hrj-sšt3 is associated with high ranking titles as well as low ranking titles; therefore, the sequence or the context of the titles associated with hrj-sst3, do not help in assigning a specific function to this title in the pyramid complex. However, the meaning of sšt3, "secret," shows that the individual who held this title is keeping the secrets of the pyramid complex.

3. Another common title, which occurred with the three pyramids at Giza is smsw ḥ3jt. Only one individual held this title in the pyramid complex of Khafra and Menkaura, and two individuals in that of Khufu. Their tombs can be dated to Dynasties 5 and 6.<sup>14</sup>

<sup>11</sup> See Appendix, no. 59.

<sup>12</sup> Ibid., 136.

<sup>13</sup> Ibid., 27A.

<sup>14</sup> See Table, nos. 1-3.

Smsw ḥ3jt means "the elder of the ceiling," "portal"<sup>15</sup> or the "hall."<sup>16</sup> Hassan translates it as "eldest of the audience halls of the pyramid."<sup>17</sup> This title can precede the pyramid name or the temple.<sup>18</sup> Spencer suggested that the ḥ3jt is a porch or portico in front of a building. She indicates in her conclusion that "the most important aspect of the porch described as a ḥ3jt must have been the fact that it was covered with a "ceiling" or "roof" for which the term was originally used."<sup>19</sup>

Thus, the term ḥ3jt means a portico, pavilion, or any structure similar to that; or a porch in front of an entrance. The meaning of the title would then be "elder of the porch" of a certain pyramid. We have such a portico in the lower temple of Menkaure, with pillars and a ceiling, and this could be the place where smsw ḥ3jt presided. He may have been responsible for admitting visitors to the pyramid complex.

4. Ḥrp jmjw z3, which directly precedes the name of Khafra's pyramid, occurred with only two individuals; the tomb of one dates to Dynasty 5 and that of the other is

<sup>15</sup> Faulkner, Dictionary, p. 156.

<sup>16</sup> Erman and Grapow, Wörterbuch, II, 476, 4-11.

<sup>17</sup> Hassan, Giza, VII, 55-56.

<sup>18</sup> Spencer, Egyptian Temple, p. 157.

<sup>19</sup> Ibid., pp. 157, 169.

undated.<sup>20</sup> This title also occurs in context with Khufu's personnel, but does not appear before his name or pyramid; it is attested with nine individuals from Dynasties 5-6.<sup>21</sup> It never occurs in Dynasty 4, nor does it appear with king Menkaura.

The title means "director of those who are in the phyle."<sup>22</sup> It is clear from the Abousir Papyri that the members of the phyle directed by the hrp, performed two daily processions around the pyramid, transported the provisions of the cult, guarded the temple both day and night and carried the cult statue.<sup>23</sup>

5. Also associated with the funerary establishment at Giza are the titles jmj-r3 and hrp, "overseer" and "director" of the (ḥ. In regard to Khufu, these two titles are not followed by the name of the king or his pyramid; the individual who holds them is involved in the funerary establishment of Khufu.<sup>24</sup> With Khafra, the titles are jmj-r3 (ḥ ḥ(.f-r( wr, "overseer of the palace of the pyramid of Khafra", and hrp (ḥ, "director of the palace."<sup>25</sup> In essence, the (ḥ was a ceremonial palace.<sup>26</sup>

<sup>20</sup> See Table, no. 2.

<sup>21</sup> Ibid., 4.

<sup>22</sup> Posener-Kriger, Les Archives, II, 574.

<sup>23</sup> Roth, Phyles.

<sup>24</sup> See Table, no. 4.

<sup>25</sup> Ibid., 2, 4.

<sup>26</sup> See above, pp. 361-365.

The overseer of the (ḥ was concerned with the religious affairs and ceremonies of the sed festival. He was assisted by a hrp.<sup>27</sup>

B: Administrative titles occurring with only one king at Giza

These titles are administrative and are part of the funerary establishment at Giza; they occur with a specific king.

(1) KHUFU

A. Jmj-r3 šḥwt Ḥwfw, "overseer of the arable fields of Khufu."<sup>28</sup> The tomb of Hagy dated to Dynasty 5, provides the only known occurrence, which has a similar title jmj-r3 šḥt nbt, but without the name of the king.<sup>29</sup> The individual Hagy seems to have been in charge of Khufu's fields.

B. Jmj-r3 zšrt nt 3ḥt-Ḥwfw, "overseer of the milk herd of Akhet-Khufu."<sup>30</sup> Simpson suggests that the pyramid city of Khufu had its own dairy herd and that Hagy was connected with the dairy service in the area.

<sup>27</sup> Goelet, Two Aspects.

<sup>28</sup> Simpson, Mastabas, 41, 34.

<sup>29</sup> Ibid.

<sup>30</sup> Ibid.; the verb zsr means "to milk," see Erman and Grapow, Wörterbuch, IV, 295, 1-3; the determinative of zšrt shows a jar and a cow.

The milk produced by the herds under Hagy's charge was probably destined for the offering of 3ḥt-Ḥwfw.

C. Ḥk3 ḥwt Ḥwfw, "estate manager of Khufu."<sup>31</sup>

There were two individuals who held this title and their tombs date from Dynasties 5-6.<sup>32</sup> The holder of this office was probably in charge of one of the estates of Khufu.<sup>33</sup>

D. Jmj-r3 w(bt nswt, "overseer of the workshop of the king." The tomb of one individual, who was in charge of the w(bt, dates to Dynasty 5.<sup>34</sup> W(bt is identified as the name of Khufu's workshop.<sup>35</sup>

E. Jmj-r3 ḥmwt w(bt, "overseer of the craftsmen of the w(bt." The duties included overseeing the work of the craftsmen who made cult objects for the pyramid complex and who made the provisions for the personnel of the pyramid city. This person worked under jmj-r3 w(bt nswt.

F. Zš jmjw z3 3ḥt-Ḥwfw, "the scribe of those who are in the phyle of the pyramid of Khufu." This title occurs once in the tomb of Nfrj which dates to Dynasties

<sup>31</sup> Fischer, Dendera, pp. 11, 21; Simpson translates it as "property administrator", see Simpson, Mastabas, 41, 35.

<sup>32</sup> See Table, no. 1.

<sup>33</sup> See Jacquet-Gordon, Les noms, pp. 66, 120, 220, 222, 278.

<sup>34</sup> See Table, no. 4.

<sup>35</sup> See above, pp. 367-369; cf. Faulkner, Dictionary, p. 56.

5-6.<sup>36</sup> This individual recorded the activities of the phyles.

G. Jmj-r3 zšw 3ḫt-Ḥwfw, "overseer of the scribes of the pyramid of Khufu." The tomb of Nfr, who held this title in Khufu's funerary establishment is dated to Dynasties 5-6.<sup>37</sup> He was in charge of all the scribes in the pyramid complex, the upper and lower temples, workshop, funerary domains and pyramid city.

## 2. KHAFRA

The two titles which occur in the administration of Khafra's funerary establishment are šḫd Ḥ(.f.r( wr and (d . mr Ṛn rsj discussed above.<sup>38</sup>

## 3. MENKAURA

Three unique titles are associated with Menkaura and are mentioned in the decree of Pepi II of Menkaura's pyramid.

A. Jmj-r3 wsḫt m Mn-k3w-R( nṯrj, "overseer of the broadhall of the pyramid of Menkaura."<sup>39</sup> Wsḫt means "broad hall" or "court" and is probably the court in

<sup>36</sup> See Table, no. 1.

<sup>37</sup> Ibid.

<sup>38</sup> See above pp. 327-328, pp. ; cf. Goedicke, "Die Laufbahn," p. 22, believes that the title (d-mr is not a title, it always occurs with a territorial reference.

<sup>39</sup> Leprohon, Stelae, p. 47.

which offerings were made.<sup>40</sup> During the Old Kingdom at Giza, the *wsht* had both an altar and drainage channels and it is possible that the offering ceremonies were performed here. The *ḥm-ntr* or *w(b)*-priest may have made the offering, but the *jmj-r3* was the administrator to the *wsht*, responsible for all the duties that had to be done. He was in charge of the *wsht* of the lower temple, as is indicated by the decree of Pepi II found there, and was also a permanent resident of the pyramid city of Menkaura.

B. *Jmj-r3 ḥbt m Mn-k3w-r( ntrj*, "overseer of the offering at the pyramid of Menkaura".<sup>41</sup> The meaning of this title explains the duties of the individual who held this title.

C. *Jmj-r3 d3t Mn-k3w-r( ntrj*, "overseer of the chamber of the pyramid of Menkaura." The *d3t* is a chamber in the temple.<sup>42</sup> Leprohon translates it similarly as "overseer of the chamber, or of a box, of the pyramid of Menkaura."<sup>43</sup> It is not possible to know the specific chamber alluded to the *d3t*.

<sup>40</sup> Spencer, *Egyptian Temple*, p. 73; in the Abousir Papyri, the court means *wsht*, see Posener-Kriger, *Les Archives*, II, 499-501.

<sup>41</sup> Leprohon, *Stelae*, p. 47.

<sup>42</sup> Erman and Grapow, *Wörterbuch*, V, 514-515.

<sup>43</sup> Leprohon, *Stelae*, p. 47.

VI.4.5: Hntjw-š

A. Introduction

This title has been discussed among scholars for many years and it appears to have had various meanings and different functions throughout the Old Kingdom. Some scholars hesitate to translate it, simply leaving the transliteration.

Meyer designated the ḥntjw-š to mean "tenant." Kees agreed with Meyer on this designation, but added that it also refers to a type of land in the district of the pyramid estate on the border of the cultivated land; to which the king assigned a type of tenant as manager.<sup>44</sup> Borchardt translated this term as a pyramid official.<sup>45</sup> Junker noted that the ḥntjw-š were assigned by the king and concluded that the ḥntjw-š directed the land and gave a share to the king. He felt that they were part of the middle class at the beginning of Dynasty 5, but by the end of the Old Kingdom had risen to an upper class status. He felt that those belonging to the highest class of officials gave the land to others of lower class

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<sup>44</sup> See Junker, Giza, VI, 15 on his discussion on Meyer and Kees opinions.

<sup>45</sup> Borchardt, "Knigserlass," pp. 153-160.

to cultivate it. The ḥntjw-š that are associated with the pr-(3 were only tied to the palace.<sup>46</sup>

Helck points out that the ḥntjw-š were people responsible for cultivating the gardens and fields of the palace and the necropolis,<sup>47</sup> and he concludes that the ḥntjw-š of the pyramid temples were under the control of the same administration as those of the palace.<sup>48</sup> According to him, the designation had existed since the time of Unas, and the ḥntjw-š were very simple people who could not afford their own tombs. During later periods however, they were able to build tombs.<sup>49</sup>

Stadelmann does not believe that this is an office, but thinks it pertains to people who served at the funerary temple and had the privilege of taking a share of the funerary domains of the king.<sup>50</sup> He also feels that the ḥntjw-š pr-(3 are attached to the funerary domains of the living king, rather than to the palace.<sup>51</sup>

Fischer translates this term as "tenant landholder."<sup>52</sup> Roth recently indicated that the ḥntjw-š are those in personal service to the king, whether they

<sup>46</sup> Junker, Giza, VI, 17-19.

<sup>47</sup> Helck, Beamtentiteln, pp. 107-108.

<sup>48</sup> Helck, "Bemerkungen," p. 98.

<sup>49</sup> Ibid., p. 102.

<sup>50</sup> Stadelmann, "Die Ḥntjw-š", pp. 153-164.

<sup>51</sup> Ibid.

<sup>52</sup> Fischer, Dendera, p. 236.

serve the living or the deceased king and without regard to their rank.<sup>53</sup>

In the Abousir Papyri, the ḥntjw-š frequently have names compounded with the king's name. They performed both ritual and administrative functions and were members of a phyle.<sup>54</sup>

Goelet envisions three categories of ḥntjw-š titles in the Old Kingdom: (1) titles connected with the pyramid city; (2) administrative titles not attached to any institution; (3) titles containing pr-(3.<sup>55</sup> The literal meaning of ḥntjw-s is "one foremost of the -š."<sup>56</sup> Furthermore, according to Goelet, the most striking feature of the titles, which are compounded with pr-(3 and directly connected with the pyramid city, is that of administrative ranks as jmj-r3 and šḥd and are quite rare among them.<sup>57</sup> The highest rank of the ḥntjw-š, which are attached to the pr-(3 is jmj-r3 st ḥntjw-š pr-(3.<sup>58</sup>

Stadelmann considers the pr-(3 as a name of a pharaoh, not as a palace.<sup>59</sup> Therefore he thinks all the five offices of jmj-r3 ḥntjw-š pr-(3 that Wni superseded

<sup>53</sup> A. Roth, "The Distribution of the Old Kingdom Title Ḥntj-š," *SÄK* (forth coming).

<sup>54</sup> Posener-Krieger, *Les Archives*, II, 577-581; Roth, *Phyles*.

<sup>55</sup> Goelet, *Two Aspects*.

<sup>56</sup> *Ibid.*

<sup>57</sup> *Ibid.*

<sup>58</sup> *Ibid.*

<sup>59</sup> Stadelmann, "Die Ḥntjw-š," pp. 165-164.

are connected with the five major pyramid cities in the Memphite region. Roth does not agree with this hypothesis and proposes they were connected with the five phyles in the upper temples.<sup>60</sup>

Goelet states that the people who held the designation of pr-(3 are those who were attached to the palace and the living king.<sup>61</sup> Moreover, he thinks the ḥntjw-š of the pyramid temple were probably under the control of the same administration as those of the palace. This suggestion is confirmed by the decree of Pepi II at Dahshur.<sup>62</sup>

#### B. Hntjw-s at Giza

In the appendix, I have listed ḥntjw-š titles, that are compounded with the pr-(3, as governmental titles and other ḥntjw-š titles. Where a pyramid name is attached, they are listed as "mortuary." Unattached, ḥntjw-š titles are listed under "mortuary," where their holders have a title connecting them with a mortuary cult at Giza.

Khafra is the only king at Giza who has a ḥntj-š title associated with his pyramid, namely šḥd ḥntjw-š Ḥ(.f.r( wr, "inspector of the ḥntjw-š of the pyramid of

<sup>60</sup> Roth, "Distribution."

<sup>61</sup> Goelet, Two Aspects.

<sup>62</sup> Ibid.

Khafra.<sup>63</sup> Three ḥntjw-š titles are found in the titulary of individuals who were connected with the funerary cult of Khufu: jmj-r3 ḥntjw-š, šḥd ḥntjw-š and ḥntj-š.<sup>64</sup> There are evidently no hntj-s titles held by persons associated with the cult of Menkaura.<sup>65</sup>

### C. Duties of the Hntjw-š

The Dahshur decree of Pepi I stated that these people were responsible for cultivating the fields which provided the produce for the sacrifices at the pyramid.<sup>66</sup> The decree explained that the ḥntjw-š performed rituals and received permission to cultivate the fields as payment, rather than it being their duty to cultivate the land.<sup>67</sup>

The Abousir Papyri shows that the ḥntjw-š and ḥmw-ntr shared duties of watching the temple at night and performing the daily rituals. According to the papyri, the ḥntjw-š' duties included the purification and adornment of the statue during the ritual for the divine image, and at the same time, the ḥntjw-š were responsible for transporting goods and offerings to and from the

63 See Table, no. 2.

64 Ibid., 4.

65 Ibid., 3-4.

66 Goedicke, Knigliche, pp. 55-77.

67 Roth, "Distribution."

temple.<sup>68</sup> The variety of duties, assigned to the ḥntjw-š here affiliated with the palace, which is clearly seen from the inscription of Weni. The latter narrates that he was granted the office of jmj-r3 ḥntjw-š pr-(3 in which he served as a bodyguard for the king, led an army to Palestine and dealt with a harem conspiracy.<sup>69</sup> Thus, Weni served as personal attendant to the king, as one might say an aide-de-camp, who guarded him, obeyed his orders and conducted whatever missions; outside or inside the country, that the king stipulated. In summary, the ḥntjw-š, according to the Abousir Papyri, performed rituals in the temple and were in charge of the delivery of goods from the funerary domains. This function is the most important which we have to consider, especially for the ḥntjw-š who were connected with the funerary establishments of the pyramid complex.

#### VI.5: CHRONOLOGICAL ORGANIZATION OF THE FUNERARY CULT

The titles in the funerary cult of Khufu, Khafra and Menkaura are organized according to the date of the tombs in which they occur. The tombs utilized were those that

<sup>68</sup> Ibid., Posener-Kriger, Les Archives, II, 580.

<sup>69</sup> Roth, "Distribution."

could be securely dated to a specific Dynasty. The sequence lists the titles from highest to lowest.

VI.5.1: DYNASTY 4

A. Khufu

Hm(t)-ntr Hwfw; w(b nswt; (d-mr grgt.

B. Khafra

Hm-ntr H(.f-R(; w(b nswt.

C. Menkaura

Hm-ntr Mn-k3w-r(; w(b nswt.

VI.5.2: DYNASTY 5

A. Khufu

Jmj-r3 njwt 3ht-Hwfw

Jmj-r3 shwt Hwfw

Jmj-r3 w(bt nswt

Jmj-r3 zšrt n 3ht-Hwfw

Hrp (h

Hm(t)-ntr Hwfw

Hm-ntr mddw-Hr

Hm-ntr mdd-r-nbtj

(d-mr grgt

Hrp w(bw nswt  
 W(b nswt  
 W(b nswt 3ht-Hwfw

B. Khafra

Jmj-r3 (h H(.f-r( wr  
 Jmj-r3 w(bw H(.f-r( wr  
 Hrp jmjw z3 H(.f-r( wr  
 Hrxj-sst3 H(.f-r( wr  
 Hm-ntr statue of Upper Egypt  
 (d-mr grgt  
 (d-mr Tnrstj H(.f-r( wr  
 shd w(bw  
 w(b H(.f-r( wr

C. Menkaura

Hm-ntr Mn-k3w-r( .  
 w(b nswt  
 w(b Mn-k3w-r( ntrj

VI.5.3: DYNASTY 6

A. Khufu

Jmj-r3 njwt 3ht-Hwfw

Hrp jmjw-z3

Smsw h3jt 3ht Hwfw

Hm-ntr Hwfw

Hm-ntr Bjkwj-j-nbw

Hm-ntr mddw-Hr

Hm-ntr mddw-r-nbtj

Hm-ntr Hwfw hntj 3ht Hwfw

(d-mr grgt

Hrp w(bw nswt

Hrp w(bw nswt 3ht-Hwfw

shd w(bw 3ht-Hwfw

w(b nswt

B. Khafra

Jmj-r3 H(.f-r( wr

Smsw h3jt H(.f-r( wr

Shd hntjw-š H(.f-r( wr

Jmj-ht hmw-ntr H(.f-r( wr

Hm-ntr H(.f-r(

Hm-ntr wsr-m-nbtj

Hm-ntr Hr-wsr-jb

Shd w(bw H(.f-r( wr

Shd w(bw

w(b nswt

C. Menkaura

Jmj-r3 njwt Mn-k3w-r( ntrj

Jmj-r3 wsht Mn-k3w-r( ntrj

Jmj-r3 hbt Mn-k3w-r( ntrj

Jmj-r3 hmw-ntr Mn-k3w-r( ntrj

Shd hmw-ntr Mn-k3w-r( ntrj

Shd hmw-ntr Mn-k3w-r(

Hm-ntr Mn-k3w-r(

Hm-ntr Mn-k3w-r( m hnw

Shd w(bw Mn-k3w-r(

Shd w(bw

W(b nswt

## VI.6: DISCUSSION AND CONCLUSION

### VI.6.1: DYNASTY 4

The organization of the funerary cult of Khufu, Khafra and Menkaura in the 4th Dynasty was very simple. There are no compounded designations but simply: ḥmw-ntr or w(bw, and (d-mr grgt which occurs only in Khufu's cult.

The titles ḥmw-ntr and w(bw occurred only with the cult of the three kings in Dynasty 4. The ḥmw-ntr had a high place in this period and served only Khufu. This uncomplicated organization may be due in part to the lack of preservation or availability of securely dated tombs of the 4th Dynasty. It would seem, however, that during this period the entire bureaucracy of the country was uncomplicated and the cult followed a simple organization as well.<sup>1</sup>

The only administrative title connected with a pyramid cult in this period is cd-mr grgt, who was the

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<sup>1</sup> There is a false door panel from Giza (CG1727) which has the title shd w(bw Ḥ(.f-R( wr (see Appendix, no. 143); it could be dated either to the 4th or the beginning of the 5th Dynasty; see Strudwick, The Administration, pp. 37-52. It is possible this title should be included in the organization of Khafra's cult of Dynasty 4, however, the data is uncertain.

person in charge of the funerary domains of Khufu and Khafra. The funerary domain was very important to the cult since its products were necessary for the cult to survive. Since no titles have been found associated with the domains of Menkaura, there probably were none at Giza as well. None at least were established since he died unexpectedly. The decree of Shepseskaf supports this fact because the pyramid complex of Menkaura was supplied by the products of Shepseskaf's funerary domain.

The title *jmj-r3 njwt* of the pyramid does not exist in Dynasty 4 at Giza; it does however, occur in Dynasty 4 at Sneferu's pyramids at Dakshur.<sup>2</sup> Its absence at Giza may be due to the presence of the *cd-mr grgt*.<sup>3</sup> It may be that the *ḥmw-ntr* was in charge of the pyramid city at Giza, since this was a high ranking title in Dynasty 4 and its holders were princes and princesses. It is certain that those *ḥmw-ntr* in Dynasty 4 were installed in their positions by their contemporary kings at their respective pyramids. In this case, *ḥmw-ntr* in Dynasty 4 were on the top of the hierarchy, below which were the *w(bw*.

<sup>2</sup> Baer, *Rank and Title*, p. 145 [534].

<sup>3</sup> Stadelmann, "Villa de Pyramide," pp. 69-70. It is unlikely that *(d-mr grgt* was in charge of the pyramid city (see above, pp. 323-326).

VI.6.2: DYNASTY 5

The organization of the funerary cult is no longer simple in the 5th Dynasty. Ranked offices appeared for the first time and high level titles were developed.

The organization of the w(bw is more complex in Dynasty 5. For the first time the w(bw of the pyramid occurs with all three kings. W(b nswt of the pyramid however, does not replace the earlier w(b nswt. Possibly the titles were considered variants of each other. For the first time the w(bw have a supervisor, the jmj-r3 w(bw who is assisted by a ḥrp and a šḥd.

No hierarchy appears, as of yet for the ḥmw-ntr. However, the ḥmw-ntr of the other names of the king appear for the first time, although only attested for Khufu. In the case of Khafra, there is the new title of ḥm-ntr of the statue of Upper Egypt of the pyramid of Khafra. The title ḥrp jmjwz3 of the pyramid of Khafra, also appears for the first time, which suggests the phyle organization was now in operation.

The administrative office, jmj-r3 njwt 3ḥt-Ḥwfw, first appears in Dynasty 5. There is no jmj-r3 of the pyramid city of Khafra and Menkaura known for that time

and it is possible that the *jmj-r3* of Khufu's pyramid city was also in charge of the other two pyramid cities.

Four new titles appeared in Khufu's cult for the first time in Dynasty 5: the "overseer of the king's workshop," "director of the sed festival palace," "overseer of the fields" and "overseer of the milk herd of the pyramid of Khufu." The title *(d-mr grgt* is still found in Dynasty 5. The appearance of both *(d-mr grgt* and *jmj-r3 njwt* in Dynasty 5 may argue against the theory that *(d-mr grgt* was in charge of the pyramid city.

New titles also appeared with Khafra's cult such as: "overseer of the sed festival palace of Khafra's pyramid", "privy counsellor" of Khafra's pyramid and *(d-mr In rsj H(.f-r( wr*. The later may have been in charge of Khafra's funerary domain. This last title occurs because the bureaucracy of the country was increasing and the funerary domains that were needed for each pyramid cult were extending. The funerary domains of Menkaura were still organized by Shepseskaf's personnel.

The cult of Menkaura remained uncomplicated in Dynasty 5. The only change in this period (parallel to that in Dynasty 4) is the presence of the title *w(b* of the pyramid of Menkaura. The simple structure of his cult may be a matter of preservation, since the

archaeological evidence shows the continuation of the cult until the end of the Old Kingdom.

The organization of the cult in Dynasty 5 would still be the same as in Dynasty 4. The priests performed the daily service in the temple and they celebrated the yearly feasts of Ra, Hathor and Horus. The only differences are the increase of the offices and more responsibilities were given to more people.

#### VI.6.3: DYNASTY 6

The old two titles of Dynasty 4 ḥmw-ntr and w(b nswt still continued. The organization of the cult, however, becomes even more complex which parallels the growth of the bureaucracy throughout the country.

w(bw can still be found with the name of nswt and the pyramid. The ranking of w(bw in Dynasty 6 is ḥrp w(bw, shd, w(bw; there is no jmj-r3 attested, but the title may have existed since it is already known in Dynasty 5.

In Khufu's reign, the hierarchy of w(bw was ḥrp w(bw nswt, shd w(bw and w(b nswt. That of the w(bw of the pyramid was ḥrp w(bw nswt 3ḥt-ḥwfw and shd w(bw 3ḥt-ḥwfw.

In Khafra's reign, the hierarchy of w(bw was shd w(bw and w(b nswt, for the pyramid the only title is shd w(bw H(.f-r( wr.

In Menkaura's reign, the hierarchy of w(bw was: shd w(bw Mn-k3w-r( and w(b nswt. No w(bw of the pyramid of Menkaura seems to exist.

Hmw-ntr of Khufu, Khafra and Menkaura still remained, and for the first time the office of hm-ntr of the pyramid appeared. There is a complete new hierarchy of hmw-ntr in Dynasty 6 which is as follows:

Jmj-r3 hmw-ntr

Shd hmw-ntr

Jmj-ht hmw-ntr

Hmw-ntr

The title jmj-ht hmw-ntr appeared for the first time in Dynasty 6. The complete set of hmw-ntr, of the four names of Khufu; and hmw-ntr, of the three names of Khafra, appeared for the first time.

A new title also appeared and was held by three individuals. This title is hm-ntr Hwfw hntj 3ht-Hwfw, "priest of Khufu who presides over Akhet-Khufu."

The office of hm-ntr of the king is not replaced by that of his pyramid, as is suggested by others. Indeed, both hm-ntr of the pyramid as a new office; and the old

office of ḥm-nṯr of the king, evidently existed side-by-side.

The complete standard sequence of titles of ḥmw-nṯr in Dynasty 6 suggests that every office in the hierarchy acquired a new and elaborate ranking structure in Dynasty 6.

In Dynasty 4, only the son of the king or his daughter served the cult. In Dynasty 6, the size and elaboration of the bureaucracy made it necessary to have a more complex organization for the cult.

For the first time in Dynasty 6, the title shḏ ḥntjw-š H(.f-r( wr appeared and the sequence of titles of ḥntjw-š in Khufu's cult was jmj-r3, shḏ and ḥntjw-š.

The office of the head of the administration of the cult, that is, "overseer of the pyramid city," continued, but for the first time we now have overseers of the pyramid city of Khufu, Khafra and Menkaura.

We now find administrative titles of smsw ḥ3jt of the pyramid of Khufu and Khafra and jmj-r3 wsḥt and ḥbt f the pyramid of Menkaura.

These changes not only took place in the king's cult in Dynasty 6, but also effect the hierarchy of titles in the queen's cult. For the first time, for example, is the title jmj-r3 ḥmw-k3 mwt nswt.

Menkaura's cult in Dynasty 6 is completely different from that in Dynasties 4 and 5. He had a hierarchy in the w(bw and ḥmw-ntr titles and new offices were introduced for the first time that are not paralleled in Khufu or Khafra's cult.

However, it is clear that there was an increasingly elaborate organization of the cult of all three kings as the Old Kingdom progresses.

One title connected with Menkaura's cult jmj-r3 d3t Mn-k3w-r( ntrj "overseer of council (jury)" of Menkaura's pyramid is dated to Dynasties 5-6.<sup>1</sup> The increasing elaboration witnessed in Menkaura's cult in Dynasty 6, however, suggests that this title too belongs to Dynasty 6.

Khufu also had two titles that are not previously included in the organizational chart, these are jmj-r3 zšw 3ḥt-Ḥwfw and zš jmjw-z3 3ḥt-Ḥwfw. Both date to Dynasties 5-6. It seems impossible to date these two titles based on the organizational chart because of the increase of offices in Dynasties 5-6 to Khufu's cult. It is important to note, however, that these two titles existed in this period and that they had to do with the scribal

<sup>1</sup> Porter and Moss, Bibliography, III<sup>1</sup>, 294; see also idem, Bibliography, III<sup>2</sup>, fasc. 3, 736, they listed the title no. 796 d3 d3t which it should read d3t only.

offices; one of them being the scribe of the phyle of Khufu's pyramid.<sup>2</sup>

The Abousir Papyri also informs us that the temples had laundrymen and other servants.<sup>3</sup>

The service and the function of the cult of Khufu, Khafra and Menkaura can be understood through the function of the personnel listed in the Abousir Papyri. There were daily services and monthly as well as yearly feasts. It is important to know that the titles of *w(b)* and *ḥm-ntr* were not honorific titles but were actually functioning designations for people who performed services in the temple.

The *ḥm-ntr* of the king in Dynasty 5 who is at the same time a *ḥm-ntr* of a king in Dynasty 4, has to do with the ritual in the temple, at least in the monthly or the yearly festival of Ra, Hathor and Horus. The previous discussion can suggest that there was a programme established for the personnel of the cult of Khufu, Khafra and Menkaura, as there was for the wall reliefs, statuary, cult objects and architecture.

<sup>2</sup> There are four titles which occur in the Abousir Papyri that do not exist at Giza; those are: *ḥrj-ḥbt*, *jmj-ḥnt*, *jmj-rnpt* and *ḥrjw-nst*; see Posener-Krieger, Les Archives, II, 583-584.

<sup>3</sup> Ibid., pp. 588-601.

## VII: CONCLUSIONS

Conclusions about significant aspects of the funerary establishments of Khufu, Khafra and Menkaura are made at the end of Chapters 4-6. However, for the convenience of the reader, I will summarize here the overall conclusions of this research.

### VII.1: THE CULTIC ASPECTS OF THE ESTABLISHMENTS

Khufu, the first king who built his pyramid in Giza, equated himself with Ra and adapted his pyramid complex so as to embody this change. I conclude that the upper temple of Khufu had five niches in the sanctuary, four of which contained his four statues, each identified by one specific name from Khufu's titulary. Each statue was assigned a specific priest to perform ceremonies in front of it. The fifth niche contained a statue of Hathor, probably served by some of the many priests of Hathor known at Giza.

The three subsidiary pyramids were built for the king's queens and his mother; none of them are to be interpreted as a cult pyramid. Rather, Khufu's upper

temple was modified so as to incorporate the ideas normally expressed through a cult pyramid. In the First Intermediate Period, the priests of Khufu moved the equipment of Hetepheres I from the pyramid G1a during the destruction of the pyramid complex of Khufu to a nearby pit, which had been cut in Dynasty 3.

The two boat pits located south of Khufu's pyramid functioned as solar boats for Khufu (as Ra), for the day and night trip. The other two boat pits which flanked the upper temple are boats for the king as Horus. The fifth boat is for Hathor. Overall, therefore, the cult in Khufu's funerary establishment was focussed on a divine triad, Ra, Horus and Hathor.

Khafra worshiped his father as Ra. The upper temple of Khafra also had five niches; here, however, only three had statues of Khafra, with a specific priest assigned to its cult, while the other two niches were assigned for statues of Khufu and Hathor. Respectively, the subsidiary pyramid was built for Khafra's queens, not as a ritual pyramid. And, the boat of Khafra had the same function as those of Khufu.

The Sphinx and its temple are dated to the time of Khafra. The Sphinx represents Khafra as Horus giving offerings to his father Khufu as Ra, who rises and sets

in the form of the sun over the temple known as the Sphinx temple.

Menkaura, however, emphasized the cult of Ra, perhaps because of the influence of the priests of Ra at Heliopolis. His pyramid complex was strongly influenced architecturally by the change and he initiated, for the most part, the architectural style of the 5th and 6th Dynasty pyramid complexes. He planned his lower temple with the open court to emphasize the worship of the sun cult. Menkaura's subsidiary pyramids GIIIa and GIIIb functioned as tombs for his queens and GIIIc as a ritual pyramid that functioned for the sed festival.

VII.2: THE ORGANIZATIONAL ASPECTS OF THE ESTABLISHMENTS

The funerary domain is an establishment near Giza that produces agricultural and animal products, and is located on the floodplain. The funerary domain of Khufu was called the grgt. In the time of Khafra the grgt was divided into a north district, called grgt mhꜥtꜥ, assigned to Khufu, and a south district, called Tn rsꜥ, assigned to Khafra. The domains of Khufu and Khafra were administered by an (ḡ-mr throughout the Old Kingdom, except it seems that hntꜥ-s replaced (ḡ-mr in the administration of Tn-rsꜥ of Khafra's pyramid in Dynasty 6. R-ꜥ Khufu was the site for delivery of the products from the funerary domain. The cult of Menkaura did not have its own funerary domains, but was dependent on the circulation of products from the temple of his son Shepseskaf, and therefore, no grgt or Tn is named for Menkaura.

Textual and archaeological evidence indicates that each pyramid complex at Giza had its own pyramid city to house the personnel who maintained the cult of the king and the gods. The location of the pyramid city should be at the foot of the lower temple of each pyramid. The

city was directed by a ḥm-nṯr in Dynasty 4, but, from Dynasty 5 on, was directed by an jmj-r3.

Khufu and Khafra's pyramid complex each had an (ḥ "palace" as a symbolic ritual palace for the sed festival; it served as a symbolic resting place and changing room at various points during the ceremony. This palace was directed by an jmj r3 assisted by a ḥrp. Menkaura's pyramid complex did not have an (ḥ "palace," but the function of his ritual pyramid played the same role as the (ḥ "palace."

Each pyramid complex at Giza had a workshop to produce artefacts needed for the cult of the kings and food for the personnel who lived in the pyramid city. Each workshop also had storage areas for the products from the funerary domains. Khufu's workshop was called w(bṯ and was located on the southeast of his pyramid. No name has been found for Khafra's workshop, but the archaeological evidence indicates that its location was at the so-called Petrie's barracks, west of the pyramid. Menkaura's workshop was called ḥmwt smjt and was located south of the causeway in the area known as the industrial community.

The archaeological evidence concludes that the Giza plateau had only one workmen's camp, located southeast of the Sphinx and serving all three pyramids. The evidence

also indicates that there was one harbor that served the entire site and was located east of the so-called Sphinx temple.

### VII.3: THE CORRELATIONSHIPS OF THE DIFFERENT ASPECTS OF THE ESTABLISHMENTS

The correlated study of the wall reliefs, statuary, objects in the magazines, architectural components and the personnel of the cult, show that each represent aspects of a basically unified programme. Each aspect has a programmatic form of its own; but the different programmes are tied together and relate to each other.

#### VII.3.1: WALL RELIEFS

The programme of the wall reliefs indicates that there were four major types of scenes depicted in the pyramid complex: dominating scenes, scenes of the king's relation with gods, sed festival scenes, and offerings from the gods to the king. The scenes are repeated throughout the complex and focus only on the king, and indicate that the complex as a whole was conceived of as both temple and palace.

### VII.3.2: STATUARY

The statuary programme indicates the existence of a divine triad at the pyramid complex, namely, Ra, Hathor and Horus. The triad was worshiped all over the pyramid complex and each also had its own place of worship: the upper temple for the worship of Ra, the lower temple for the worship of Horus and the queen's chapels for the worship of Hathor. The statuary programme also demonstrates the close relationship between the king and the gods. In addition, the seated royal figures recall the king enthroned in his palace.

### VII.3.3: OBJECTS

The programme of objects' in the magazines parallels the dual functions of the temple and the palace attested by the wall reliefs and the statuary. The southern magazines contained the objects used to maintain the cult. The northern magazines contained the palace objects that the king would use in the beyond.

#### VII.3.4: ARCHITECTURE

The architectural programme is closely related to all the other programmes. It unifies the temple, in which the rituals seen in the reliefs were performed, and in which were kept the cult objects needed. However, the architectural programme also represents the palace, from which the king carried out the governing responsibilities depicted in the reliefs; the palace aspect was also supplied with the necessary objects. The architectural components of the pyramid complex were established in Dynasty 4 and the programme continued throughout the Old Kingdom with very little change.

#### VII.3.5: PERSONNEL

The programme of the personnel of the funerary establishment was organized in a consistent way and this programme, like the others, originated in Dynasty 4. It served as the basis for the administrative structure as it became more complex and elaborate in Dynasties 5 and 6, but remained fundamentally similar in function.

The relationships of the different programmes outlined above are evident in a number of other ways:

some of the subjects of the wall reliefs were presumably typical of palaces (e.g. dominating scenes, perhaps those showing the king with gods, and the sed festival scenes); similar subjects would be found in temples, where, however, scenes of the gods giving offerings to the king would also be found. Such scenes as these last would not occur in the palace. Statues, such as those actually found, would have been placed in both palaces and temples. The sed festival also takes place in the palace and this suggests that the pyramid complex is a ritual palace tied in with the ceremonial palace. The personnel consists of cult priests who service the temple and an administrative establishment that runs the funerary establishment as a great palace complex. Therefore, the pyramid complex is a combination of a temple and a palace.

This analysis of the programmes shows that the pyramid complex was not built for the funeral procession of the king, nor was the lower temple used for the mummification process, as believed by the majority of scholars. The mummification of the king's body was done in the royal workshop. The ritual mummification was done in a purification tent which was set outside the lower temple. The funeral procession of the king went outside

the pyramid complex and reached the burial chamber of the  
pyramid through the pyramid court.

APPENDIX

## 1. INTRODUCTION

The following appendix is a list of the mortuary personnel connected with the funerary establishments of Khufu, Khafra, and Menkaura. The list is arranged alphabetically. Each entry contains the following information:

# A number is given to each entry for purposes of reference.

NAME Full name and nicknames are given.

ID This provides the location and number of the person's tomb, name of the excavator, or museum in which relevant artefact(s) are found.

TITLES These are sorted into mortuary titles (those containing a name of a king, the name of a pyramid or pyramid city, etc.) and other titles.

DATE Date is given according to dynasty, and wherever possible, by reign of king.

SOURCE OF DATE Publication in which date is given.

FAMILY Some family members are given separate entries, if this is so, the entry number is given next to his or her name.

REFERENCE This lists all available publications of the material, and where material is unpublished, gives museum catalogue numbers.

## 2. LIST OF ABBREVIATIONS

### MUSEUMS, SITES, AND EXCAVATORS:

AB	Abubakr
Ber. Mus.	Berlin Museum
BM	British Museum
C	Curto
Cl. Mus.	Cleveland Museum
CM	Cairo Museum
EPU	Exact provenience unknown
G	Giza
H	Hassan
HKC	Hassan, Khafra Cemetery
JWC	Junker, Western Cemetery
LG	Lepsius, Giza
MFA	Museum of Fine Arts, Boston
MM	Mariette masatabas
MQ	Mycerinus quarries
Orinst	Oriental Institute Museum, University of Chicago
SE	Egyptian Antiquities Service Excavation
SM	Saleh Mycerinus
Sq	Saqqara
SS	Sheik Said
Toledo	Toledo Museum

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- Anzeiger, Wien                              Anzeiger der (Kaiserlichen) Akademie der Wissenschaften Wien: Philosophisch-historische Klasse.
- Arch. Lacau                                      photographs and papers of Pierre Lacau, in Paris, Centre Documentaire d'Histoire des Religions, 19 Avenue d'Iéna.
- Badawy, Iteti                                  A. Badawy, the Tombs of Iteti, Sekhem ankh-Ptah and Kaemnofert at Giza (Berkeley: 1976).
- Bisson de la Roque                              F. Bisson de la Roque, Rapport sur les fouilles d'Abou-Roasch 1922/23 FIFAO I.3 (Cairo: 1924).
- BM, Hieroglyphic Texts                      British Museum, Hieroglyphic Texts from Egyptian Stelae etc., 9 parts (London: 1911ff.)
- Borchardt, D 11                                  L. Borchardt, Denkmäler des Alten Reiches, I ("Catalogue général des antiquités égyptiennes du Musée du Caire,"XCVII) (Berlin: 1937).
- Bothmer, Arts III                                B. Bothmer, Arts in Virginia III<sup>1</sup> (Fall, 1962).
- CG    L. Borchardt, Statuen und Statuetten von Königen und Privatleuten, I, (Catalogue général des antiquités égyptiennes du Musée du Caire, LIII) (Berlin: 1911).

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#1

NAME: ḥHT-ḥTP

ID: G 7650

TITLES:

MORTUARY: ḥm-ntr Ḥwfw

ḥrp ḥ

OTHER:

ḏ-ḥr

...ḥm ḏw Nhn

[ḥm-ntr] wḥdt

ḥrj-wḏb [n] ḥwt-ḥ nh

ḥrp ḥḥts km

smr w t j

DATE: Dynasty 4 (reign of Khafra)

SOURCE OF DATE: KB, 52, 287, [7].

FAMILY:

WIFE: MRJTJT·S III (see below, #37)

REFERENCES: MFA: A 7767, A 7286-E 6517 (unpublished);

Smith, HESPOK, 160-161, pls. 41-42;PM III<sup>1</sup>, 200.

REMARKS: The stela of MRJTJT·S is from this tomb.

#2

NAME: ḥHT-ḥTP

ID: G 1204

TITLES:

MORTUARY: shḏ ḥmw-ntr ḥht-Ḥwfw

OTHER: wr mdw šm'w

nj-nst-ḥntt

ḥkḥ ḥwt

smḥ' wḏ-ḥ mdw n ḥrj-wḏbw

DATE: Dynasties 5 to 6 (from Djedkara to Teti)

SOURCE OF DATE: KB, 52, 240, 287, [9].

REFERENCES: MFA: A 6020, EG 936-937 (unpublished false door);

PM III<sup>1</sup>, 57.

#3

NAME: 𓂏𓂏-𓂏𓂏

ID: H

TITLES:

MORTUARY: jmj-rꜥ zšw n 𓂏𓂏-𓂏wfw  
 OTHER: jmj-rꜥ 𓂏mw-kꜥ mwt nswt  
 rh nswt  
 zš pr-ḥd  
 zš šnwt pr-ḥd  
 zš šnwt pr-ḥd ḥ'  
 šḥd zšw pr-ḥd  
 šḥd zšw šnwt

DATE: early Dynasty 5 to Dynasty 6

SOURCE OF DATE: KB, 53, [11].

FAMILY:

FATHER: Kꜥ-NFR

TITLES:

OTHER: rh nswt

MOTHER: PSST

TITLES:

OTHER: jmj-rꜥ sjnwt  
 𓂏m-kꜥ

WIFE: NJ-KꜥW-ḤTHR

TITLES:

OTHER: rḥt nswt  
 ḥmt-kꜥ mwt nswt

ELDEST SON: 𓂏mw-Kꜥ

DAUGHTER: NFRT

SON: R' -WR

REFERENCES: Hassan, GIZA I, 73-80.

#4

NAME: HT-HTP

ID: G 1208

TITLES:

MORTUARY:     jmj-rz ht-Hwfw  
                   w' b nswt  
                   hm-ntr Hwfw  
                   hrp jmjw zz  
 OTHER:           jmj-rz ms'  
                   rh nswt  
                   shd wzz

DATE: mid Dynasty 5 or later

SOURCE OF DATE: KB, 52, [10].

FAMILY:

WIFE: MRJTJT-S

TITLES:

OTHER:           rht nswt

REFERENCES: MFA: A 6190 (unpublished);

Fischer, MMJ 8 (1973), 18-29 (22), n. 31, fig. 20;PM III<sup>1</sup>, 58.

REMARKS: may be son of SNNW (G 1206, see below, #16)

#5

NAME: ḥḤT-ḤTP

ID: AB

TITLES:

MORTUARY: ḥm-nṯr Ḥwfw  
 ḥrp jmjw zḥ  
 shd w bw ḥḥt-Ḥwfw

OTHER: jmj-rb srw  
 wr md šm'  
 nj-nst-ḥntt  
 rh nswt

DATE: Dynasty 6 to FIP (from Pepi II to end of Dynasty 8)

SOURCE OF DATE: KB, 52, 240, 287, [8].

FAMILY:

WIFE: ḤMT-ḥḤTJ

SON: ḥḤT-ḤTP

TITLES:

MORTUARY: shd ḥmw-nṯr  
 OTHER: wr md šm'w  
 ḥkḥ ḥwt

REFERENCES: Abu-Bakr, Giza I, 1-9;  
 PM III<sup>1</sup>, 49.

#6

NAME: JFZN

ID: G 2196

TITLES:

MORTUARY: w' b nswt  
 hm-nꜣr Hwfw  
 hntj-š  
 šꜥd w' bw  
 šꜥd hntjw-š

OTHER: jmj-rꜣ hntjw-š pr-' ꜥ  
 jrj hrjw-' ' t-nswt  
 hrj-sšꜥꜥ  
 rh nswt

DATE: Dynasty 6 (reign of Pepi II)

SOURCE OF DATE: KB, 53, 240, 287, [16].

FAMILY:

WIFE: MRJTJT·S

SON: MRJ-' NH

TITLES:

MORTUARY: w' b nswt

OTHER: rh-nswt

hntj-š pr[-' ꜥ]

REFERENCES: WKS, Giza IV, 21-22;PM, III<sup>1</sup>, 82.

#7

NAME: JJ-MRJJ

ID: G 6020

TITLES:

MORTUARY: w' b nswt  
 hm-ntr Nfr-jr-k3-K'  
 hm-ntr Hwfw  
 hm-ntr Sshw-R'  
 OTHER: jmj-r3 pr hwt-'3t  
 rh nswt

DATE: Dynasty 5, probably reign of Neferirkare

SOURCE OF DATE: KB, 54, 287, [21].

FAMILY:

FATHER: SPSS-K3F-'NH

SON: NFR-B3W-PTH

REFERENCES: MFA: 4430 (unpublished);  
 PM, III<sup>1</sup>, 170.

#8

NAME: JB-JR

ID: J

TITLES:

MORTUARY: shd w' bw 3ht-Hwfw  
 OTHER: hrj-s3t3

DATE: Dynasty 6

SOURCE OF DATE: KB, 56, [33].

REFERENCES: Junker, Giza IX, 102-104;  
 PM, III<sup>1</sup>, 110.

#9

NAME: JMJ-ST-KBJ

ID: G 4351

TITLES:

MORTUARY: w' b nswt

hmt-ntr Hwfw

OTHER: jmj-r3 'h3w

jmj-r3 prwj 'h3w

jmj-r3 wpwt

jmj-r3 wpwt

pr-'3

jmj-r3 hntjw-š pr-'3

jmj-r3 hrjw- ' -nswt

jmj-r3 šwj pr-'3

jmj-r3 st hntjw-š pr-'3

jmj-ht hntjw-š pr-'3

jrj sd3wt pr-'3

wd' mdw m swt špswt n pr-'3

hrj-sštz

hrj-sštz nb. f

hrj-sštz nb. f mrr. f

hntj-š pr-'3

z3b 'd-mr pr-'3

smr prj

shd hntjw-š pr-'3

DATE: Dynasty 6 to FIP

SOURCE OF DATE: KB, 56-57, [36].

FAMILY:

WIFE: HWT-B3WNN

TITLES:

OTHER: rht nswt

hmt-ntr Hthr nb. t nh. t

REFERENCES: Junker, GIZA, VI, 208-217;PM, III<sup>1</sup>, 126.

#10

NAME: JN-K<sub>3</sub>-F

ID: H

TITLES:

MORTUARY: hm-ntr H'·f-R'  
shd w' bwOTHER: rh nswt  
hrj-sšt<sub>3</sub> nb·f

DATE: mid Dynasty 5 or later

SOURCE OF DATE: KB, 57, [42].

REFERENCES: Hassan, Giza VI<sup>3</sup>, 117-124;  
PM, III<sup>1</sup>, 248.

#11

NAME: JRW-K<sub>3</sub>-HWF<sub>W</sub>

ID: LG 20-21

TITLES:

MORTUARY: jmj-r<sub>3</sub> sht-Hwfw

DATE: Dynasty 5

SOURCE OF DATE:

REFERENCES: LD I, 44-5;  
PM, III<sup>1</sup>, 49.

#12

NAME: JR·N-HT/JR·N-PTH/JRJ

ID: H

TITLES:

MORTUARY: jmj-ht hmw-ntr H'·f-R' wr  
shd hmw-ntr Mn-kw-R' ntrjOTHER: jmj-rz wpw·t  
jmj-rz wpw·t ntr m prwj  
jmj-rz wpw·t htpt ntr  
nj-nst-hntt  
hrj-sštz wd' -mdwt  
hrj-sštz nj sdwz ntr  
hrp jrj mdz·t  
zsb jmj-rz zšw  
zsb jmj-ht jrj mdz·t  
zš '·-nswt  
zsb 'd-mr  
zsb shd jrj mdz·t

DATE: Dynasty 6 (from Menera to Pepi II)

SOURCE OF DATE: KB, 58, 240<sub>3</sub>, 288, [48].REFERENCES: Hassan, Giza VI<sup>3</sup>, 9-17;  
PM, III<sup>1</sup>, 250.

#13

NAME: JR·N-HT/JRJ

ID: unknown

TITLES:

MORTUARY: jmj-rz njwt zht-Hwfw  
shd w' bw zht-HwfwOTHER: hrj mdw (?)  
hrj-tp nswt pr-' z  
zsb 'd-mr

DATE: end Dynasty 6

SOURCE OF DATE:

REFERENCES: PM, III<sup>1</sup>, 117;  
Pietrangeli, Le Sculture, 76, pl. 58.

#14

NAME: JR·N-R'

ID: J

TITLES:

MORTUARY: w b nswt  
 hm-ntr Hwfw  
 shd hmw-ntr Mn-kw-R' ntrj

OTHER: jmj-rz hm-kz  
 nj-kz-nswt nj dt.f

DATE: early Dynasty 6

SOURCE OF DATE: KB, 58, [51].

REFERENCES: Junker, Giza III, 156-163.

#15

NAME: JHx

ID: J

TITLES:

MORTUARY: shd w bw zht-Hwfw

OTHER: hm-ntr Mx't  
 hrj-sšt3 n wd' mdw  
 z3b jmj-rz zšw

DATE: Dynasty 6 (reign of Pepi II)

SOURCE OF DATE: KB, 59, 288, [55].

REFERENCES: Junker, Giza VI, 74-77.

#16

NAME: JHT-N-NB

ID: G 1206

TITLES:

MORTUARY: shd w' bw

OTHER: rh nswt

DATE: mid Dynasty 5 or later

SOURCE OF DATE: Reisner, Giza I, 218.

FAMILY:

SON: SNNW

TITLES:

MORTUARY: hm-ntr Hwfw

'd-mr Grgt

hrp jmjw z3

FAMILY:

SON: JHT-HTP

TITLES:

MORTUARY: shd w' bw

'd-mr Grgt

hrp jajw z3

OTHER: hrp 'pr nfrw

shd wjz

REFERENCES: MFA: 11777-11778 (unpublished);

Reisner, Giza I, 218;PM, III<sup>1</sup>, 57-58.

#17

NAME: JSFJ

ID: Decree of Pepi II

TITLES:

MORTUARY:    jꜛj-rꜛ wsꜥt ꜛ Mn-kꜛw-R' nꜥrj  
               jꜛj-rꜛ njwt ꜛ Mn-kꜛw-R' nꜥrj  
               jꜛj-rꜛ ꜥbt ꜛ Mn-kꜛw-R' nꜥrj

DATE: Dynasty 6, reign of Pepi II.

SOURCE OF DATE: Leprohon, CAA Boston, 1/4 - 3/4.REFERENCES: Leprohon, CAA Boston, 1/4 - 3/4.

#18

NAME: JTTJ

ID: G 7948

TITLES:

MORTUARY:    shꜥ w' bw ꜥ·f-R' wr

DATE: Dynasty 5 or later

SOURCE OF DATE: KB, 109, [362].

FAMILY:

BROTHER: ꜥ·f-R' -'nh (see below, #81)

REFERENCES: PM, III<sup>1</sup>, 208 [2].

#19

NAME: JTTJ

ID: G 7391

TITLES:

MORTUARY: w' b  
w' b [H' .f-R' wr]  
shd w' bw  
shd w' bw H' .f-R' wr

OTHER: jmj-rz pr-'z  
jmj-rz kbt nt nswt  
rh nswt  
[sdwtj ntr] wjs-'z  
shd n pr-'z

DATE: late Dynasty 5

SOURCE OF DATE: Badawy, Iteti..., 11, 12.

FAMILY:

SON: JTTJ

TITLES:

OTHER: jmj-rz-hmw kb  
rh nswt

BROTHER: 'nh-H' .F-R'

MORTUARY: shd w' bw H' .f-R' wr

REFERENCES: Badawy, Iteti..., 11-12;PM, III<sup>1</sup>, 193;

MFA: B 6902-B 6903 (unpublished).

#20

NAME: JDW

ID: G 7102

## TITLES:

MORTUARY: hntj-š Mn-nfr Ppjj  
 šḥd w bw šht-Hwfw  
 šḥd w bw H'·f-R' wr

OTHER: jwn knawt  
 jmj-rš wpt ḥtp-nṯr m prwj  
 jmj-rš ḥwt wrt  
 jmj-rš zšw  
 jmj-rš zšw mrt  
 wḏ' mdw  
 mdw rhjt  
 ḥm-nṯr Mš' t  
 ḥrj-sšṯṯ m wḏ' -mdwt  
 ḥrj tp nswt  
 zšb  
 zš mrt  
 zš nswt  
 zš ' -nswt ḥft ḥr  
 smš' wḏ' mdw

DATE: Dynasty 6 (from Menera to Pepi II)

SOURCE OF DATE: KB, 62, 240, 288, [77].

## FAMILY:

WIFE: MRJTJT·S

SON: JDW

## TITLES:

OTHER: jmj-r pr

šḥd ḥmw-kš

zšb zš

SON: KšR/MRJ-R' -NFR(see below 112)

DAUGHTER: BNDJT

DAUGHTER: JRJJ

REFERENCES: WKS, GIZA II, 19-31;  
 PM, III<sup>1</sup>, 185.

#21

NAME: 'nh-NB.F

ID: MQ 3

TITLES:

MORTUARY: jmj-rꜣ w' bw hꜣstjw Mn-kꜣw-R' nꜣrj

w' b n nswt

hm-nꜣr Mn-kꜣw-R'

OTHER: jmj-rꜣ jpt pr-'ꜣ

jꜣj-hꜣt pr-'ꜣ

rꜣ nswt

zš whꜣrt

shꜣ pr-'ꜣ

shꜣ skꜣ n wjꜣ

DATE: Dynasties 5 to 6

SOURCE OF DATE: PM III<sup>1</sup>, 294;

cf. KB, 64, [97].

FAMILY:

FATHER: MNKꜣw-R' -'nh

REFERENCES: MFA: A 5449 (unpublished);

PM III<sup>2</sup>, 294;

MQ, no. 3.

#22

NAME: 'nh-NB.F

ID: SM

TITLES:

MORTUARY: hm-nꜣr Mn-kꜣw-R'

OTHER: rꜣ nswt

DATE: Dynasty 6

SOURCE OF DATE: Saleh, "Mycerinus," 150, pl. 31C.

REFERENCES: Saleh, "Mycerinus," 150, pl. 31C.

REMARKS: may be same as #20.

#23

NAME: 'nh-TJ-FJ

ID: G 4911

TITLES:

MORTUARY: w' b nswt

hm-ntr Hwfw

OTHER: rñ nswt

DATE: Dynasties 5 and 6

SOURCE OF DATE: Curto, Gli Scavi, 74 (1).

FAMILY:

WIFE: DFT

REFERENCES: Curto, Gli Scavi, 74 (1);PM III<sup>1</sup>, 141.

#24

NAME: W3S-PTH

ID: H

TITLES:

MORTUARY: jmj-r3 hmwt w' bt

hm-ntr Hwfw

OTHER: jmj-r3 hm-k3

mhnk nswt

rh nswt

hm-ntr Pth

hm-ntr Zkr

hrj-hkr

DATE: end of Dynasty 4 to early Dynasty 5

SOURCE OF DATE: Hassan, Giza II, 5-14.

FAMILY:

WIFE: WMTT-K3

TITLES:

OTHER: rht-nswt

hmt-ntr Hthr

SON: W3S-PTH

TITLES:

OTHER: shd hmwt w' bt

hm-k3

SON: SPSS-PTH

SON: DT-PTH

DAUGHTER: WNTT-K3

REFERENCES: Hassan, Giza II, 5-14, fig. 17;  
PM, III<sup>1</sup>, 273.

#25

NAME: WR-MRW

ID: G 7851

TITLES:

MORTUARY: w' b nswt

hm-ntr H' . f-R'

hm-ntr Snfrw

OTHER: hm-ntr hk3

DATE: end Dynasty 5 to Dynasty 6

SOURCE OF DATE: KB, 67-68, [116].

REFERENCES: MFA: A 7544; B 8635 (drum over entrance).

#26

NAME: WR-HW

ID: LG 95

TITLES:

MORTUARY: hm-ntr Mn-kw-R'  
hm-ntr Nfr-jr-kz-R'OTHER: jmj-rz js dfz  
jmj-rz mš'  
jmj-rz st-dfz  
jmj-rz zšw  
jmj-rz gs jmj-wr. t' z hr  
jdw nfrw  
wd' mdw wsht  
pfr mh m šw. t  
hm-ntr Wsjr  
hm-ntr Mz' t  
hm-ntr st-jb-R'  
hrj wdb  
[hrp] zšw jrj- n  
hrp zšw jrjw n ddx. t wrt  
shd zšw pr mdzt  
shd pr hrj-wdbw  
shd zšw n ht wrt  
sdm mdw m sštz nb  
zsb jmj-rz zšw  
zsb shd zšw n wpt  
zsb shd zšw n hw. tj wr. tj jmj-wr. t nt hnw  
zš' -nswt [n] pr- z

DATE: end Dynasty 5 to early Dynasty 6 (Djedkara to Unas)

SOURCE OF DATE: KB, 68, 240, 289, [118].

FAMILY:

WIFE: HNWT-SN

TITLES:

OTHER: rht nswt  
hmt-ntr HthrREFERENCES: Hassan, Giza V, 237-256;

LD II, 43-44;

Urk. I, 46-48;PM, III<sup>1</sup>, 254.

#27

NAME: WDTꜣ

ID: H

TITLES:

MORTUARY: hm-nꜣr Mn-kꜣw-R'

DATE: late Dynasty 4

SOURCE OF DATE:

REFERENCES: Hassan, Giza VIII 308, [30189].

#27A

NAME: WTꜣ

ID: CG

TITLES:

MORTUARY: w' b nswt  
hrj-sꜣtꜣ Mn-kꜣw-R' nꜣrj

DATE: Dynasties 5-6

SOURCE OF DATE: KB, 69, [124].

REFERENCE: Borchardt, Denkmaler III, 206.

#28

NAME: PN-MRW

ID: G 2197

TITLES:

MORTUARY: w' b nswt  
hm-nꜣr Mn-kꜣw-R'  
OTHER: jmj-rꜣ hmw-kꜣ  
rh nswt  
hrp zh  
shꜣ hmw-kꜣ

DATE: end of Dynasty 5 to Dynasty 6 (from Unas to Teti)

SOURCE OF DATE: KB, 71, 240, 289, [140].

FAMILY:

WIFE: MRJTJT-S

REFERENCES: WKS, Giza IV, 26;PM, III<sup>1</sup>, 82;

MFA: A 681-A 688.

#29

NAME: PTH-MK-STJ-F

ID: Abousir

TITLES:

MORTUARY:    jꜣj-rꜣ kꜣkꜣj bꜣ  
                   jꜣj-ḥt ḥꜣw-kꜣ Ḥnt-kꜣw.s  
                   šꜣd wꜣ bw zḥt Ḥwfw

DATE: Dynasty 6

SOURCE OF DATE: KB, 73, [153A].

REFERENCE: Schaefer, Priestergraber, 9-10.

#30

NAME: PTH-ḤTP

ID: near G 7410

TITLES:

MORTUARY:    wꜣ b nswt  
                   ḥꜣm-nꜣr Ḥwfw  
 OTHER:       ḥꜣrj-sšꜣtꜣ

DATE: ?

REFERENCES: MFA: A 7012;

Service Excavation magazine near G7410 (unpublished).

#31

NAME: MJNWW

ID: built against G4860

TITLES:

MORTUARY: w' b nswt  
 hm-ntr Bjkwj-j-nbw  
 hm-ntr Hwfw  
 hm-ntr mddw-Hr  
 hm-ntr mdd-r-nbtj

OTHER: hrj-sštz  
 hrj-sštz nb.f arr nb.f  
 hntj-š pr-'z  
 sbz nswt

DATE: Dynasty 6

SOURCE OF DATE: KB, 77, [172].

REFERENCES: Junker, Giza VI, 232-36;  
 PM, III<sup>1</sup>, 140.

#32

NAME: MNW-HM

ID: MM 11

TITLES:

MORTUARY: w' b Wer-kz.f-swt  
 hm-ntr Mn-kzw-R' m hnw

OTHER: hm 'h (?)  
 hm-ntr Hthr  
 hm-ntr sšzt  
 hn R' m Nht-R'  
 hn Hrw Nhn-R'  
 hrj-sštz  
 sdzwtj-ntr

DATE: Dynasty 6

SOURCE OF DATE: KB, 151, [559], based on date of father.

FAMILY:

FATHER: TP M'nh II

REFERENCES: Mariette, D 11, 200;  
 Saqqara;  
 Cairo CG 1417.

#33

NAME: MN-HBW

ID: LG 30

TITLES:

MORTUARY: hm-ntr mddw-Hr  
 hm-ntr Hwfw  
 OTHER: hrj-sštz  
 hrj-sštz n hmw.t  
 shđ jrjw-mđst pr-mđst ntr pr-'z

DATE: Dynasty 6

SOURCE OF DATE: KB, 78, [178].

REFERENCES: Junker, Giza VIII, 159-165;  
 PM, III<sup>1</sup>, 168.

#34

NAME: MR-JB/Kz-NJ-NJSWT

ID: G 2100 - I - annex

TITLES:

MORTUARY: hm-ntr Hwfw  
 hrp 'ñ  
 OTHER: jmj-rz mš'  
 jmj-rz kbt nbt nswt  
 'd-mr Dp  
 wr mšw Jwnw  
 r pjw nbw wr mdw šm'  
 rh nswt  
 hr-hbt  
 sar  
 smf w'tj  
 sđwtj ntr  
 zš nswt n ht.f

DATE: early Dynasty 5, (dated by Reisner to reign of Menkaura)

SOURCE OF DATE: KB, 79, 290, [182].

FAMILY:

FATHER: MR-JB-S

ID: G 2000

MOTHER: SJDJT

DAUGHTER: N-SDR-KzJ (see below #60)

REFERENCES: LD II, 18-22.

#35

NAME: MR-' nh·F

ID: H

TITLES:

MORTUARY: w' b nswt  
 hm-ntr Hwfw  
 OTHER: jmj-rꜥ pr  
 rh nswt

DATE: Dynasty 6

SOURCE OF DATE: KB, 81, [190].

FAMILY:

WIFE: NFR-ḥTP·S

TITLES:

OTHER: rht-nswt  
 hnt-kꜥ

SON: S' nh·N·S

TITLES:

OTHER: rh nswt

SON: NFR

TITLES:

OTHER: zš

REFERENCES: Hassan, Giza III, 14-22;  
 PM, III<sup>1</sup>, 278.

REMARKS: rock-cut tomb.

#36

NAME: MRW-Kz

ID: J

TITLES:

MORTUARY: w' b nswt  
 hm-ntr Hwfw  
 OTHER: rh nswt  
 ssw hzjt

DATE: Dynasty 6

SOURCE OF DATE: KB, 81, [193].

FAMILY:

FATHER: Kz-HR-PTH  
 WIFE: NDT-M-PT  
 SON: JHJ-M-Sz·F  
 SON: SPSS-PTH

REFERENCES: Junker, Giza IX, 70-83;  
 PM, III<sup>1</sup>, 118.

#37

NAME: MRJTJT·S III

ID: G 7650

TITLES:

MORTUARY: hmt-ntr Hwfw  
 OTHER: hmt-ntr Njt  
 hmt-ntr Hthr  
 sst nswt n ht·f

DATE: Dynasty 4 (reigns of Khufu and Khafra)

SOURCE OF DATE: KB, 52, 287, [7].

FAMILY:

FATHER: HWFW  
 MOTHER: MRJTJT·S I  
 HUSBAND: HHT-HTP (see above #1)

REFERENCES: Smith, HESPOK, pl. 41 a;  
 PM, III<sup>1</sup>, 200;

MFA, obj. Reg. 29-3-87, 29-7-21, 29-7-22, 29-3-88;

6 blocks from E wall of G 7650;

MFA, 30.831, 37,2620, C 8132, C 13413, EG 515.

#38

NAME: NST

ID: built against G 1351

TITLES:

MORTUARY: shd w' bw zht-Hwfw

DATE: Dynasty 6

SOURCE OF DATE: KB, 83, [203A].

REFERENCES: Junker, Giza IX, 234;  
PM, III<sup>1</sup>, 105.

#39

NAME: NJ-NHBT

ID: Epu

TITLES:

MORTUARY: shd hntjw-š H' .f-R' wr

DATE: late Dynasty 6

SOURCE OF DATE: PM, III<sup>1</sup>, 292.REFERENCES: CM: 19.6.46.5;  
PM, III<sup>1</sup>, 292.

#40

NAME: NJSW-S'nh

ID: south of G I

TITLES:

MORTUARY: hm-ntr Hwfw  
hrp jmjw zt  
shd w' bwOTHER: rh nswt  
hrj-sšt

DATE: Dynasty 6 to FIP (from Teti or Pepi II to Dynasty 8)

SOURCE OF DATE: KB, 87, 240, 291, [235].

FAMILY:

WIFE: HNWT

TITLES:

MORTUARY: hmt-k

OTHER: rht nswt

REFERENCES: Junker, Giza X, 173-182;  
PM, III<sup>1</sup>, 220.

#41

NAME: NJ-K~~z~~-HP

ID: G 2352

TITLES:

MORTUARY: hm-ntr Hwfw hntj ht Hwfw

OTHER: rh nswt  
...hwt-'t[t]

DATE: Dynasty 5

SOURCE OF DATE: WKS, Giza IV, 34.REFERENCES: WKS, Giza IV, 34, pl. 57 a, fig. 44.

#42

NAME: NJ-K~~z~~-NSWT

ID: G 2184

TITLES:

MORTUARY: hm-ntr Hwfw

OTHER: wr m<sub>u</sub>w Sm'w  
hrj-sštr  
nj-nst-hntt

DATE: Dynasty 5

SOURCE OF DATE: KB, 88, [240]

REFERENCES: MFA: from G 2184 no. 12;

Box cemetery 2100 etc.;

KB, 88, [240];

CM: CG, 1307.

REMARKS: may be the same as NJ-K~~z~~-NSWT in KB, 88, [240],  
which Borchardt dated to Dynasty 5, however, this is unlikely,  
as they have no titles in common.

#43

NAME: NJ-' nh/NJJ

ID: J

TITLES:

MORTUARY: ' d-mr Grgt  
 hrp w' bw nswt zht-Hwfw  
 OTHER: jmj-rz mš'  
 rh nswt

DATE: Dynasty 6

SOURCE OF DATE: KB, 84, [207 A].

FAMILY:

SON: JJ-M-ḤTP

TITLES:

MORTUARY: ' d-mr Grgt  
 hrp jmjw zš  
 hrp w' bw nswt  
 OTHER: rh nswt  
 shd wjz

REFERENCES: Junker, Giza VI, 239-240.

#44

NAME: NFR

ID: G 4761

TITLES:

MORTUARY: w' b nswt  
 hm-ntr mddw-Ḥr  
 hm-ntr mdd-r-nbtj  
 hm-ntr Hwfw  
 OTHER: jmj-rz pr  
 jmj-rz hmw-kz

DATE: early Dynasty 5 (from Neferirkara to Djedkara)

SOURCE OF DATE: KB, 90, 291, [250].

FAMILY:

FATHER: HNT

MOTHER: JJT-JT

WIFE: ḤTP-Mr' T

REFERENCES: Junker, Giza VI, 26-74;  
 PM, III<sup>1</sup>, 137.

#45

NAME: NFR

ID: L 99

TITLES:

MORTUARY: w' b nswt  
 hm-ntr H' .f-R'  
 hrp 'h

OTHER: hrj-sštz  
 hrp jrw šn nswt  
 smr w' tj

DATE: mid Dynasty 5 or later

SOURCE OF DATE: KB, 90, [252].

FAMILY:

WIFE: NB-JRJ

SON: NJ-Kt-HNMW

TITLES:

OTHER: zš

REFERENCES: LD II, 95f.;

Hassan, Giza III, 200-218;PM, III<sup>1</sup>, 258.

#46

NAME: NFR

ID: G 1461

TITLES:

MORTUARY: jmj-rš zšw šht-Hwfw  
 hrj-sštz [šht-Hwfw]?

OTHER: jmj-rš pr hd

DATE: Dynasty 5 or 6

REFERENCES: MFA: 12967-12468 (unpublished);

PM, III<sup>1</sup>, 64;Strudwick, JEA 71 (1985), 43;Hassan, Giza I, 73.

#47

NAME: NFR  
 ID: south of HTPJ  
 TITLES:

MORTUARY: hm-ntr H'·f-R'

DATE: Dynasties 5 to 6

SOURCE OF DATE: Hassan, Giza VII, pl. 57 [A], 126 [13].

REFERENCES: Hassan, Giza VII, pl. 57 [A], 126 [13];  
 PM, III<sup>1</sup>, 241.

#48

NAME: NFRJ  
 ID: AB  
 TITLES:

MORTUARY: w' b nswt  
 w' b nswt sht-Hwfw

OTHER: jmj-rs gs-[pr]  
 jrj jz  
 rh nswt  
 hm-ntr Hr sss tks  
 hks hwt  
 hks hwt'z[t]  
 hrp' pr  
 hrp' pr nfrw  
 zsb hrj Skr  
 shd wjs  
 shd pr-'z

DATE: mid Dynasty 5 (from Djedkara to Unas)

SOURCE OF DATE: KB, 90, 240, 291, [254].

REFERENCES: Abubakr, Giza I, 39-67.  
 PM, III<sup>1</sup>, 50.

#49

NAME: NFRJ  
 ID: unknown  
 TITLES:

MORTUARY: zš jmjw zš sht-Hwfw

DATE: Dynasties 5 to 6

SOURCE OF DATE: PM, III<sup>1</sup>, 176.

REFERENCES: PM, III<sup>1</sup>, 176;  
 Cl. Mus.: 20.1992.

#50

NAME: NFR-JHJ

ID: G 4513 A-B-C-D-E

TITLES:

MORTUARY: jmj-rz Mn-kzw-R' ntrj  
 jmj-rz H' f-R' wr  
 shd w' bw

OTHER: wr mdw šm'w  
 wr mdw [n] šm'w  
 nj-nswt-hntt  
 rh nswt  
 rh nswt hwt-' zt  
 hrj-sštz  
 hrp zšw jrj-j' h

DATE: Dynasty 6 to FIP (from Pepi II to Dynasty 8).

SOURCE OF DATE: KB, 90-91, 240, 291, [257].

REFERENCES:

- A: MFA: A 7152-7153 (unpublished west wall);
  - B: MFA: A 7147 (unpublished architrave);
  - C: MFA: A 7148-7150 (unpublished false door)
  - D: MFA: A 7180 (unpublished east face of north column);
  - E: MFA: A 7158 (east face of southern column);
- PM, III<sup>1</sup>, 129.

#51

NAME: NFR-Bzw-PTH

ID: G 6010; LG 15

TITLES:

MORTUARY: w' b nswt  
 hm-ntr Nj-wsr-R'  
 hm-ntr Nfr-jr-kb-R'  
 hm-ntr Hwfw  
 hm-ntr Szhw-R'

OTHER: jmj-rb pr hwt-'jt  
 jmj-rb hwt-'jt  
 rh nswt

DATE: Dynasty 5 (from Neferirkara to Djedkara)

SOURCE OF DATE: KB, 91, 240, 291, [258].

FAMILY:

FATHER: JJ-MRJJ

GRANDFATHER: SPSS-Kbf 'NH

SON: NFR-SSM-PTH

WIFE: HNWT

REFERENCES: MFA: A 7965 (unpublished east wall);

AFA: 4405 (unpublished);

LD II, 55-58;

Ber. Mus.: 1114 Schafer, Agyptische Inschriften I, 6-7;PM, III<sup>1</sup>, 169.

#52

NAME: NFR-N-PTH

ID: Sq

TITLES:

MORTUARY: hm-ntr Hwfw

DATE: Dynasties 5 to 6

SOURCE OF DATE:

REFERENCES: Saqqara;

PM, III<sup>2</sup>, 2, 756.

#53

NAME: NFR-HR-N-PTH/FFJ

ID: HKC

TITLES:

MORTUARY: w' b nswt

hm-ntr Mn-kw-R'

hm-ntr H' .f-R'

OTHER: rht nswt

DATE: end Dynasty 5 to Dynasty 6 (from Djedkara to Unas)

SOURCE OF DATE: KB, 92, 291, [267].

FAMILY:

WIFE: SXT-MRT

TITLES:

OTHER: rht nswt

SON: TZN

TITLES:

OTHER: kbh nmtj pr-'x

DAUGHTER: MRT-TF.S

TITLES:

OTHER: rht nswt

REFERENCES: Hassan, Giza V, 279-287;  
PM, III<sup>1</sup>, 253.

#54

NAME: NFR-HTP

ID: HKC

TITLES:

MORTUARY: smsw hxt Mn-kw-R' ntrj

DATE: mid Dynasty 5 or later

SOURCE OF DATE: KB, 92, [268 B].

REFERENCES: Hassan, Giza VII, 55-56.

# 55

NAME: NFR-HW

ID: HKC

TITLES:

MORTUARY: jmj-rꜥ H̄ · f-R' wr

OTHER: wr mꜥw Sm'w

DATE: Dynasty 5 or later

SOURCE OF DATE: KB, 92-93, [269 A].

FAMILY:

WIFE: S'nh-HTHR

TITLES:

MORTUARY: jmj-rꜥ H̄ · f-R' wr

w' b nswt

hrp w' bw nswt

OTHER: rh nswt

hrj-sꜥtꜥ nh·f

REFERENCES: Hassan, Giza VI<sup>3</sup>, 155-157.REFERENCES: Hassan, Giza VI<sup>3</sup>, 158-62;PM, III<sup>1</sup>, 248.

#56

NAME: NFR-Z[...]

ID: G 2240

TITLES:

MORTUARY: jmj-rꜥ st hntjw-š

hm-ntr Hwfw

OTHER: hrj-sꜥtꜥ

DATE: ?

REFERENCES: MFA: A 8228 (unpublished).

#57

NAME: NFRT-NSWT

ID: G 1457

TITLES:

MORTUARY: jmj-rꜥ w' bt nswt  
 jmj-rꜥ njwt ꜥht-Hwfw  
 ꜥm-ntr Hwfw  
 hrp w' bw n nswt

OTHER: rh nswt  
 hrj-sꜥtꜥ n nswt

DATE: Dynasty 5 (from Djedkara to Unas)

SOURCE OF DATE: KB, 91, 240, 291, [263].

REFERENCES: MFA: A 7736 (unpublished false door);

MFA: A 7736 (unpublished lintel);

see also Fischer, JAOS 74, (1954), 26ff.PM III<sup>1</sup>, 64.

REMARKS: Reisner dated this to the end of the 5th dynasty based on a sealing of Menkaura (Giza I, 210), but Junker disagrees with this date (Giza V 3), as does Baer ([263], 91).

NFRT-NSWT should probably be read as NFR-NSWT

#58

NAME: NJ-ꜥTP-ꜥNMW

ID: AB

TITLES:

MORTUARY: ꜥm-ntr ꜥntj ꜥht-Hwfw  
 shꜥ w' bw

OTHER: rh nswt  
 ꜥꜥꜥ ꜥwt Hwfw

DATE: mid Dynasty 5 or later

SOURCE OF DATE: KB, 87, [230].

FAMILY:

WIFE: ꜥNTJ

TITLES:

OTHER: mjtrꜥ  
 rht nswt

REFERENCES: Abubakr, Giza I, 11-25;  
 PM, III<sup>1</sup>, 50.

#59

NAME: NSWT-NFR

ID: G 4970

TITLES:

**MONTUARY:**   jmj-rꜥ 'ḥ Ḥ-f-R' wr  
                   jmj-rꜥ w'bw Ḥ-f-R' wr  
                   'd-mr Grgt  
                   'd-mr Ṛn rsj Ḥ-f-R' wr  
                   ḥm nṯr of statue of king of Upper Egypt  
                   ḥm-nṯr Ḥ-f-R'  
                   ḥrj-sšꜥ Ḥ-f-R' wr  
                   ḥrp jmjw-zꜥ Ḥ-f-R' wr  
**OTHER:**       jmj-rꜥ 'ḥ  
                   jmj-rꜥ wpwt  
                   jmj-rꜥ wpwt (Upper Egypt 8, 10)  
                   jmj-rꜥ prw nsw nswt  
                   jmj-rꜥ mnww (Upper Egypt 8, 10)  
                   jmj-rꜥ mnww nswt (Lower Egypt 13 east)  
                   jmj-rꜥ nswtjw (Upper Egypt 8, 10)  
                   jmj-rꜥ rḥw (Lower Egypt 13 east)  
                   jmj-rꜥ zswt (Lower Egypt 13 east)  
                   jrj-ḥt nswt  
                   wp.wt  
                   mnw.w nswt  
                   rḥ nswt  
                   ḥkꜥ ḥwt-'ꜥt (Upper Egypt 8, 10)  
                   zꜥb ḥrj-sšꜥ  
                   smjwꜥ  
                   sšm-tꜥ ( Upper Egypt 8, 10)

DATE: early Dynasty 5

SOURCE OF DATE: KB, 96-97, 292, [292].

## FAMILY:

WIFE: HNT

## TITLES:

OTHER: hnt-ntr Njt  
hnt-ntr Hthr

SON: SP SS KzJ

## TITLES:

OTHER: shd wjz

SON: NSDR KzJ

## TITLES:

OTHER: shd wjz

SON: KzNJB

## TITLES:

MORTUARY: hrp 'h

SMF

REFERENCES: Junker, Giza III, 75, 163-87;  
PM, III<sup>1</sup>, 143.

#60

NAME: N-SDR-KzJ

ID: G 2101

TITLES:

MORTUARY: hmt-ntr Hwfw

OTHER: hmt-ntr Hthr

hkrt nswt

srt nswt

DATE: Dynasty 5

SOURCE OF DATE: Junker, Giza II, 97-121.

FAMILY:

FATHER: MR-JB/Kz-PW-NSWT (see above #34)

REFERENCES: Junker, Giza II, 97-121;PM, III<sup>1</sup>, 72.

#61

NAME: R'-JRW-Kz

ID: G 2236

TITLES:

MORTUARY: w' b

w' b nswt

hm-ntr Hwfw

hntj-s

hm-ntr mddw-Hr

OTHER: jmj-rz wpt

hrj-sstz

DATE: ?

REFERENCES: MFA: obj. reg. 39-3-20; photo B 9121.

#62

NAME: R'-HW·F

ID: HKC

TITLES:

MORTUARY: jmj-rꜣ H'·f-R' wr  
 hm-nꜥr H'·f-R'  
 hrp w' bw nswt  
 OTHER: wr mdw Sm'w  
 rh nswt  
 hrj-sꜣtꜣ nj nb·f

DATE: Dynasty 5 or later

SOURCE OF DATE: KB, 100-101, [313].

REFERENCES: Hassan, Giza VII, 95-99;  
 PM, III<sup>1</sup>, 241.

#63

NAME: RWD

ID: G 2086

TITLES:

MORTUARY: w' b mwt nswt  
 hm-nꜥr H'·f-R'  
 hm-nꜥr Hwfw  
 hm-nꜥr Dd·f-R'  
 OTHER: rh nswt  
 zꜣb hrj wdb

DATE: Dynasty 6

SOURCE OF DATE: KB, 102, [317].

FAMILY:

WIFE: MSꜣT

REFERENCES: Fischer, Minor Cemetery,  
 34-35 and 141-143;  
 PM, III<sup>1</sup>, 98.REMARKS: built against G 2085;  
 Reisner assigns this tomb #3086.

#64

NAME: RWD-JB

ID: D. 213

TITLES:

MORTUARY: w' b nswt

hm-ntr Hwfw

DATE: Dynasties 5 to 6

SOURCE OF DATE: PM, III<sup>1</sup>, 117.

FAMILY:

WIFE: TINTT

REFERENCES: PM, III<sup>1</sup>, 117;Ranke, Personennamen 1, 221.

#65

NAME: RWD-K3

ID: no. 1268-69

TITLES:

MORTUARY: hm-ntr Hwfw

shd w' bw nswt

shd w' bw H' · f-R' wr

shd H' · f-R' wr

OTHER: shd n pr-' 3

DATE: Dynasty 4 or later

SOURCE OF DATE: KB, 102, [318], ?.

REFERENCES: BM: 1268-9;

Hieroglyphic Texts, I, pl. VIII;PM, III<sup>1</sup>, 308.

#66

NAME: RWD-K~~z~~

ID: HKC

TITLES:

MORTUARY: hm-ntr H'·f-R'  
shd w bw

OTHER: rh nswt

DATE: early Dynasty 5

SOURCE OF DATE: KB, 101-102, [316].

FAMILY:

SON: JN-K~~z~~·F (figure in large scale)

TITLES:

OTHER: gnwtj w' bt  
gnwtj hkr nswt

WIFE: WN-HR-zHT

TITLES:

OTHER: hmt-ntr Hthr

REFERENCES: Hassan, Giza VI<sup>3</sup>, 125-132;PM, III<sup>1</sup>, 247.

#67

NAME: RMNW-KZ/JMJ

ID: HKC

TITLES:

MORTUARY: shd w' bw Mn-kew-R'  
 shd hmw-ntr Mn-kew-R'  
 shd hmw-ntr Mn-kew-R' ntrj

OTHER: mnjw jhw tntt  
 hm-ntr nj smz-tjwj  
 hm-ntr Hthr nbt Jwnt  
 hrp arw

DATE: Dynasty 6

SOURCE OF DATE: KB, 102, [319]

FAMILY:

SON: SNW-'NH

TITLES:

OTHER: hntj-š pr-'z

SON: NJ-JSWT-PTH

TITLES:

OTHER: hntj-š pr-'z

MENTIONED: PTH SPSS

TITLES:

OTHER: jmj-rz hntjw-š pr-'z

MENTIONED: JFJ-MRJJ

TITLES:

OTHER: rht nswt  
 hnt-ntr HthrREFERENCES: Hassan, Giza, II, 169-178;  
 PM, III<sup>1</sup>, 261.

#68

NAME: RR [...]

ID: G 2349

TITLES:

MORTUARY: w' b [nswt]  
 hm-ntr Hwfw

OTHER: jmj-[rz] hntjw-š pr-'z  
 hrj-pr

DATE: ?

REFERENCES: MFA: A 7315 (unpublished).

#69

NAME: R2R2MW

ID: G 2099

TITLES:

MORTUARY: jmj-ht hntjw-š  
 w' b nswt  
 hm-ntr Hwfw  
 hntj-š

OTHER: rh nswt [n] pr-' z  
 jmj-ht pr-' z

DATE: Dynasty 6

SOURCE OF DATE: PM, III<sup>1</sup>, 70.

FAMILY:

WIFE: 'nh-TJ

SON: Kz-HR-ST.F

TITLES:

MORTUARY: w' b nswt  
 hm-ntr Hwfw  
 hntj-š

OTHER: mry.f w' b nswt shmt

SON: NJ-KzW PTH

TITLES:

MORTUARY: w' b nswt  
 hm-ntr Hwfw  
 hntj-š

SON: KD-N.S

TITLES:

MORTUARY: w' b nswt  
 hm-ntr Hwfw

OTHER: zš

REFERENCES: MFA 2: A 8072-5, 39-1-16; 39-1-17, 39-1-18,  
 39-1-19;

MFA 3: A 8079-8081;

MFA 4: B 9040-44, unpublished.

REFERENCES: MFA: 1, 8077-2;

see also Toledo no. 49.4; Toledo no. 49.5; Virginia Museum,  
 Richmond no. 49.21;

PM, III<sup>2</sup>, 70.

REMARKS: family represented by four statues from G 2099;  
 one son has two names on statue no. 4: Kz-HR-ST.F  
 and KD-N.S.

#70

NAME: HRW-NFR

ID: G 2353

TITLES:

MORTUARY: w' b nswt  
 [...] hm-ntr  
 [...] hm-ntr [Hwf]w[...]

DATE: Dynasty 5

SOURCE OF DATE: WKS, Giza IV, 36.

FAMILY:

SON: HFW-PTP

TITLES:

MORTUARY: w' b nswt  
 OTHER: rh nswt

REFERENCES: WKS, Giza IV, 36.

#71

NAME: Hx' JJ

ID: Cemetery G 2100

TITLES:

MORTUARY: hm-ntr Hwf hntj zht-Hwf  
 hm-ntr Hwf  
 OTHER: rh nswt

DATE: ?

REFERENCES: MFA: from photo Box labelled Giza photo 56, Cemetery G2100 etc.;

#72

NAME: HxH-KxJ

ID: EPU

TITLES:

MORTUARY: hm-ntr mddw-Hr  
 hm-ntr Bjkwj-j-nbw  
 hm-ntr Hwf  
 OTHER: jmj-rz pr pr-'z

DATE: Dynasty 6

REFERENCES: PM, III<sup>1</sup>, 178 [F];  
Anzeiger, Wien, 51 (1914), 165.

#73

NAME: H<sub>2</sub>M-K<sub>2</sub>J

ID: JWC

TITLES:

MORTUARY: hm-ntr mddw-Hr  
hm-ntr Bjkwj-j-nbwOTHER: mrr nb-f R' nb  
hrj-pr pr-'z  
hrj-sštz  
shd hntjw-š pr-'z

DATE: Dynasty 6

SOURCE OF DATE: KB, 103, [325].

REFERENCES: Junker, Giza VII, 253;  
PM, III<sup>1</sup>, 178.

#74

NAME: H<sub>2</sub>GJ

ID: G 2352

TITLES:

MORTUARY: jmj-rz shwt Hwfw  
jmj-rz zšrt nt zht-Hwfw  
w' b nswt  
hm-ntr Bjkwj-j-nbwOTHER: jmj-rz jhw  
rh nswt

DATE: end Dynasty 5

SOURCE OF DATE: KB, 103 [327].

REFERENCE: WKS, Giza IV, 34-35.  
PM, III<sup>1</sup>, 84.

#75

NAME: HTP

ID: MQ

TITLES:

MORTUARY: jmj-rz Mn-k<sub>2</sub>w-R' ntrj

DATE: ?

REFERENCES: MFA: unnumbered drawing in folder with LG 93 and MQ tombs.

#76

NAME: HTPJ

ID: D 211

TITLES:

MORTUARY: w b nswt

hm-ntr Hwfw

DATE: Dynasty 6

REFERENCES: PM, III<sup>1</sup>, 116;

CM: 57164, 57135.

#77

NAME: HTP-N-PTH

ID: G 2350 R

TITLES:

MORTUARY: jmj-rꜥ hntjw-š

w b nswt

hm-ntr Hwfw

OTHER: rh nswt

DATE: mid Dynasty 5 or later

SOURCE OF DATE: KB, 107, [355].

REFERENCES: MFA: unpublished (A 8318).

#78

NAME: HTP-N-PTH

ID: G 7521

TITLES:

MORTUARY: hm-ntr Hwfw

shd hntjw-š

DATE: ?

REFERENCES: MFA: A 3624;

MFA: B 5692 (unpublished).

#79

NAME: HTP-HR-S

ID: G 7000X

DATE: early Dynasty 4

REFERENCES: Reisner and Smith, Giza II, 48-59.REMARKS: On sealing found inside tomb: w'bt mddw-Hr  
(workshop of Khufu); htm nbw w'bt; sbꜥw w'bt; sšꜥꜥ  
w'bt.

#80

NAME: HTP-HRS

ID: MM2

TITLES:

MORTUARY: hmt-ntr Hwfw

OTHER: rht nswt

hmt-ntr Njt

hmt-ntr Hthr nbt nht

hrj-sštz

DATE: Dynasty 5

SOURCE OF DATE: PM, III<sup>2</sup>, 1, 490.REFERENCE: Mariette, Mastaba, 90-91;  
PM, III<sup>2</sup>, 1, 490.

#81

NAME: H'·F-R'-'NH

ID: LG 75-G 7948

TITLES:

MORTUARY: shd w' bw

shd w' bw H'·f-R' wr

OTHER: rh nswt

shd n pr-'z

DATE: Dynasty 5 or later

SOURCE OF DATE: KB, 109, [362].

FAMILY:

WIFE: NJKz-HR

TITLES:

OTHER: mjtrt

hmt-ntr Njt

hmt-ntr Hthr nbt nht nbt jwnt

BROTHER: JTTJ (see above #18)

REFERENCES: LD II, pl. 8-11;

Mariette, 540;

PM, III<sup>1</sup>, 207.

#80

NAME: H · F-HFW I

ID: G 7130-7140

TITLES:

MORTUARY: hm-ntr Hwfw

hrp 'h

OTHER: jrj-p' t

'z dwzw

'd mr

[w ] wrw zh

wr djw

wq mdt [n] hr[jw] wdbw

mdw hp

hm bzw Nhn

hm-ntr hr kmz-'

hrj wdbw hwt-'nh

sz nswt

sz nswt n ht.f

smr w' tj

sdzwtj bitj

zsb

tzjtj

tztj

DATE: mid to end Dynasty 4

SOURCE OF DATE: KB, 112, 292, [375].

FAMILY:

WIFE: NFRT-KzW

SON: WT-Kz/JWN-Kz

DAUGHTER: NFRT-Kz

REFERENCES: WKS, Giza III, 20;PM, III<sup>1</sup>, 188.

#83

NAME: H · F · HWPW II

ID: G 7150

TITLES:

MORTUARY: w b nswt

hm-ngr...

hm-ntr Hwfw

OTHER: jaj-rꜥ nš'

jaj-rꜥ snjwꜥ jmntjt

jaj-rꜥ kꜣt

jaj-rꜥ kꜣt [nt] nswt

wr mꜣw Sn'w

[nj]-nst-hntt

hm-ntr jst-jb-R'

hm-ntr Mꜣ' t

hrj sšꜣ

hrj-sšꜣ n nb·f

sꜣ nswt

DATE: Dynasty 4 to 5 (from Menkaura to Neusera)

SOURCE OF DATE: KB, 113, 292, [376].

FAMILY:

WIFE: HNT-KꜣWS

SON: H · F · HWPW

SON: STJ-PTH

SON: SꜣBN-PTH

REFERENCES: WKS, Giza III, 27;PM, III<sup>1</sup>, 190.

#84

NAME: H'-K3-R'

ID: G 1314

TITLES:

MORTUARY: w' b nswt

hm-ntr Hwfw

hm-ntr Sshw-R'

OTHER: jrj mrht pr-'z

jrj nwb n hkrt nswt

jrj-rdwy nswt

jrj s3r pr-'z

jrw 3n nswt

jdw n msw nswt

rh nswt

hsw swt m pr-'z

shd jrw 'nt pr-'z

DATE: late Dynasty 5 or Dynasty 6

REFERENCES: MFA: unnumbered drawing; photo B 11811, 1812  
(unpublished).REMARKS: from the east facade of G 1313, he seems to be the  
father of JJ-DFz in PM, III<sup>1</sup>, 61 and Reisner, Giza I, 262,  
fig. 160.

#85

NAME: Hwfw-MR

ID: SE

TITLES:

MORTUARY: w' b nswt

hm-ntr Mn-kiw-R'

hm-ntr H' f-R'

OTHER: jmj-rz jst [...]

jmj-rz jdw n hwt-'z

rh nswt

shd w' bw mwt nswt

DATE: Dynasty 4

REFERENCES: Service Excavations N.6, MFA: A 6956, A 6957;  
Fakhry, Sept tombeaus no. 6, 19-25;  
PM, III<sup>1</sup>, 213.

#86

NAME: HWFW-SNB I

ID: JWC

TITLES:

MORTUARY: hm-ntr [...]
  
hm-ntr mdd-r-nbtjOTHER: jmj-rz jp-t nswt
  
hry-sšt nb-f

DATE: end of Dynasty 5 or later

SOURCE OF DATE: KB, 113, [377].

REFERENCES: Junker, Giza VII, 117-26;
  
PM III<sup>1</sup>, 152.

#87

NAME: HWFW-SNB II

ID: JWC

TITLES:

MORTUARY: w b nswt
  
hm-ntr mddw-Hr
  
hm-ntr HwfwOTHER: jmj-rz wp-wt hntjw-š pr-' z
  
šd hntjw-š pr-' z

DATE: Dynasty 6

SOURCE OF DATE: KB, 113, [378].

REFERENCES: Junker, Giza VII, 123-126;
  
PM III<sup>1</sup>, 153.REMARKS: may be son of HWFW-SNB I.

#88

NAME: HW-Tz

ID: HKC

TITLES:

MORTUARY: hm-ntr Mn-kw-R'

OTHER: rh nswt

hm-kz

hrj-htw

shd jdw hwt-' 3t

shd hm-kz

DATE: mid Dynasty 5 or later

SOURCE OF DATE: KB, 115, [384A].

FAMILY:

WIFE: NFR-Hz-NSWT

DAUGHTER: NJ-KzW-HTHR

REFERENCES: Hassan, Giza III, 41;  
PM III<sup>1</sup>, 279.

#89

NAME: HMT-NW

ID: G 5210

TITLES:

MORTUARY: w' b nswt

hm-ntr Hwfw

OTHER: rh nswt

DATE: early to end of Dynasty 4

SOURCE OF DATE: KB, 115, 293, [386].

REFERENCES: MFA: A 8178, A 8271, 8272 (unpublished);

PM, III<sup>1</sup>, 155;

LD II, 26;

Mariette, L no. 30.

#90

NAME: HNW

ID: BM: no. 1272

TITLES:

MORTUARY: hm-ntr Mn-kw-R'  
shd w bwOTHER: rh nswt  
hrj-sst3

DATE: Dynasty 4 or later?

SOURCE OF DATE: PM III<sup>1</sup>, 308;

cf. KB, 116, [391].

REFERENCES: BM: no. 1272;

Hieroglyphic Texts, I, pl. 9;PM, III<sup>1</sup>, 308.

#91

NAME: HNW

ID: HKC

TITLES:

MORTUARY: w b nswt  
hm-ntr Mn-kw-R'OTHER: jmj-r3 pr  
rh nswt  
shd hmw-k3

DATE: Dynasty 6

SOURCE OF DATE: KB, 115, [388].

FAMILY:

WIFE: TWF-N-'NH

TITLES:

OTHER: hmt-ntr Hthr

REFERENCES: Hassan, Giza II, 159-68;PM, III<sup>1</sup>, 261.

#92

NAME: HNMW

ID: G 2191

TITLES:

MORTUARY: hm-ntr Hwfw

OTHER: hrj-sštz

DATE: mid Dynasty 5 or later

SOURCE OF DATE: KB, 117, [398].

REFERENCES: MFA: A 5633 (unpublished);  
PM, III<sup>1</sup>, 81.

#93

NAME: HNMW-HTP II

ID: J

TITLES:

MORTUARY: hm-ntr Hwfw

hrp jmj-zš

hrp w bw nswt

OTHER: jmj-rš pr

jmj-rš hsw-kš

rh nswt

hrj-sštz

zš '-nswt

DATE: Dynasty 6

SOURCE OF DATE: KB, 119, [404].

REFERENCES: Junker, Giza IX, 199, 209;  
PM, III<sup>1</sup>, 105.

#94

NAME: ZP-N

ID: AB

TITLES:

MORTUARY: w' b nsw nswt

w' b nswt

hkb hwt Hwfw

OTHER: rh nswt

hrp hrpw n hwt-<sup>1</sup> st

FAMILY:

WIFE: NFR-JHJJ

TITLES:

OTHER: rh nswt

DATE: end Dynasty 5 or later

SOURCE OF DATE: KB, 119-120, [412].

REFERENCES: Abu-Bakr, Giza I, 31-37;  
PM, III<sup>1</sup>, 50.

REMARKS: built against the mastaba of NFRJ

#95

NAME: ZKR-HTP

ID: tomb below LG 09

TITLES:

MORTUARY: hm-ntr Hwfw

DATE: Dynasty 5 to Dynasty 6

SOURCE OF DATE: PM, III<sup>1</sup>, 210.REFERENCES: PM, III<sup>1</sup>, 210.

#96

NAME: SBK-~~H~~TP

ID: G 2420 A

TITLES:

MORTUARY: w' b nswt  
 hm-ntr Bjkwjj-nbw  
 hm-ntr mddw-Hr  
 hm-ntr Hwfw  
 OTHER: jrj-sdswt pr-'z  
 hrj-sstz

DATE: late Dynasty 5

SOURCE OF DATE: PM, III<sup>1</sup>, 93.REFERENCES: MFA: A 7581 (unpublished false door);  
 PM, III<sup>1</sup>, 93.REMARKS: Name listed incorrectly in PM, possibly the  
 father of DD-F-HWFW in G 2420 B (see below #141).

#97

NAME: SMR-Kz

ID: stela between G 3010 and G 3020

TITLES:

MORTUARY: hm-ntr Hnmw Hwfw  
 OTHER: rh nswt

DATE: Dynasty 6

SOURCE OF DATE: KB, 123, [436 A]

REFERENCES: Fisher, Minor Cemetery, 96-101, 146-147;  
 PM, III<sup>1</sup>, 97.REMARKS: Baer assigns G 3020 to SMR-Kz, but the  
 stela bearing his name and titles was found between  
 G 3010 and G 3020.

#98

NAME: SNJ

ID: G 2042

TITLES:

MORTUARY: w' b nswt  
 hm-ntr Hwfw  
 OTHER: jmj-rz hntjw-s pr-'z  
 hrj pr pr-'z

DATE: ?

REFERENCES: MFA: A 3822 (unpublished false door).

#99

NAME: SNB

ID: JWC

TITLES:

MORTUARY: hm-ntr Hwfw

hm-ntr Dd.f-R'

hrp 'h

OTHER: jmj-r3 jwhw

jmj-r3 šwj pr-'3

wr-'

hm-ntr W3dt nbt pr-nw

hm-ntr mrhw

hm-ntr k3-wr hntj stpt

hrp 'pr kzw

hrp hwwt nt dšrt

hrp hm.wt mw

hrp nmjw sšrw

smr

smr pr

sd3wtj-ntr wn hr b3w

DATE: mid Dynasty 6 or later

SOURCE OF DATE: KB, 123-124, [441].

FAMILY:

WIFE: SNT-JT.S

TITLES:

OTHER: hmt-ntr Njt

hmt-ntr Hthr

SON: 'NH-M'-DD.F-R'

TITLES:

OTHER: rh nswt

REFERENCES: Junker, Giza V, 3-124;PM, III<sup>1</sup>, 101.

#100

NAME: SNFRW-H . F

ID: LG 56; G 7070

TITLES:

MORTUARY: hm-ntr Hwfw

OTHER: jrj p nb

mjw Nhn

hstj-

hrj-sstz

smr w' tj

sdzwtj bjtj

DATE: early to middle Dynasty 4 to early Dynasty 5

SOURCE OF DATE: KB, 125, 293, [450].

REFERENCES: LD II, 16, 125;

Reisner, Giza I, 60, 116, 209.REMARKS: SNFRW-H . F was a great-grandson of Sneferu and belonged to the generation of Menkaura (KB, 125, [450]; see Reisner, ZAS 64, 98-99.

#101

NAME: SNNW-Kz/KKJ

ID: G 2041

TITLES:

MORTUARY: jmj-rz njwt zht-Hwfw

'd-mr Grgt

hrp w' bw nswt

OTHER: jmj-rz kt

rh nswt

zš '-nswt

DATE: early to middle Dynasty 5

SOURCE OF DATE: KB, 126, [452 A].

FAMILY:

WIFE: JTJ

REFERENCES: MFA: B 7405, 7407, 7409, 7408;

Reisner, Giza I, 217-311;Smith, HESPOK, pl. 45;Junker, Giza VI, 20;PM, III<sup>1</sup>, 68.

#102

NAME: SRF-Kz

ID: SS 24

TITLES:

MORTUARY: hm-ntr Wsr-kz.f

hm-ntr Hwfw

OTHER: jmj-rz wpt

jmj-rz njwt szwt

jmj-rz hwt

jmj-rz spzwt

rh nswt

hrj-jb

szm-tz

DATE: early Dynasty 5 (or later)

SOURCE OF DATE: KB, [457], 127.

REFERENCES: Davies, Shiek Said, 10-14, pls. 4-6;Kanawati, Administration, 116-117 (he dates this tomb to the late 6th Dynasty).

#103

NAME: SRHW

ID: MQ

TITLES:

MORTUARY: jmj-rz dzt Mn-kzw-R' ntrj

hrj-sztz Mn-kzw-R' ntrj

shd w bw

OTHER: rh nswt

DATE: Dynasty 5 to Dynasty 6

SOURCE OF DATE: KB, 127.

REFERENCES: MFA, A 5448 (unpublished);

MQ no. 2;

PM, III<sup>1</sup>, 294.

#104

NAME: SHTPW

ID: AB

TITLES:

MORTUARY: hm-ntr H' .f-R'

OTHER: jmj-rz jhw

hrp mrw jhw

DATE: Dynasty 4

SOURCE OF DATE: Jacquet-Gordon, Domaines, 201-202.REFERENCES: Bisson de Laroque, Fouilles d'Abou-Roach, 55-56;  
A Zivie, Hermopolis, 41.

#105

NAME: SHM-'NH-PTH/SHM-PTH

ID: HKC

TITLES:

MORTUARY: w' b nswt

hm-ntr Mn-kzw-R'

OTHER: jmj-ht haw-kz

rh nswt

hrp zh

sbz-tj n nswt m'nh

shd hmw-kz

DATE: Dynasty 6

SOURCE OF DATE: KB, 128, [464].

FAMILY:

WIFE: HNT

TITLES:

OTHER: rht nswt

REFERENCES: Hassan, Giza II, 32-45;  
PM, III<sup>1</sup>, 272.

#106

NAME: SHM-Kz

ID: G 1029

TITLES:

MORTUARY: w' b nswt

hm-ntr Hwfw

OTHER: jmj-rz hntjw-š pr-'z

jmj-rz st pr-'z

jmj-rz st hntjw-š pr-'z

hm-ntr Ssp-jb-R'

hrj-sštz

DATE: Dynasty 5 or 6

SOURCE OF DATE: WKS, Giza IV, 1.

FAMILY:

WIFE: Unknown

TITLES:

OTHER: rht nswt

SON: PH-N-PTH

TITLES:

MORTUARY: w' b nswt

hm-ntr Hwfw

REFERENCES: WKS, Giza IV, 5;PM, III<sup>1</sup>, 53.

#107

NAME: SDM

ID: EPU

TITLES:

MORTUARY: hm-ntr H' .f-R' wr

DATE: ?

REFERENCES: Arch. Lacau phot. c i bis, 12;

PM, III<sup>1</sup>, 292.

#108

NAME: SPSSKꜛF-NH

ID: LD 16

TITLES:

MORTUARY: w b nswt  
 hm-nꜛr Nfr-jr-kꜛ-R'  
 hm-nꜛr Hwfw  
 hm-nꜛr Sꜛhw-R'

OTHER: jmj-rꜛ prw msw nswt  
 jmj-rꜛ hwt-'ꜛt  
 rh nswt  
 zš pr mꜛꜛt

DATE: Dynasty 5 (from end of Neferirkara to Djedkara)

SOURCE OF DATE: KB, 91, 240, 291, [491].

REFERENCES: LD II, 50-51.

#109

NAME: SPSS-KꜛF-NH

ID: HKC

TITLES:

MORTUARY: w b nswt  
 hm-nꜛr H'·f-R'

OTHER: jmj-rꜛ hmw-kꜛ  
 rh nswt  
 hrj-tp nhb  
 shꜛ hm-kꜛ  
 zꜛ srꜛt pr-'ꜛ

DATE: Dynasty 6 (from Mernera to Pepi II)

SOURCE OF DATE: KB, 135, 240, 294, [492].

FAMILY:

WIFE: S' NHT  
 SON: R' -WR-NDS  
 SON: JJ-M-HTP  
 SON: JJ-DFꜛ  
 SON: NJ-' NH-HNW

TITLES:

OTHER: zš  
 hm-kꜛ

REFERENCES: Hassan, Giza II, 15-31;  
 PM, III<sup>1</sup>, 272.

#110

NAME: SNW

ID: G 1351

TITLES:

MORTUARY: hm-ntr Hwfw  
shd w'bw

DATE: Dynasties 5 to 6

SOURCE OF DATE:

REFERENCES: MFA: 11981 (unpublished);  
PM, III<sup>1</sup>, 62.

#111

NAME: KJJ

ID: LG no. 69

TITLES:

MORTUARY: w' b nswt  
smw h3jt n 3ht-Hwfw

DATE: Dynasty 5-6

SOURCE OF DATE: KB, 136, [494A].

REFERENCES: LD II, 34 a-b;  
PM, III<sup>1</sup>, 21i.

#112

NAME: K3R/MRJ-R' -NFR

ID: G 7101

TITLES:

MORTUARY: jmj-r3 njwt rht-Hwfw  
 jmj-r3 njwt Mn-k3w-R' ntrj  
 hntj-s Mrj-R' -mn-nfr  
 shd w bw H' .f-R' wr

OTHER: jmj-r3 wpt htpt-ntr m prwj  
 jmj-r3 hnw  
 jmj-r3 zsw n 'prw m prwj  
 jmj-r3 zsw n k3t nbt  
 jmj-r3 k3t nbt  
 jmj-r3 zsw  
 mdw rhjt  
 hm-ntr M3't  
 hrj-s3tz n wdt nbt  
 hrj-s3tz n k3t nbt  
 hrj tp nswt  
 z3b  
 z3 ' -nswt  
 z3 ' -nswt hft-Hr [m3']  
 z3 nswt  
 z3 nswt hft Hr  
 smr w tj

DATE: Dynasty 6 (from Pepi I to Pepi II)

SOURCE OF DATE: KB, 136, 294, [495].

FAMILY:

MOTHER: HNWT

FATHER: JDW (see above, []) (G 7102)

WIFE: GFJ

TITLES:

OTHER: rht nswt  
 hmt-ntr [Hthr]

SON: JDW (see #//)

BROTHER: NHTJ

SISTER: TTWT

SISTER: BNDT

REFERENCES: WKS, Giza II, 18;  
 PM, III<sup>1</sup>, 184.

#113

NAME: K3-HR-ST.F

ID: G 2099

TITLES:

MORTUARY: w b nswt

hm-ntr Hwfw

DATE: Dynasty 6

SOURCE OF DATE: Bothmer, Arts, 3<sup>1</sup>, fig. 1, p. 24.REFERENCES: PM, III<sup>1</sup>, 70;Bothmer, Arts, III, fig. 1, p. 24;

Mus. 49.21, Richmond, Virginia.

REMARKS: Name of K3-NS on back of statue.

#114

NAME: KD-NFR

ID: G 1151

TITLES:

MORTUARY: w' b nswt  
 hm-ntr Mn-swt-Nj-wsr-R'  
 hm-ntr Hr'w

OTHER: [jaj-rs st hntjw]-š [pr-' z]  
 rh nswt  
 rh nswt n pr-' z  
 hm-ntr R' m Ssp-jb-R'  
 hrj-sštz  
 shd hntjw-š pr-' z

DATE: Dynasty 5 or later

SOURCE OF DATE: Reisner and Fisher in ASAE 13 (1914), 245.

FAMILY:

WIFE: HMT-R'

TITLES:

OTHER: rht nswt  
 hmt-ntr nt Wpt-wrwt  
 hmt-ntr Hthr

REFERENCES: MFA: EG 4409 (false door); EG 4410 (south wall);  
 EG 54 (west wall of corridor);

Reisner and Fisher in ASAE 13 (1914), 245.PM, III<sup>1</sup>, 56.

#115

NAME: KD-N·S

ID: G 1673

TITLES:

MORTUARY: smsw hrjt hnt-Hwfw

OTHER: rh nswt

hrj-sštj n wd' -mdw

smsw hrjt

DATE: end Dynasty 6 or later

SOURCE OF DATE: KB, 159, [601].

FAMILY:

WIFE: NJ-' NH-HTHR

REFERENCES: MFA: A 6928, 6931 ( false door);

MFA: obj. reg. 32-4-12;

MFA: B 8129, 8198 (found between G 1233-G 1235);

PM, III<sup>1</sup>, 65 (listed also the tomb without name).

REMARKS: KB does not list the name. The loose lintel and the false door are together; the name of the wife (NJ-' NH-HTHR) is listed as Baer read it.

#116

NAME: KD-N·S

ID: J

TITLES:

MORTUARY: w' b nswt

hm-ntr mddw-Hr

hm-ntr Hwfw

hntj-š

DATE: Dynasty 6 or FIP

SOURCE OF DATE: Junker, Giza, VI, 244-48; KB, 137-138, [501].

FAMILY:

WIFE: šBDT

SON: MRJ-HWFW

SON: SNB-' NH

DAUGHTER: NJ-' NH-HTHR

DAUGHTER: NJ-Mj' T-HTHR

REFERENCES: Junker, Giza VI, 244-48;PM, III<sup>1</sup>, 140.

#117

NAME: KD-N.S

ID: between HFW-SNB and G 5160

## TITLES:

MORTUARY: w' b nswt  
 hm-ntr Hfw  
 OTHER: jmj-ht hntjw-š pr-'z  
 jmj-rz wp.wt hntjw-š pr-'z  
 jmj-rz wp.wt pr-'z  
 jmj-rz md pr-'z  
 jmj-rz st hntjw-š pr-'z  
 jrj sdw.t pr-'z  
 hrj-sštz  
 shd hntjw-š pr-'z

DATE: Dynasty 6

SOURCE OF DATE: KB, 138, [502].

## FAMILY:

SON: SzBJ

## TITLES:

OTHER: hntj-š prj-'z

SON: MRJ-HFW

## TITLES:

OTHER: hntj-š pr-'z

DAUGHTER: NJ-Mz' T-HTHR

## TITLES:

OTHER: hmt-ntr Njt mhtj.t jnb

DAUGHTER: NJ-'NH-HTHR

## TITLES:

OTHER: hmt-ntr Hthr nht nb.t

REFERENCES: Junker, Giza VII, 133-138;PM, III<sup>1</sup>, 152.

#118 CANCELLED

#119

NAME: Kz-JRJ-S

ID: H

TITLES:

MORTUARY: jmj-rz njwt H'·f-R wr  
shd w bw

OTHER: hm-kz

DATE: mid Dynasty 5 or later

SOURCE OF DATE: KB, 139, [508]

REFERENCES: Hassan, Giza, III, 171, Mastaba H.

REMARKS: determinative of pyramid city is written.

#120

NAME: K<sub>2</sub>J-HR-PT<sub>H</sub>/ST<sub>K</sub>-T<sub>2</sub>

ID: G 5560

TITLES:

MORTUARY:      jmj-r<sub>2</sub> njwt m<sub>2</sub>.wt Jssj-nfr  
                  smsw h<sub>2</sub>jt hht-Hwfw  
                  sh<sub>2</sub> w' bw hht-Hwfw

OTHER:            jmj-r<sub>2</sub> Jnbw-h2  
                  jmj-r<sub>2</sub> šnw-tj  
                  jmj-r<sub>2</sub> zš.w  
                  wr md šm'w  
                  nj-nst-hntt  
                  hm-n<sub>2</sub>r M<sub>2</sub>'t  
                  hrp zš.w  
                  hrp zš.w jrjw-j' h  
                  z<sub>2</sub>b 'd-mr

DATE: early Dynasty 6

SOURCE OF DATE: KB, 148, [544].

REFERENCES: Junker, Giza VIII, 108-122;  
 PM, III<sup>1</sup>, 166.

#121

NAME: K<sub>2</sub>-' PR

ID: H

TITLES:

MORTUARY:      jmj-r<sub>2</sub> H'-f-R' wr  
                  w' b nswt

OTHER:            wr mdw šm'w  
                  r<sub>2</sub>h nswt  
                  hrpj-sštz  
                  sm<sub>2</sub>' mdw w<sub>2</sub>d' nj hwt wr. t

DATE: late Dynasty 5

SOURCE OF DATE: KB, 139, [510].

MENTIONED: NFR-HWWMENTIONED: NJ-S' NH-HTHRREFERENCES: Hassan, Giza VI<sup>3</sup>, 155-158;  
 PM, III<sup>1</sup>, 248.

#122

NAME: KzW

ID: D 30

TITLES:

MORTUARY: w' b nswt  
 hm-ntr Hwfw  
 OTHER: shd hmw-kz

DATE: Dynasties 5 to 6

SOURCE OF DATE: PM, III<sup>1</sup>, 110.REFERENCES: PM, III<sup>1</sup>, 110.

#123

NAME: KzMNJ

ID: SM

TITLES:

MORTUARY: jaj-rz hmw-ntr Mn-kiw-R' ntrj  
 OTHER: rh nswt

DATE: late Old Kingdom

REFERENCES: Saleh, "Mycerinus," 151.

#124

NAME: K3-M-NFRT

ID: MM 23

TITLES:

MORTUARY: w' b S3hw-R' h' -bz  
 hm-ntr mn-swt-  
           Nj-Wer-R'  
 hm-ntr H' .f-R'  
 hm-ntr Hwfw  
 hm-ntr S3hw-R'

OTHER: jwn-knmt  
 jmj-r3 z3' -nswt  
 jmj-r3 z3w mrt  
 'd-mr  
 wr mdw Sm' w  
 wd-mdw n hrj-wdbw  
 mdw rhjt  
 hm-ntr M3' t  
 hm-ntr R' m Nhn-R'  
 hm-ntr R' m St-jb-R'  
 hrj-s3t3  
 hrj-s3t3 wd mdt nt nswt  
 hrj-s3t3 nb.f  
 hrp wsht  
 hrp z3w jrjw-j' h  
 hrp z3w wsht  
 nj-nst-hntt  
 z3b 'd-mr

DATE: Dynasty 6 (reign of Pepi II)

SOURCE OF DATE: KB, 142, 240, 294, [523].

REFERENCES: Mariette, Mastabas, D23;Dunham, AJA 39, 300-309;PM III<sup>2</sup>, 1, 437.

REMARKS: At Saqqara, he is the priest of Neferirkara, Khafra, Userkaf, Sahura, and Neusera.

#125

NAME: K~~r~~-M-TNNT

ID: G 7411

TITLES:

MORTUARY: w b nswt  
 hm-ntr Hwfw  
 OTHER: hrj-sštr

DATE: Dynasty 5

SOURCE OF DATE: PM, III<sup>1</sup>, 195.

FAMILY:

WIFE: NFR-HTHR

TITLES:

OTHER: rht nswt  
 hmt-ntr Njt  
 hmt-ntr Hthr

REFERENCES: MFA: 1977;

MFA: B 8259;

MFA: A 7016 (unpublished);

PM, III<sup>1</sup>, 195.

#126

NAME: K[3]-NJ-NSWT II

ID: G 2156

TITLES:

MORTUARY: hm-ntr Hwfw  
 OTHER: wr mdw Sm'w  
 nj nst hntt  
 rh nswt  
 hm-ntr Mz' t  
 hrj-sštj nb.f

DATE: Dynasty 6

SOURCE OF DATE: KB, 145, 294, [532], VD Unis to Teti, 240.

FAMILY:

FATHER: K[3]-NJ-NSWT I

ID: G 2155

TITLES:

OTHER: 'd-mr Dp  
 w [m] wrw hb  
 rz pjw nbw  
 hm-ntr nb jmt  
 hrj-wdbw hwt-nh  
 hrj-sštj nj pr dwz.t  
 hrj tp Nhb  
 hrp hsts km  
 hrp šndt  
 ht hz  
 hrj-hb  
 sz mhtt  
 sz nswt  
 sz nswt nj ht.f  
 sz  
 smz Hr  
 smr  
 smr pr  
 smr w' tj

REFERENCES: Junker, Giza II, 135-70.

MOTHER: NFR-Hz-NSWT

REFERENCES: Junker, Giza III, 145-156;  
 PM, III<sup>1</sup>, 79.

#127

NAME: K<sub>3</sub>-N-NSWT III

ID: G 2156 B

TITLES:

MORTUARY: w' b nswt

hm-ntr Hwfw

OTHER: jmj-r<sub>3</sub> hntjw-š pr-' zhm-ntr N<sub>3</sub>' t

hrj-sštz

hntj-š pr-' z

FAMILY:

FATHER: K<sub>3</sub>-N-NSWT II (see #126)REFERENCES: PM, III<sup>3</sup>, 79;

Junker III, 145-156.

DATE: mid Dynasty 5

SOURCE OF DATE: KB, 145, [532].

REFERENCES: MFA: B 1095 (block in debris);

MFA: 2156 (false door);

MFA: A 5628 (unpublished);

PM, III<sup>1</sup>, 306.

#128

NAME: K<sub>3</sub>R

ID: Munich

TITLES:

MORTUARY: jmj-r<sub>3</sub> njwt iht-Hwfwsh<sub>3</sub> hm-ntr

OTHER: hrj tp nswt

smr w' tj

DATE: Dynasty 6?

REFERENCES: Orinst P 36607/N 22016: false door;

PM, III<sup>1</sup>, 306.

#129

NAME: K<sub>3</sub>-HJF

ID: G 2136

TITLES:

MORTUARY: w' b nswt  
 hm-ntr mdd-r-nbtj  
 hm-ntr mddw-Hr  
 hm-ntr Hwfw  
 shd hntjw-s  
 OTHER: rh nswt  
 hrj-sštj  
 shd hntjw-s pr-'z

DATE: mid Dynasty 6

SOURCE OF DATE: KB, 146, [539].

FAMILY:

FATHER: M<sub>3</sub>'

MOTHER: HNMT

SON: DD-NFRT

TITLES:

OTHER: hntj-s pr-'z

SON: WRS-SMWJ

TITLES:

OTHER: hrj-sštj  
 hntj-s pr-'zSON: SNJ-~~s~~HTJ

TITLES:

OTHER: sxb zš

SON: JJ-MRJJ

DAUGHTER: TK<sub>3</sub>JREFERENCES: Junker, Giza VI, 96-152;  
 PM, III<sup>1</sup>, 76.

#130

NAME: K<sub>3</sub>-TP

ID: 1288

TITLES:

MORTUARY: 'd-mr Grgt mhtj  
 w' b nswt  
 hm-ntr Hwfw  
 hrp jmjw z<sub>3</sub>  
 hrp w' bw nswt

OTHER: jaj-r<sub>3</sub> k<sub>3</sub>t nswt  
 'd-mr  
 rh nswt

DATE: ?

SOURCE OF DATE: KB, 150, [549]

REFERENCES: BM: 1173-1174;

1288 . Hieroglyphic Texts, I, pl. V;

"Saqqara";

Fischer, Egyptian Studies, I, 35-37, figs. 10-13, pls. 9-11.

#131

NAME: KI-DW

ID: H

TITLES:

MORTUARY: w' b nswt  
 hm-ntr w' b H' . f-R' ?  
 hm-ntr Wsr-m-nbtj  
 hm-ntr H' . f-R'  
 hm-ntr Hr-wsr-jb  
 smsw h3jt nj H' . f-R' wr  
 shd w' bw  
 OTHER: jmj-r3 pr  
 rh nswt  
 hm-k3  
 hrj-s3t3  
 smsw h3j. t

DATE: Dynasty 6 (reign of Pepi II)

SOURCE OF DATE: KB, 150, 240, 295, [550].

FAMILY:

WIFE: NFR-RS  
 TITLES:  
 OTHER: rht nswt  
 WIFE: NBTJ  
 TITLES:  
 OTHER: rht nswt  
 SON: 'NH-WD. S  
 TITLES:  
 OTHER: s3b z3

REFERENCES: Hassan, Giza, VI<sup>3</sup>, 93, 110;  
 PM, III<sup>1</sup>, 244.

#132

NAME: TP-M-'NH II

ID: MM 11

TITLES:

MORTUARY: w b Mn-kw-R' ntrj  
 w b H'·f-R' wr  
 w b nswt @hw-R' h' -bz  
 w b Snfrw-h'  
 hm-ntr Hwfw  
 OTHER: hm-ntr M's't  
 hrj-sštz pr-' z

DATE: mid Dynasty 5

SOURCE OF DATE: KB, [559]

FAMILY:

WIFE: NB-HTP/BBJ

TITLES:

OTHER: hmt-ntr Njt  
 hmt-ntr Hthr

REFERENCES: Mariette, D11;

PM, III<sup>2</sup>, I, 483;

Saqqara.

#133

NAME: TP-M-'NH

ID: D20

TITLES:

MORTUARY: hm-ntr Hwfw  
 OTHER: jmj-rz st n hntjw-š pr-' z  
 rh nswt

DATE: Dynasty 5 to Dynasty 6

SOURCE OF DATE: PM, III<sup>1</sup>, 109.

REFERENCES: LD II, 152 b;

drum in Ber. Mus. 1138;

PM, III<sup>1</sup>, 109.

#134

NAME: TTJ

ID: found in debris in street between G 5130 - G 5140

TITLES:

MORTUARY: w' b nswt  
 hm-ntr Hwfw

DATE: ?

REFERENCES: MFA: obj. reg. 15-10-6;  
 base of a statuette, unpublished.

#135

NAME: TNTJ

ID: MM 1

TITLES:

MORTUARY: jmj-rz 'h  
 w' b nswt  
 hm-ntr ...  
 hm-ntr Hwfw  
 hrp 'h

OTHER: jmj-jz  
 jmj-rz wpwt  
 jmj-rz mš'  
 rh nswt  
 hm-ntr Hnmw hntj Hr-wr mswt.f nbt  
 hrp 'pr nfrw  
 sdwtj ntr wjz

DATE: Dynasty 4

SOURCE OF DATE: KB, 153, 295, [569].

FAMILY:

WIFE: JJ-NFRT

REFERENCES: Mariette, B1

PM, III<sup>2</sup>, a, 482;Reisner, Tomb Development, p. 392.

#136

NAME: TTJ

ID: DM

TITLES:

MORTUARY:      jmj-rꜣ H̄ · f-R' wr  
                  'd-mr Grgt  
                  w b nswt  
                  hm-nꜣr H̄wfw  
                  hm-nꜣr H̄ · f-R' wr  
                  hrj-sꜣtꜣ H̄ · f-R' wr  
                  hrp jmjw zꜣ  
                  hrp jmjw zꜣ H̄ · f-R' wr

OTHER:            jmj-rꜣ wp·t n pr-'ꜣ  
                  jmj-rꜣ st n pr-'ꜣ  
                  rh nswt  
                  hrj-sꜣtꜣ  
                  hrj-sꜣtꜣ n nswt

DATE: ?

REFERENCES: BM: 157-a-c . Hieroglyphic Texts,  
 I, 2nd ed., pls. 6-8;  
 KB, 154, [574].

#137

NAME: TTW I/K~~E~~-NSWT

ID: G 2001

TITLES:

MORTUARY: jmj-r~~E~~ njwt ht-Hwfw  
 jmj-r~~E~~ hntjw-š  
 shd w bw ht-Hwfw

OTHER: hrj hbt  
 hrj tp nswt pr-'~~E~~  
 smr w' tj

DATE: Dynasty 6

SOURCE OF DATE: WKS, Giza IV, 13-14.

FAMILY:

WIFE: W~~E~~DT-HTP

TITLES:

OTHER: rht nswt  
 hmt-ntr Njt  
 hmt-ntr Hthr

MOTHER OR WIFE: NBT

TITLES:

OTHER: rht nswt  
 hmt-ntr Hthr nbt nht

REFERENCES: WKS, Giza IV, 13-14;PM, III<sup>1</sup>, 66.

#138

NAME: D3G

ID: H

TITLES:

MORTUARY: w b nswt  
 hm-ntr Hnaw Hwfw  
 OTHER: jaj-r3 hmw-k3  
 rh nswt

DATE: Dynasty 3

SOURCE OF DATE: KB, 154, [577].

FAMILY:

WIFE: TTTJ  
 TITLES:  
 OTHER: rht nswt  
 hkrt nswt w'tt

SON: K3 H3P

TITLES:  
 OTHER: hm-k3

REFERENCES: Hassan, Giza II, 46-64;  
 PM III<sup>1</sup>, 271.

#139

NAME: DWs-R'

ID: H

TITLES:

MORTUARY: w' b nswt  
 hm-ntr Mn-ksw-R'  
 hrj hbt

OTHER: hrj prj pr-' z  
 hrj-šstz nb.f  
 hntj-š pr-' z  
 šhd hntjw-š pr-' z  
 smr pr-' z

DATE: Dynasty 5

SOURCE OF DATE: PM III<sup>1</sup>, 287-288.

FAMILY:

SON: JR-N-hHT

TITLES:

OTHER: hntj-š pr-' z

SON: NJ-HNMWREFERENCES: Hassan, Giza IX, 59-62.

REMARKS: also another son, no titles, and a woman, MR-S-'NH, no relationship known, are mentioned in the tomb.

#140

NAME: DD-W J

ID: G 1452 + 1453

TITLES:

MORTUARY: hm-ntr [wfw  
 šhd w' bw

OTHER: rh nswt  
 hm-ntr Hthr

DATE: mid Dynasty 5 or later

SOURCE OF DATE: KB, 158, [595].

REFERENCES: MFA: Giza photo, Box 21, pl. 12, G1452;

MFA: B11817, G1453 (unpublished);

PM, III<sup>1</sup>, 64.

#141

NAME: DD-F-HWFW

ID: G 2420 B

TITLES:

MORTUARY: w' b nswt

hm-ntr Bjkwj-j-nbw

hm-ntr mddw-Hr

OTHER: jmj-rx wpt hntjw-s pr-' 3

DATE: Dynasty 5?

REFERENCES: MFA: A 7581 (unpublished).

REMARKS: may be son of SBK-ḤTP  
in G 2420; see PM III<sup>1</sup>, 93.

#142 CANCELLED

#143

NAME: Unknown

ID: false door

TITLES:

MORTUARY: shd w' bw H' .f-R' wr

DATE: Dynasty 4

SOURCE OF DATE: Hassan, Giza VIII, 307.REFERENCES: PM, III<sup>1</sup>, 307;Hassan, Giza VIII, 307;

CG: 1727;

Borchardt, Denkmaeler II, pl. 93, pp. 157-8.

#144

NAME: Unknown

ID: CM

TITLES:

MORTUARY:    jmj-rꜣ H'·f-R' wr  
                   jmj-rꜣ [...] nswt  
                   hm-ntr H'·f-R'  
                   hrp w' b  
 OTHER:        wr mdw šm'w  
                   rh nswt

DATE: ?

REFERENCES: CM: unknown (unpublished tablet of a false door).

#145

NAME: Unknown

ID: LD

TITLES:

MORTUARY:    hm-ntr Hwfw

DATE: ?

REFERENCES: LD, 11, 112.

#146

NAME: Unknown

ID: MFA

TITLES:

MORTUARY:    jmj-rꜣ njwt Mn-kꜣw-R' ] ntrj  
 OTHER:        smr [w' tj]

DATE: ?

REFERENCES: MFA: obj. reg. 25-1-1050, pit 7215 B, B 5693  
(unpublished).

#147

NAME: Unknown

ID: G 2172

TITLES:

MORTUARY:    w' b [nswt]  
                   [hm-ntr] Hwfw

DATE: ?

REFERENCES: MFA: A 827 (unpublished).

#148

NAME: Unknown

ID: G 7714

TITLES:

MORTUARY: w' b nswt  
 hm-ntr [...]  
 hm-ntr Hwfw

OTHER: rh nswt

DATE: ?

REFERENCES: MFA: photos A 7839 and B 8855;  
 fragment of a false door without name and northern false door;  
 MFA: obj-ref. G 37-5-34 and 37-5-58 (unpublished).

#149

NAME: Unknown

ID: G 2239

TITLES:

MORTUARY: w' b nswt  
 hm-ntr Hwfw

OTHER: hrj-sšt3  
 [...] hntjw-š pr-' 3

DATE: ?

REFERENCES: MFA: B 9149, 9150 (unpublished).

#150

NAME: Unknown

ID: G 2418

TITLES:

MORTUARY: hm-ntr mddw-Hr  
 hm-ntr Hwfw  
 shd w' bw nswt

OTHER: hrj-š[st3]

DATE: late Dynasty 5?

SOURCE OF DATE: PM, III<sup>1</sup>, 93.

REFERENCES: AFA: B 742 (unpublished lintel);

MFA: obj. reg. 36-10-15;

CM: 67574;

PM, III<sup>1</sup>, 93.

#151

NAME: Unknown

ID: G 2138

TITLES:

MORTUARY: hm-ntr Hwfw

OTHER: [...] hntjw-š pr-'z

DATE: ?

REFERENCES: MFA: G 2138 (unpublished inscribed block).

#152

NAME: Unknown

ID: G 2134 X

TITLES:

MORTUARY: w' b nswt  
hm-ntr mddw-HrOTHER: hm-ntr Hwfw  
hntj-š pr-'z  
hrj-sštz

DATE: ?

REFERENCES: MFA: obj. reg. 36-1-7, unnumbered drawing.

#153

NAME: Unknown

ID: PM

TITLES:

MORTUARY: hm-ntr mdd-r-nbtj

DATE: Dynasties 4 to 5

SOURCE OF DATE: PM, III<sup>1</sup>, 177.REFERENCES: Urk. 1, 154;  
PM, III<sup>1</sup>, 177 [C].

#154

NAME: Unknown

ID: C

TITLES:

MORTUARY: w' b nswt  
 hm-ntr Hwfw  
 ... [hwt-]Hwfw  
 OTHER: hrj-sšt  
 hntj-š pr-' z

DATE: ?

REFERENCES: Curto, Gli Scavi, 95 (12): fragment of a false door.

#155

NAME: Unknown

ID: CM

TITLES:

MORTUARY: jmj-rz [...] nswt  
 jmj-rz H' · f-R' wr  
 hrp w' bw  
 OTHER: wr mdw Sm'w  
 rh nswt  
 [...] nswt...

DATE: ?

REFERENCES: CM 9-26-82: tablet of false door with architrave.

#156

NAME: Unknown

ID: H

TITLES:

MORTUARY: w' b H' · f-R'

DATE: ?

REFERENCES: Hassan, Giza VI, 3, 50.REMARKS: Title is written in front of a woman;  
 behind the w' b, the sign njwt is written.

## V. Index of names listed in the Appendix

INDEX 1: Personnel connected with funerary establishment of Khufu

	NAME	DYN.
#1	HT-HTP	4
#2	HT-HTP	5-6
#3	HT-HTP	5-6
#4	HT-HTP	5
#5	HT-HTP	6-FIP
#6	JZ	6
#7	JJ-MRJJ	5
#8	JB-JR	6
#9	JMJ-ST-KJ	6-FIP
#11	JRW-K-HWFW	5
#13	JR-N-HT/JRJ	6
#14	JR-N-R	6
#15	JH	6
#16	SNNW	5
#20	JDW	6
#23	NH-TJ-FJ	5-6
#24	WS-PTH	4-5
#29	PTH-MR-STJ-F	6
#30	PTH-HTP	?
#31	MJNWW	6
#33	MN-HBW	6
#34	MR-JB/K-NJ-NSWT	5
#35	MR-NH-F	6
#36	MRW-K	6
#37	MRJTJT-S III	4
#38	MST	6
#40	NJSW-S-NH	6-FIP
#41	NJ-K-HP	5
#42	NJ-K-NSWT	5
#43	NJ-NH-MMTJ/NJJ	6
#44	NFR	5
#46	NFR	5-6
#48	NFRJ	5

## INDEX i: cont'd.

	NAME	DYN.
#49	NFRJ	5-6
#51	NFR-B <del>3</del> W-PTH	5
#52	NFR-N-PTH	5-6
#56	NFR-Z[...]	?
#57	NFRT-NSWT	5
#58	NJ-HTP-HNMW	5
#60	N-SDR-K <del>2</del>	5
#61	R ' -JR <del>W</del> -K <del>2</del>	?
#63	RWD	5
#64	RWD-JB	5-6
#65	RWD-K <del>2</del>	4
#68	RR [...]	?
#69	R <del>2</del> R <del>2</del> MW	6
#69	KD-N-S	6
#69	NJ-K <del>2</del> W-PTH	6
#69	K <del>2</del> -HR-ST-F	6
#70	HRW-NFR	5
#71	H <del>2</del> ' JJ	?
#72	H <del>2</del> M-K <del>2</del> J	6
#73	H <del>2</del> M-K <del>2</del> J	6
#74	H <del>2</del> GJ	5
#76	HTPJ	6
#77	HTP-N-PTH	5
#78	HTP-N-PTH	?
#80	HTP-HRS	5
#81	H ' . F-R ' - 'NH	5
#82	H ' . F-HWFW I	4
#83	H ' . F-HWFW II	4-5
#84	H ' -K <del>2</del> -R '	5-6
#86	HWFW-SNB I	5
#87	HWFW-SNB II	6
#89	HMT-NW	4
#92	HNMW	5
#93	HNMW-HTP I	6

## INDEX 1: cont'd.

NAME	DYN.
#94 ZP-N	5
#95 ZKR-HTP	5-6
#96 SBK-HTP	5
#97 SMR-K <del>X</del>	6
#98 SNJ	?
#99 SNB	6
#100 SNFRW-H ' F	4-5
#101 SNNW-KW/KKJ	5
#102 SRF-K <del>X</del>	5
#106 SHM-K <del>X</del>	5-6
#108 SPSSK <del>X</del> F- ' NH	5
#110 SNW	5-6
#111 K <del>X</del> JJ	5-6
#112 K <del>X</del> R/MRJ-R ' -NFR	6
#113 K <del>X</del> -HR-ST F	6
#114 KD-NFR	5
#115 KD-N S	4
#116 KD-N S	6-FIP
#117 KD-N S	6
#120 K <del>X</del> J-HR-PTH/FTK-T <del>X</del>	6
#122 K <del>X</del> W	5-6
#124 K <del>X</del> -M-NFRT	6
#125 K <del>X</del> -M-TNNT	5
#126 K <del>X</del> -NJ-NSWT II	6
#127 K <del>X</del> -N-NSWT III	5
#128 K <del>X</del> R	?
#129 K <del>X</del> -HJF	6
#130 K <del>X</del> -TP	?
#132 TP-M- ' NH II	5
#133 TP-M- ' NH	5-6
#134 TTJ	?
#135 TNTJ	4
#136 TTJ	?

## INDEX 1: cont'd.

---

NAME	DYN.
#137 TTW I/K <del>1</del> -NSWT	5-6
#138 D <del>1</del> G	6
#140 DD-W ' J	5
#141 DD- F-H <del>1</del> FW	5
#145 UNKNOWN	?
#147 UNKNOWN	?
#148 UNKNOWN	?
#149 UNKNOWN	?
#150 UNKNOWN	5
#151 UNKNOWN	?
#152 UNKNOWN	?
#153 UNKNOWN	4-5
#154 UNKNOWN	?
#155 UNKNOWN	?
#156 UNKNOWN	?

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## INDEX 2: Personnel connected with funerary establishment of Khafra.

NAME	DYN.
#10 JN-K <del>E</del> -F	5
#12 JR-N-NHT/JR-N-PTH/JRJ	6
#18 JTTJ	5
#19 JTTJ	5
#20 'NH-H' . F-R '	5
#25 WR-MRW	5-6
#39 NJ-NHBT	6
#45 NFR	5
#47 NFR	5-6
#50 NFR-JHJ	6-FIP
#53 NFR-HR-N-PTH/FPJ	5-6
#55 NFR-HWW	5
#55 S 'NH-HTHR	5
#59 NSWT-NFR	5
#62 R ' -HW- F	5
#63 RWD	6
#65 RWD-K <del>E</del>	4
#66 RWD-K <del>E</del>	5
#85 HWW-MR	4
#104 SHTPW	4
#107 SDM	?
#109 SPSSK <del>E</del> F- 'NH	6
#112 K <del>E</del> R/MRJ-R ' -NFR	6
#119 K <del>E</del> -JRJ. S	5
#121 K <del>E</del> - ' PR	5
#124 K <del>E</del> -M-NFRT	6
#131 K <del>E</del> -DW <del>E</del>	6
#135 TP-M- ' NH II	5
#136 TTJ	?
#143 UNKNOWN	4
#144 UNKNOWN	?

## INDEX 3: Personnel connected with funerary establishment of Menkaura.

NAME	DYN.
#12 JR-N- <u>JHT</u> /JR-N-PTH/JRJ	6
#14 JR-N-R	6
#17 JSPJ	6
#21 'NH-NB·F	5-6
#22 'NH-NB·F	6
#26 WR- <u>HWW</u>	5-6
#27 <u>WDIT</u>	4
#27A <u>WT</u>	5-6
#28 PN-MRW	5-6
#32 MNW- <u>HM</u>	6
#50 NFR- <u>JHJ</u>	6-FIP
#53 NFR- <u>HR-N-PTH</u> /FFJ	5-6
#54 NFR- <u>HTP</u>	5
#67 RMNW- <u>KJ</u> /JMJ	6
#75 <u>HTP</u>	?
#85 <u>HWW-MR</u>	4
#88 <u>HW-T</u>	5
#90 <u>HNW</u>	4
#91 <u>HNW</u>	4
#103 <u>SRHW</u>	5-6
#105 <u>SHM</u> - 'NH-PTH/ <u>SHM-PTH</u>	6
#112 <u>KJR</u> /MRJ-R ' -NFR	6
#123 <u>KMNJ</u>	6
#132 TP-M- 'NH II	5
#139 <u>DWR</u> -R	5
#146 UNKNOWN	?

TABLE 1: Titles associated with the funerary establishment of Khufu

TITLE	4	4-5	5	5-6	6	6-FIP	?	Total
jmj-r3 zht-Hwfw			2					2
jmj-r3 njwt zht-Hwfw			2		1	2	1	6
jmj-r3 shwt Hwfw			1					1
jmj-r3 zšw zht-Hwfw				1				1
jmj-r3 zšw n zht-Hwfw				1				1
jmj-r3 zšrt nt zht-Hwfw			1					1
'd-mr Grgt	1		1	2	2		2	8
w' b nswt zht-Hwfw			1					1
w' b nswt n zht-Hwfw			1					1
hm-ntr Bjkwj-j-nbw			3		3			6
hm-ntr mddw-Hr			4		6	1	2	13
hm-ntr mdd-r-nbtj		1	1	1	2			5
hm-ntr Hwfw	4	4	19	11	21	4	21	83
hmt-ntr Hwfw	1		2					3
hm-ntr Hwfw hntj zht-Hwfw			1		1		1	3
hm-ntr Hnmw Hwfw					2			2

**TABLE 1:** cont'd

TITLE	4-5	5	5-6	6	6-FIP	?	Total
hrj-sštz zht-Hwfw				1			1
šks hwt Hwfw				2			2
hrp w' bw nswt zht-Hwfw					1		1
smsw hšjt zht-Hwfw		1			1		2
smsw hšjt n zht-Hwfw			1				1
šhd w' bw zht-Hwfw					8	1	9
šhd hmw-ntr zht-Hwfw				1			1
zš jmjw zš zht-Hwfw				1			1

TABLE 2: Titles associated with the funerary establishment of Khafra

TITLE	4	4-5	5	5-6	6	6-FIP	?	Total
jmj-rꜥ ḥ H' .f-R' wr			1					1
jmj-rꜥ w' bw H' .f-R' wr			1					1
jmj-rꜥ njwt H' .f-R' wr			1					1
jmj-rꜥ H' .f-R' wr			1	3		1	3	8
jmj-ḥt ḥmw-ntr H' .f-R' wr						1		1
'd-mr Tn rsj			1					1
w' b H' .f-R'							1	1
w' b H' .f-R' wr			2					2
ḥm-ntr w' bw H' .f-R'						1		1
ḥm-ntr Wsr-m-nbtj						1		1
ḥm-ntr Ḥr-wsr-jb						1		1
ḥm-ntr H' .f-R'	2		4	4	4		1	15
ḥm-ntr H' .f-R' wr							2	2
ḥm-ntr statue of king			1					1
ḥrj-sšꜥ H' .f-R' wr			1				1	2
ḥrp jmjw zꜥ H' .f-R' wr			1				1	2



**TABLE 3: Titles associated with the funerary establishment of Menkaura**

TITLE	4	4-5	5	5-6	6	6-FIP	?	Total
jmj-rꜥ w' bw hstjw Mn-kꜣw-R' ntrj				1				1
jmj-rꜥ wsht m Mn-kꜣw-R' ntrj					1			1
jmj-rꜥ njwt m Mn-kꜣw-R' ntrj					1			1
jmj-rꜥ Mn-kꜣw-R' ntrj						1	1	2
jmj-rꜥ njwt Mn-kꜣw-R' ntrj					1		1	2
jmj-rꜥ hbt m Mn-kꜣw-R' ntrj					1			1
jmj-rꜥ hmw-ntr Mn-kꜣw-R' ntrj							1	1
jmj-rꜥ dꜣt Mn-kꜣw-R' ntrj				1				1
w' b Mn-kꜣw-R' ntrj			1					1
hm-ntr Mn-kꜣw-R'	2	1	2	4	2		1	12
hm-ntr Mn-kꜣw-R' m hnw					1			1
hrj-sꜣtꜥ Mn-kꜣw-R' ntrj				2				2
smsw hrjt Mn-kꜣw-R' ntrj			1					1
shd w' bw Mn-kꜣw-R'					1			1
shd hmw-ntr Mn-kꜣw-R'					1			1
shd hmw-ntr Mn-kꜣw-R' ntrj					3			3

**TABLE 4: Mortuary titles not explicitly associated with a specific king**

TITLE	4	4-5	5	5-6	6	6-RIP	?	Total
<u>jmj-rꜥ</u> ḥ (Khufu)	1							1
<u>jmj-rꜥ</u> ḥ (Khafra)			1					1
<u>jmj-rꜥ</u> w' bt nswt (Khufu)		1						1
<u>jmj-rꜥ</u> ḥmwt w' bt (Khufu)		1						1
<u>jmj-rꜥ</u> ḥntjw-š (Khufu)			1		1			2
<u>jmj-rꜥ</u> st ḥntjw-š (Khufu)							1	1
<u>jmj-ḥt</u> ḥntjw-š (Khufu)					1			1
w' b n nswt (Menkaura)					1			1
w' b nswt (Khufu)	2	1	12	7	13	2	10	47
w' b nswt (Khafra)			2	2	2			6
w' b nswt (Menkaura)			1	2	2			5
w' b nswt*	1		4	3	1		1	10
w' b nswt‡			1		1			2
<u>ḥntj-š</u> (Khufu)					4	1	1	6
<u>hrp jmjw</u> zꜥ (Khufu)				3	3	1	2	9

TABLE 4: cont'd.

TITLE	4	4-5	5	5-6	6	8-FIP	?	Total
<u>hrp</u> jmjw zꜣ (Khafra)							1	1
<u>hrp</u> 'h (Khufu)	3		1			1		5
<u>hrp</u> 'h (Khafra)		1	1					2
<u>hrp</u> w' bw (Khafra)							2	2
<u>hrp</u> w' bw n nswt (Khufu)			1					1
<u>hrp</u> w' bw n nswt (Menkaura)				1				1
<u>hrp</u> w' bw nswt (Khufu)			1		2		1	4
<u>hrp</u> w' bw nswt (Khafra)				2				2
<u>shd</u> w' bw (Khufu)			3	2	1	1		7
<u>shd</u> w' bw (Khafra)			3	2	1			6
<u>shd</u> w' bw (Menkaura)		1		1				2
<u>shd</u> w' bw*						1		1
<u>shd</u> w' bw#			1					1
<u>shd</u> w' bw nswt (Khufu)			1					1
<u>shd</u> w' bw nswt*		1						1
<u>shd</u> hmw-ntr (Khufu)							1	1
<u>shd</u> hmw-ntr#						1		1
<u>shd</u> hntjw-š (Khufu)				1	1		1	3

\* more than one king

# unspecified king

TABLE 5A: Personnel bearing title of hm-ntr Hwfw and title(s) of hm-ntr of a god or goddess.

NAME	DYN.	RELEVANT GODS AND GODDESSES
#24 W <sub>3</sub> S-PTH	4-5	Pth / Zkr
#83 H ' F-HWFW II	4-5	M <sub>3</sub> ' t
#124 K <sub>3</sub> -M-NFRT	6	M <sub>3</sub> ' t
#126 K <sub>3</sub> -NJ-NSWT II	6	M <sub>3</sub> ' t
#127 K <sub>3</sub> -N-NSWT III	5	M <sub>3</sub> ' t
#132 TP-M- ' NH II	5	M <sub>3</sub> ' t
#135 TNTJ	4	Hnmw-Hr
#140 DD-W ' J	5	Hthr

TABLE 5B: Personnel bearing title of hmt-ntr Hwfw and title(s) of hmt-ntr of a god or goddess.

NAME	DYN.	RELEVANT GODS AND GODDESSES
#37 MRJTJT·S	4	Hthr; Njt
#60 N-SDR-K <sub>3</sub> J	5	Hthr
#80 HTP-HRS	5	Hthr; Njt

**TABLE 6: Personnel bearing title of h̄m-n̄r H̄wfw and title(s) of h̄m-n̄r of another king.**

NAME	DYN.	RELEVANT KINGS
#7 JJ-MRJ	5	S̄h̄w-R' ; N̄r-jr-k̄-R'
#51 NFR-B̄W-PTH	5	S̄h̄w-R' ; N̄r-jr-k̄-R' Nj-wsr-R'
#63 RWD	6	Dd-f-R' ; H̄-f-R'
#84 H̄'-K̄-R'	5-6	S̄h̄w-R'
#83 H̄' F-H̄WFW II	4-5	Jst-jb-R'
#99 SNB	6	Dd-f-R'
#102 SRF-K̄	5	Wsr-k̄-f
#106 SHM-K̄	5-6	Ssp-jb-R'
#108 SPSSK̄F- 'NH	5	S̄h̄w-R'
#136 TTJ	6	H̄-f-R'
#124 K̄-M-NFRT	6	S̄h̄w-R' ; St-jb-R' H̄-f-R' ; Mn-swt-Nj-wsr-R'
#114 KD-NFR	5-6	Ssp-jb-R' ; Mn-swt-Nj-wsr-R'

**TABLE 7: Personnel bearing title of hm-ntr H'·f-R' and title(s) of hm-ntr of another king.**

NAME	DYN.	RELEVANT KINGS
#25 WR-MRW	5-6	Snfrw
#53 NFR-HR-N-PTH/FFJ	5-6	Mn-kw-R'
#63 RWD	6	Hwfw; Dd·f-R'
#85 HFW-MR	4	Mn-kw-R'
#124 K-M-NFRT	6	Schw-R' ; St-jb-R' ; Hwfw; Mn-swt-Nj-wsr-R'

**TABLE 8: Personnel bearing title of hm-ntr Mn-kw-R' and title(s) of hm-ntr of a god or goddess.**

NAME	DYN.	RELEVANT GODS AND GODDESSES
#26 WR-HWW	5-6	Wsjr; M' t
#32 MNW-HM	6	Hthr

**TABLE 9: Personnel bearing title of hm-ntr Mn-kw-R' and title(s) of hm-ntr of another king.**

NAME	DYN.	RELEVANT KINGS
#26 WR-HW	5-6	Nfr-jr-k-R' ; St-jb-R'
#53 NFR-HR-N-PTH/FFJ	5-6	H-f-R'
#85 HFW-MR	4	H-f-R'

TABLE 10A: Personnel holding title jmj-rz hht-hwfw

NAME	DYN.
#4 HHT-HTP	5
#11 JRW-KR-HWFW	5

TABLE 10B: Personnel holding title jmj-rz njwt hht-hwfw

NAME	DYN.
#13 JR-N-N-HHT/JRJ	6
#57 NFRT-NSWT	5
#101 SNNS-KR/KKJ	5
#112 KR/MRJ-R'-NFR	6
#137 TTW I/KR-NSWT	5-6
#128 KR	?

TABLE 11A: Personnel holding title jmj-rz H'.f-R'.wr

NAME	DYN.
#50 NFR-JBJ	6-FIP
#55 NFR-HWW	5-6
#55 S'NH-HTHR	5-6
#62 R'HW.F	5-6
#121 KR-PR	5
#135 TTJ	?
#144 UNKNOWN	?
#155 UNKNOWN	?

TABLE 11B: Personnel holding title jmj-r3 njwt H ' f-R ' wr

NAME	DYN.
#119 K3-JRJ-S	5

TABLE 12A: Personnel holding title jmj-r3 Mn-k3w-R ' ntrj

NAME	DYN.
#50 NFR-JHJ	6-FIP
#75 HTP	?

TABLE 12B: Personnel holding title jmj-r3 njwt Mn-k3w-R ' ntrj

NAME	DYN.
#17 JSFJ	6
#112 K3/MRJ-R ' -NFR	6
#146 UNKNOWN	?

**TABLE 13A:** Number of personnel in each dynasty who are hm-ntr of the names of Khufu.

TITLE	4	4-5	5	5-6	6	6-FIP	?	Total
hm-ntr Bjkwj-j-nbw			3		3			6
hm-ntr mddw-Hr			4		5	1	2	12
hm-ntr mdd-r-nbtj		1	1	1	2			5
hm(t)-ntr Hwfw	5	4	19	9	17	4	15	73
hm-ntr Hnsw Hwfw					2			2

**TABLE 13B:** Number of personnel in each dynasty who are hm-ntr of the names of Khafra.

TITLE	4	4-5	5	5-6	6	6-FIP	?	Total
hm-ntr Wsr-m-nbtj						1		1
hm-ntr Hr-wsr-jb						1		1
hm-ntr H'·f-R'	2		4	4	4			14

**TABLE 13C:** Number of personnel in each dynasty who are hm-ntr of the names of Menkaura.

TITLE	4	4-5	5	5-6	6	6-FIP	?	Total
hm-ntr Mn-kzw-R'	3	1	2	4	1		1	12

**TABLE 14: Personnel connected with the Giza establishment and buried at another site.**

	NAME	KING	LOCATION OF TOMB	DATE
#29	PTH-MR/STJ·F	Khufu	Abousir	6
#32	MNW-EM	Menkaura	Saqqara	?
#52	NFR-N-PTH	Khufu	Saqqara	5-6
#80	HTP-ERS	Khufu	Saqqara	5
#102	JRF-K	Khufu	Shiek-Said	6
#124	K-M-NFRT	Khufu, Khafra	Saqqara	6
#130	K-TP	Khufu	Saqqara	?
#132	TP-M- NHK	Khafra, Khufu	Saqqara	5

**TABLE 15: Personnel involved in the funerary establishments of Khufu, Khafra, and Menkaura after the end of the Old Kingdom.**

	NAME	KING	DYN.
#5	BHT-HTP	Khufu	FIP
#9	JHJ-ST-KBJ	Khufu	FIP
#40	NJSW-S'NE	Khufu	FIP
#50	NFR-JHJ	Khafra	FIP
#116	KD-N·S	Khufu	FIP

**TABLE 16: Personnel connected with funerary establishment of more than one of the kings buried at Giza.**

	NAME	DYN.	KINGS	LOCATION
#12	JR-N- <u>HT</u> /JR-N-PTH/JRJ6		Khafra, Menkaura	Giza
#14	JR-N-R	6	Khufu, Menkaura	Giza
#20	JDW	6	Khufu, Khafra	Giza
#50	NFR-JHJ	6-FIP	Khafra, Menkaura	Giza
#53	NFR-HR-N-PTH/FFJ	5-6	Khafra, Menkaura	Giza
#63	RWD	6	Khufu, Khafra	Giza
#65	RWD-Kz	4	Khufu, Khafra	Giza
#85	HWFV-MR	4	Menkaura, Khafra	Giza
#112	KzR/MRJ-R'-NFR	6	Khufu, Khafra, Menkaura	Giza
#124	Kz-M-NFRT	6	Khufu, Khafra	Giza
#132	TP-M- <u>NH</u> II	5	Khufu, Khafra, Menkaura	Saqqara
#136	TTJ	?	Khafra, Khufu	Giza

Table 17

## List of All the Statues and Statuettes Found in the Upper Temple of Menkaura

No (Reisner)	Province	Position	Material	Size	Intact	Fragmentary
01	magazines rooms 15,20	—	alabaster	over life		X
02	northern magazine rooms 15,20	—	"	two thirds life		X
03	room 9	—	slate	small		X
04	" "	—	alabaster	"		X
05	" "	—	copper	"		X
06	court	debris	alabaster	minute		X
07	portico	"	slate and alabaster	"		X

Table 18

## List of All the Statues and Statuettes Found in the lower Temple of Menkaura

No (Reisner)	Province	Position	Material	Size	Intact	Fragmentary
9	magazines southern corridor	III-4	slate	two fifth life size	X	
10	" "	"	"	slightly larger than No. 9	X	
11	" "	"	"	slightly larger than No. 10	X	
12	" "	"	"	larger than the above	X	
13	court	middle north of stone path- way, debris of first temple	"	slightly larger than No. 12	intact but not complete	
14	southern magazines corridor	III-4 in sand	"	life size		X
15	portico near the second temple floor and surface of 2nd temple	III-1	"	_____		X

Table 18 (cont.)

## List of All the Statues and Statuettes Found in the lower Temple of Menkaura

No	Province	Position	Material	Size	Intact	Fragmentary
16	under the walls of houses court	surface of the first temple decay	alabaster	—		X
17	corridor of the southern magazine	III-4 in a hole	"	142 cm.	X	
18	portico	II-1 , III-1	"	life size		X
19	"	II-1	"	part of life size		X
20	"	II-1 , II-2 with No. 18,19,20	"	over life size		X
21	"	II-1 with No. 18,20	"	" "		X
22	"	II-1	"	life size		X

Table 18 (cont.)

## List of All the Statues and Statuettes Found in the lower Temple of Menkaure

No	Province	Position	Material	Size	intact	fragmentary
23	portico	II-1	alabaster	life size of a young man	X	
24	houses in the court	III-12	"	less than life size		X
25	magazines	III-3	diorite	35 cm. (statuette)	X	
26	floor magazine	III-3	"	" "	X	
27	west end of the second temple floor	II-2	"	43 cm. (statuette)	X	
28	north wall of magazine	III-3	"	35 cm. (statuette)	X	
29	floor of second temple	II-2	"	47 cm. (statuette)	X	
30	under debris of room 1-4 and magazine	III-18	"	28 cm. (statuette)	X	

Table 18 (cont.)

## List of All the Statues and Statuettes Found in the lower Temple of Menkaure

No	Province	Position	Material	Size	Intact	Fragmentary
31	magazine floor in debris level of sixth Dyn. wall	III-4	diorite	25 cm. (statuette)	X	
32	floor of second temple	II-2	"	42 cm. (statuette)	X	
33	portico	III-1	limestone	20 cm. (statuette)		X
34	magazine	III-3	hard reddish stone	16 cm. (statuette)	X	
35	end of a corridor	III-4	diorite	35 cm. (statuette)	X	
36	mud debris	III-18 & walls I-4	"	16 cm. (statuette)		X
37	north of corridor	III-4	hard reddish stone	20 cm. (statuette)	X	
38	floor of the second temple	II-2	diorite	32 cm. (statuette)		X

Table 18 (cont.)

List of All the Statues and Statuettes Found in the lower Temple of Menkaure

No	Province	Position	Material	Size	Intact	Fragmentary
39	floor of the second temple	II-2	diorite	20 cm. (statuette)		X
40	court debris	I-310 , 319 , 395	black and white porphyry	32 cm. (statuette)		X
41	under houses and walls	III-18 , I-318	granite	55 cm. (statuette)		X
42	debris of court	I-395	diorite	20 cm. (statuette)	X	
43	norther end of magazine corridor	III-4	limestone	50 cm. (statuette)	X	
44	western wall of second temple	120 cm. from corner just above foot of rubble wall	granite	40 cm. (statuette)		X
45	floor of the second temple	II-2	slate	60-80 cm. (jackal / medium)		X

Table 18 (cont.)

List of All the Statues and Statuettes Found in the lower Temple of Menkaura						
No	Province	Position	Material	Size	Intact	Fragmentary
46	court debris	I-395	alabaster	large, has a height 14 cm. (stat.)		X
47	northern magazines	I-19 , I-10	"	12 cm. width (forepaws of a lion)		X
48	lower part of brick work	II-2 to III-4	ivory	14 cm. (statuette)		X
49	room debris	I-23	wood	life size arm		X
50	debris	III-3 , III-17 III-7 , I-11	crystalad copper	(crystal eyes)		X
51	found in a room debris	I-318	diorite	10 cm. (statuette)		X
52	" "	I-32	limestone	height 7 cm., length 9 cm.		X

Table 19

## List of Large Statues from the Lower Temple of Menkaura

No.	Province	Description	Material	Size	Notes
9	southern magazine corridor (III-4)	Nometriad, Hathor, Menkaura and the Hare-nome, Hathor in the middle, King with upper Egypt crown embraced by Hathor. Inscribed.	Slate	two fifth life size	Found on the floor of the magazine corridor with other triads, found first in the south.
10	southern magazine corridor (III-4)	Nometriad, Menkaura and Theben nome. King in the middle with crown of upper Egypt. Inscribed.	Slate	slightly larger than No. 9	Found on the floor of the magazine, second on the south.
11	southern magazine corridor (III-4)	Nometriad, Menkaura, Hathor and Jackel name. King in the middle with crown of Upper Egypt. Inscribed.	Slate	slightly larger than No. 10	Found on the floor of the magazine south No. 10 facing north.
12	southern magazine corridor (III-4)	Nometriad, Menkaura, Hathor and nome of Oispolis parva. King in the middle with crown of upper Egypt. Inscribed.	Slate	The largest of 9 - 11.	Found on the floor of the magazine, first in the north facing south.

Table 19 (cont.)

List of Large Statues of the Lower Temple of Menkaura					
No.	Province	Description	Material	Size	Notes
13	court	Shattered nome triad Menkaura, Hathor and a male nome. King in the middle. (heads and feet) broken away, except chin of Hathor, name of the name is broken.	slate	large than No. 12	Found in upper part of debris of decay in the court, 4 meter east of the entrance to portico and 2 meters north of axis of court.
14	thieves hole in room (III-4)	Large fragment, of nome triad, left lower part of back of triad, seated figure in middle and standing male figure on left of seated figure.	slate	two fifth life size	Found in the sand below the water level, about 50 cm. below base of slate No. 17 in room (III-4).
15	Portico (III-1)	Fragments of nome triads and 3 large pieces of triads.	slate	?	Found in the SE quarter of the portico near the floor of the crude brick temple also under the walls of the last series of houses and on the surface of decay of the first temple, and in sand outside wall of the first temple.
16	under the walls of house	Fragments of nome triads, very small fragment, thought also to be small Ka - statuettes.	alabaster	?	Found under the walls of houses 1-5 to 1-10 above the southern wall and on the surface of decay of the first temple.

Table 19 (cont.)

List of Large Statues from the Lower Temple of Menkaura					
No.	Province	Description	Material	Size	Notes
17	corridor (III-4)	Dyad of King and Queen both standing, the King wears the royal head dress but no uræus. No inscription. Suggested robe for Menkaura and Queen Khamerenebty II.	slate	life size 142 cm.	Found in a niche dug by treasure hunters, two m. below floor of corridor (III-4), same area of the triads.
18	portico (II-1) portico (III-1) and court	Statue of Menkaura wearing royal head dress and uræus, seated, broken but nearly complete not quite finished.	alabaster	life size	The statue basis found in portico (II-1) in the second temple floor, 4 basis in portico (III-1), head found in portico (II-1) and arm found in the court.
19	portico (II-1)	Inscribed alabaster statue basis of Menkaura, part of a large statue.	alabaster	life size	Found portico (II-1) with Nos. 18, 20 and 21, the second from north and just north of the doorway (II-2).
20	portico (II-1)	Basis of unfinished seated statue of Menkaura, hastily finished, legs and feet incomplete, partly inscribed.	alabaster	over life	Found in portico (II-1) with Nos. 18, 19 and 21, south of doorway to (II-2).

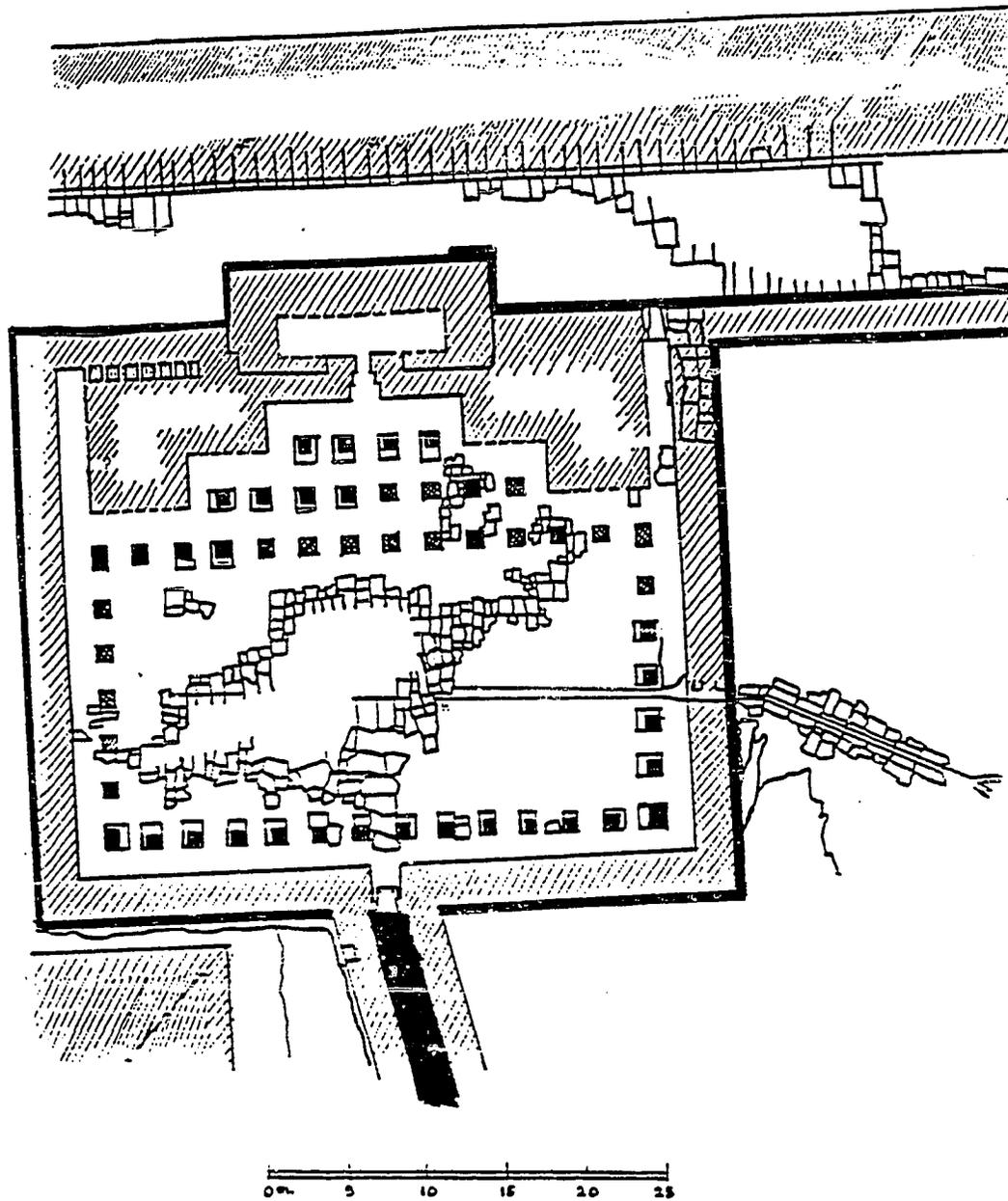
Table 19 (cont.)

List of Large Statues from the Lower Temple of Menkaura					
No.	Province	Description	Material	size	Notes
21	portico (II-1)	Basis of unfinished statue of Menkaura, better preserved. Inscribed.	alabaster	life size	Found in portico (II-1) with Nos. 1E-20 the first on the south.
22	portico (II-1)	Head of Menkaura, head dress with triple pleating, right eye damaged thought to belong to the basis of No. 19.	alabaster	life size	found in portico (II-1) buried in the southern side of No. 19.
24	house in the court	Fragments of statue of Menkaura.	alabaster	less than life size	Found scattered under houses (III-12) and 12 fragments found in room (I-320).

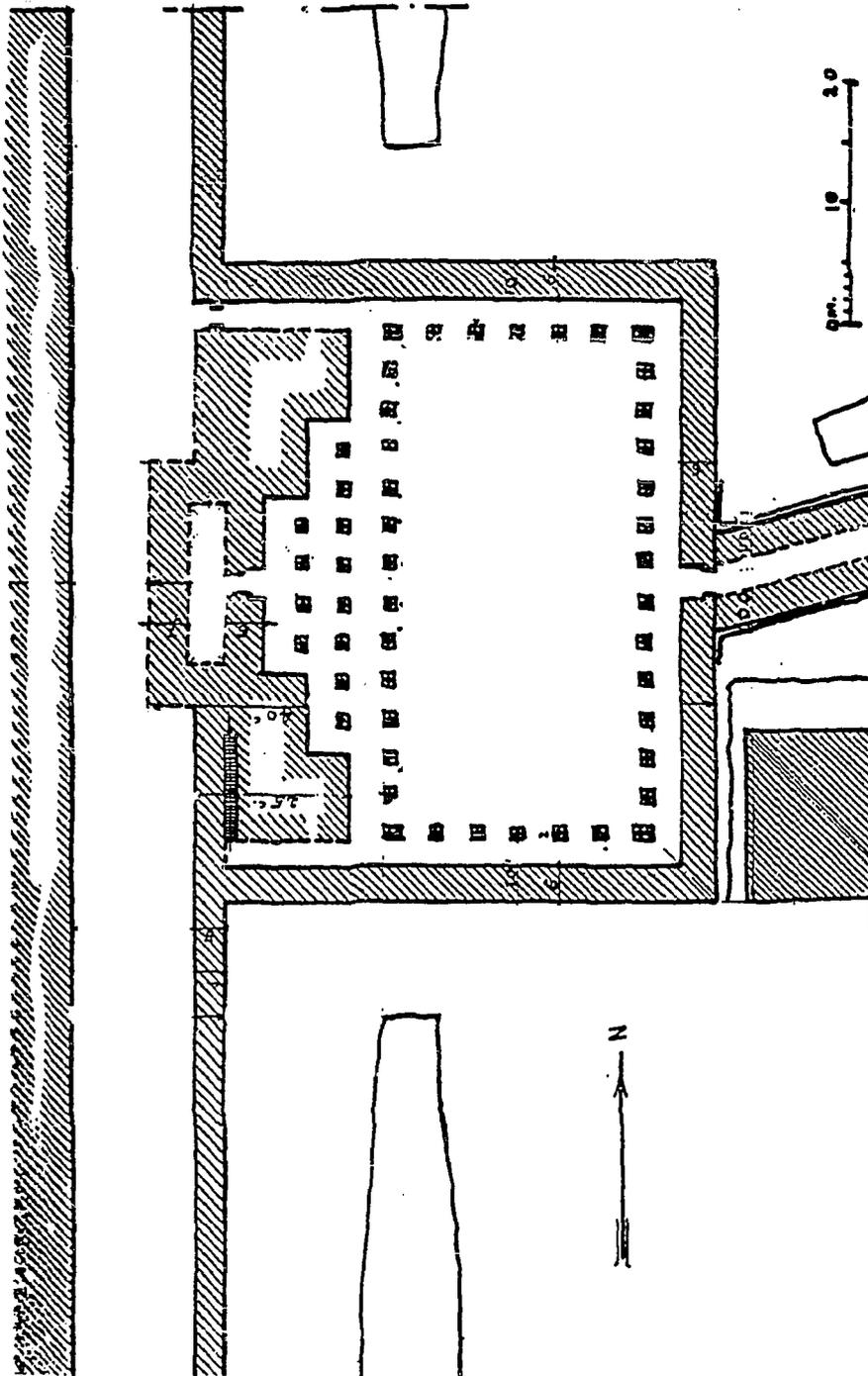
Table 28

## List of Large Statues from the Upper Temple of Menkaura

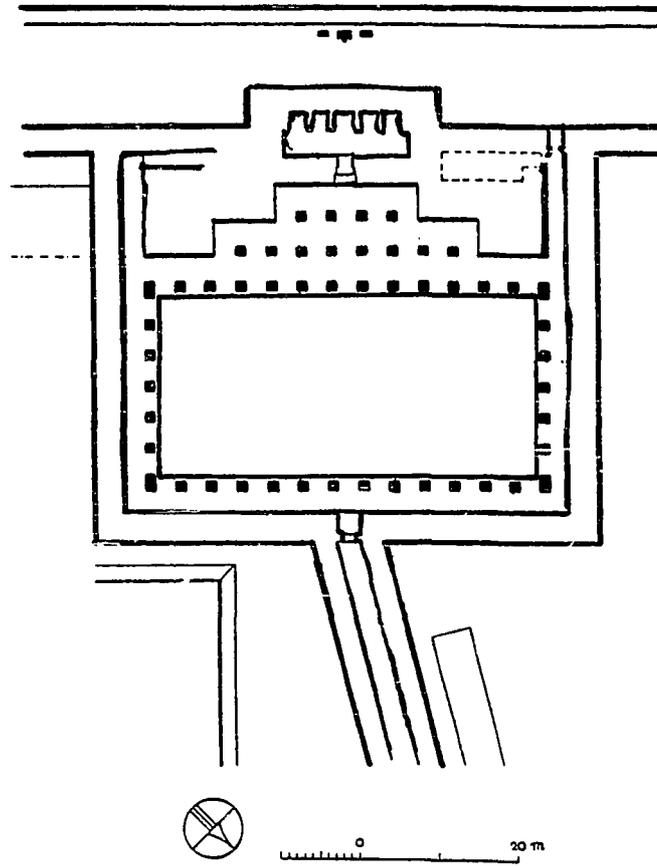
No.	Province	Description	Material	Size	Notes
01	northern magazines	Great statue of Menkaura found in many pieces, head, left shoulder, fragment of the body, knees fragments as well as fragments of basis and toes inscribed with the name of Menkaura, restored.	alabaster	over life size	The head was found outside the northern wall opposite room 20, about 3 meters from the drain hole in the wall, body fragment found near the drain hole, others found in room 15 (northern mag.)
02	northern magazines	Seated statue of Menkaura, found in fragments of torso, basis, feet, hips and thigh.	" "	two thirds life size	Found outside the drain hole in the northern magazines, room 20 and in the sand of room 15.



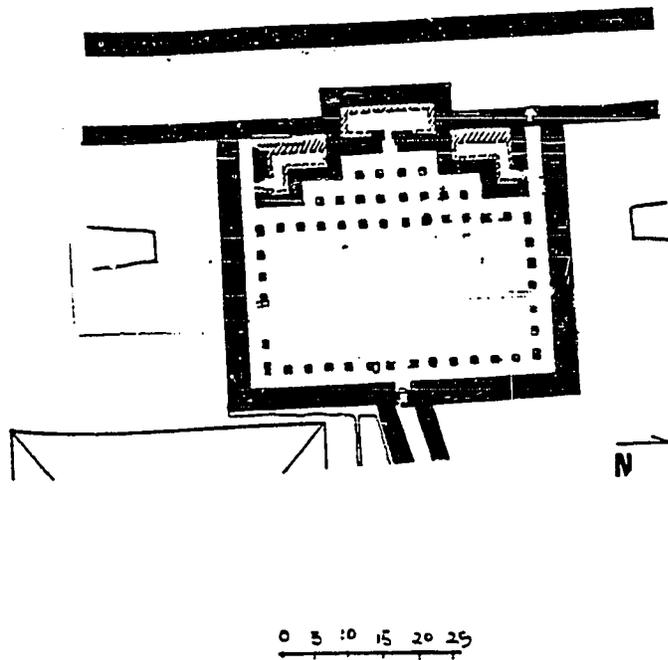
The drainage channels of the Upper temple of Khufu



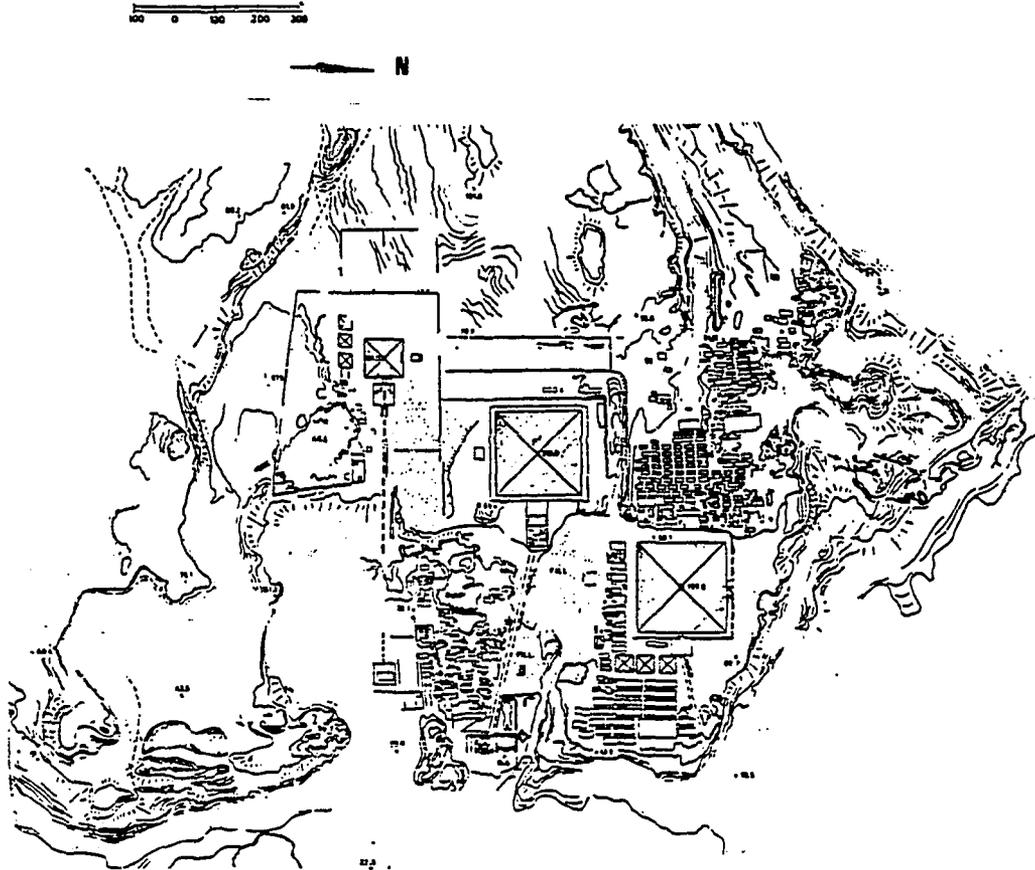
The Upper temple of Khufu



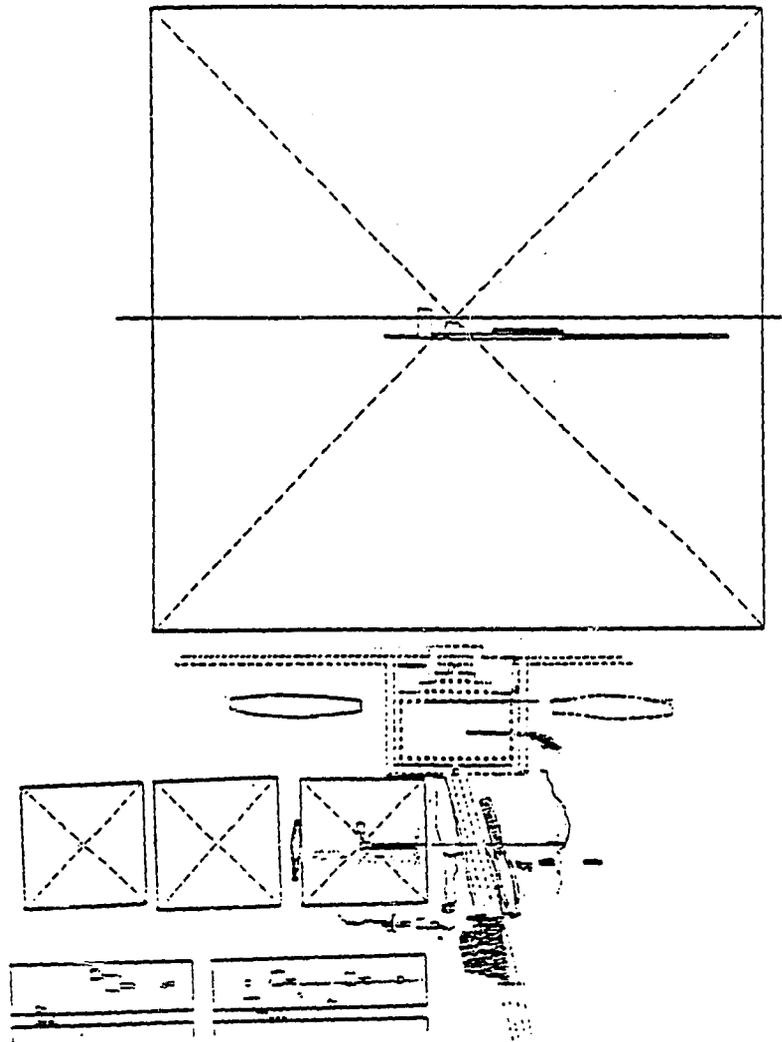
The five niches in the Upper temple of Khufu



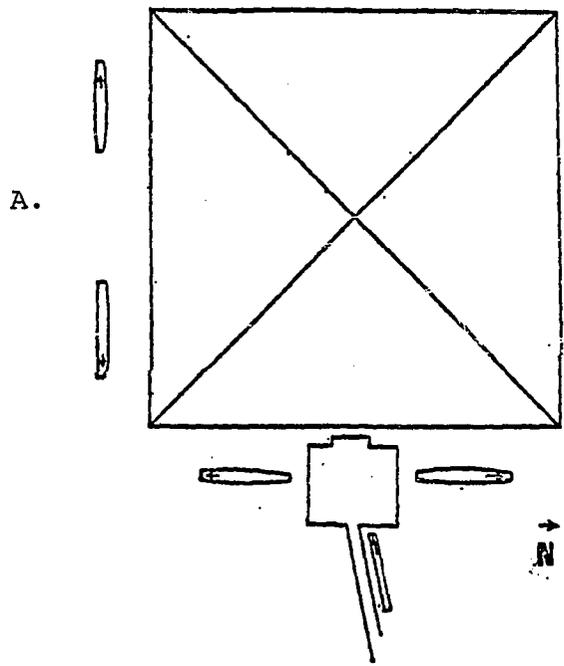
The Upper temple of Khufu



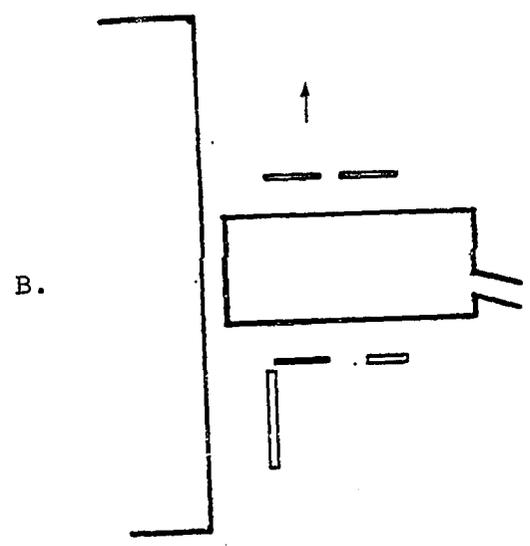
The location of temenos walls in the Giza necropolis

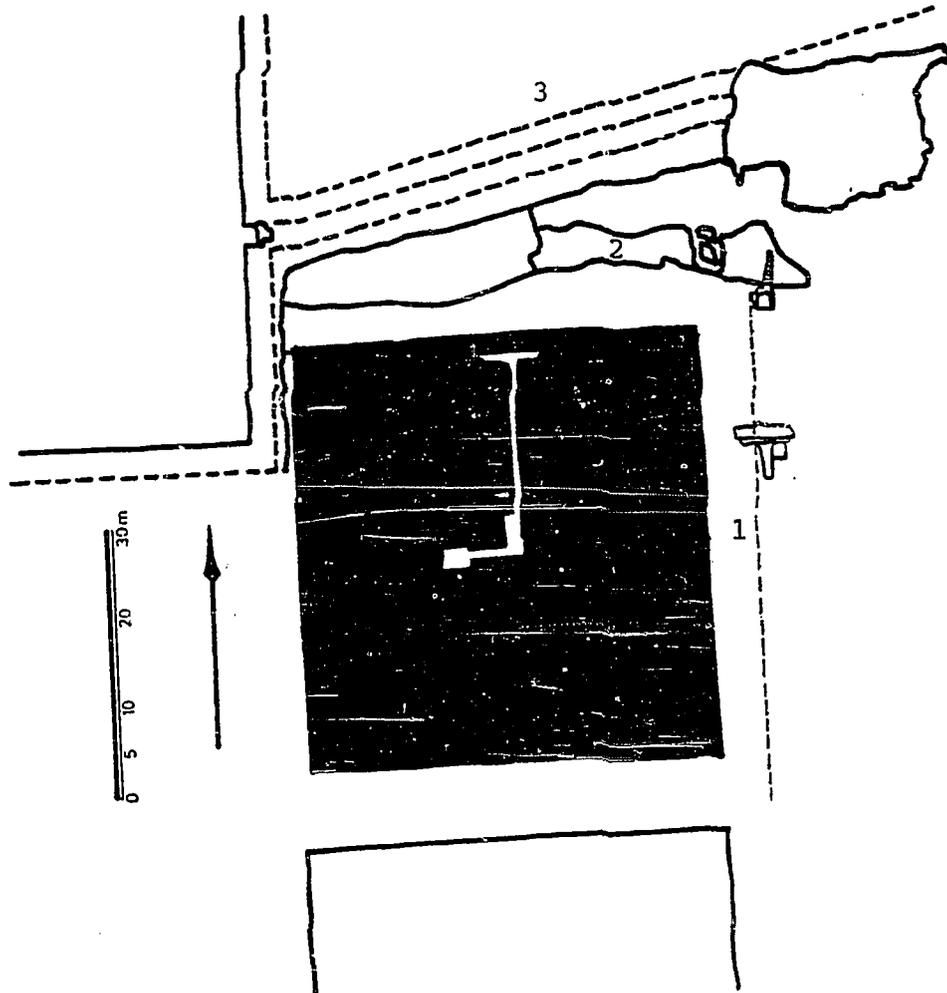


1. Subsidiary pyramids
2. Hetepheres I shaft
3. Trial passages

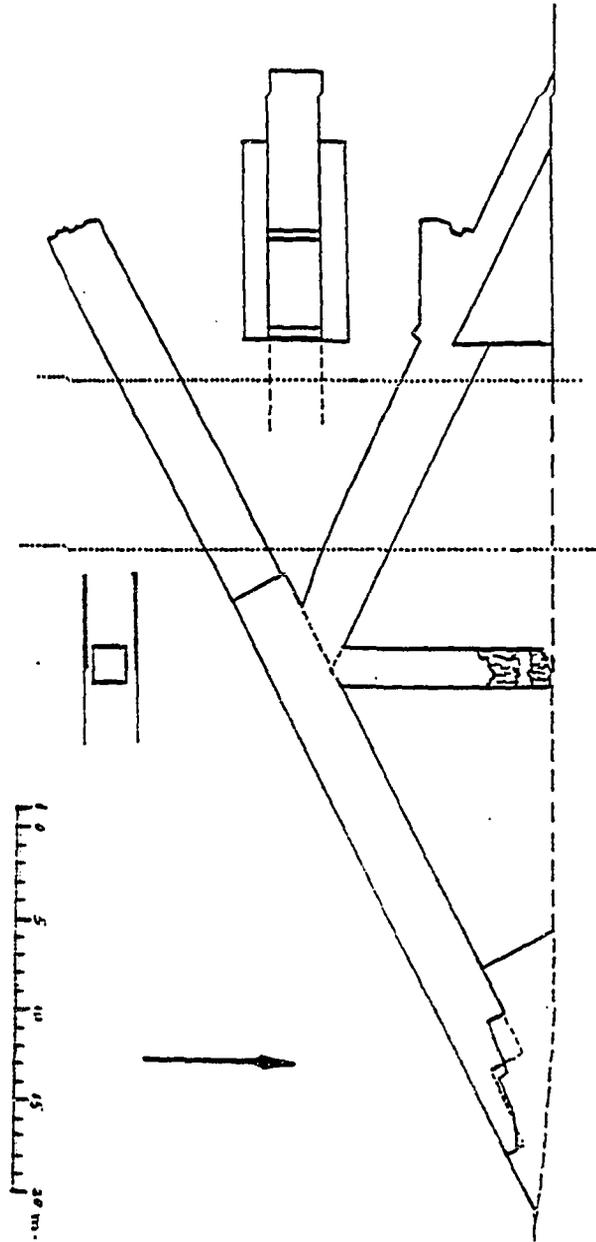


A. Khufu's boat pits  
B. Khafra's boat pits

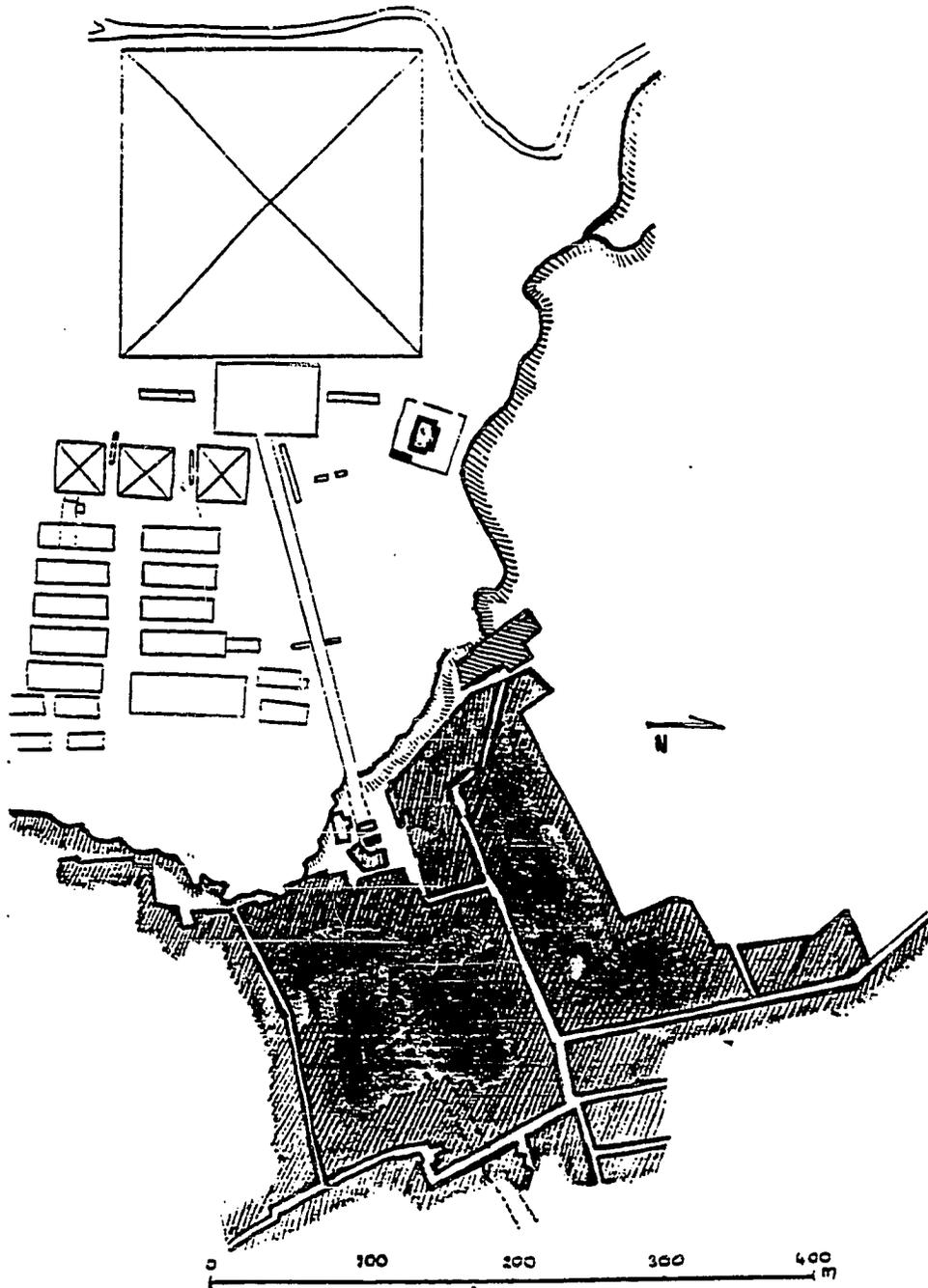




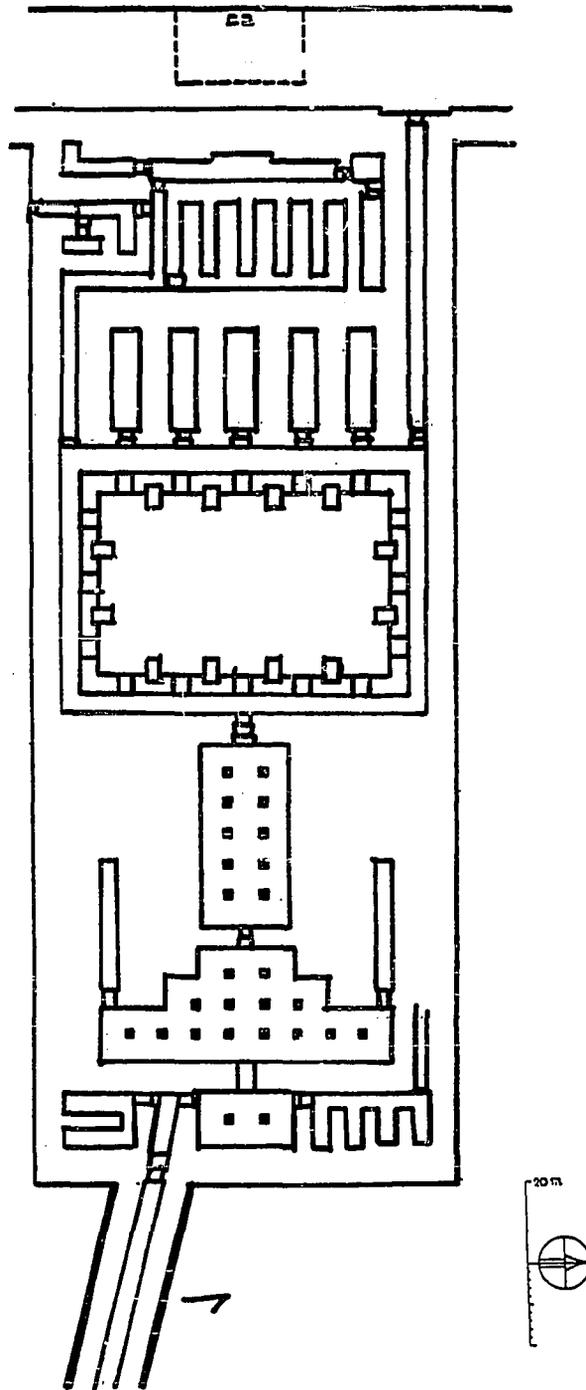
1. Subsidiary pyramids
2. Hetepheres I shaft
3. Causeway



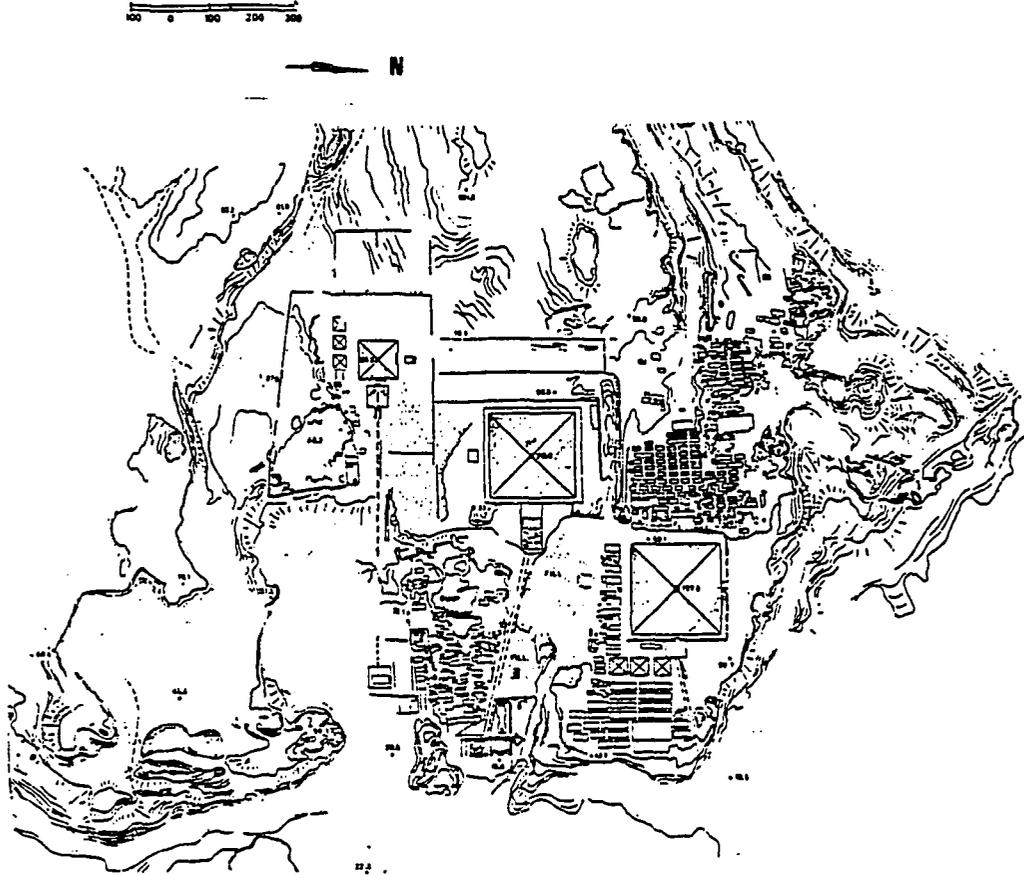
Trial passages



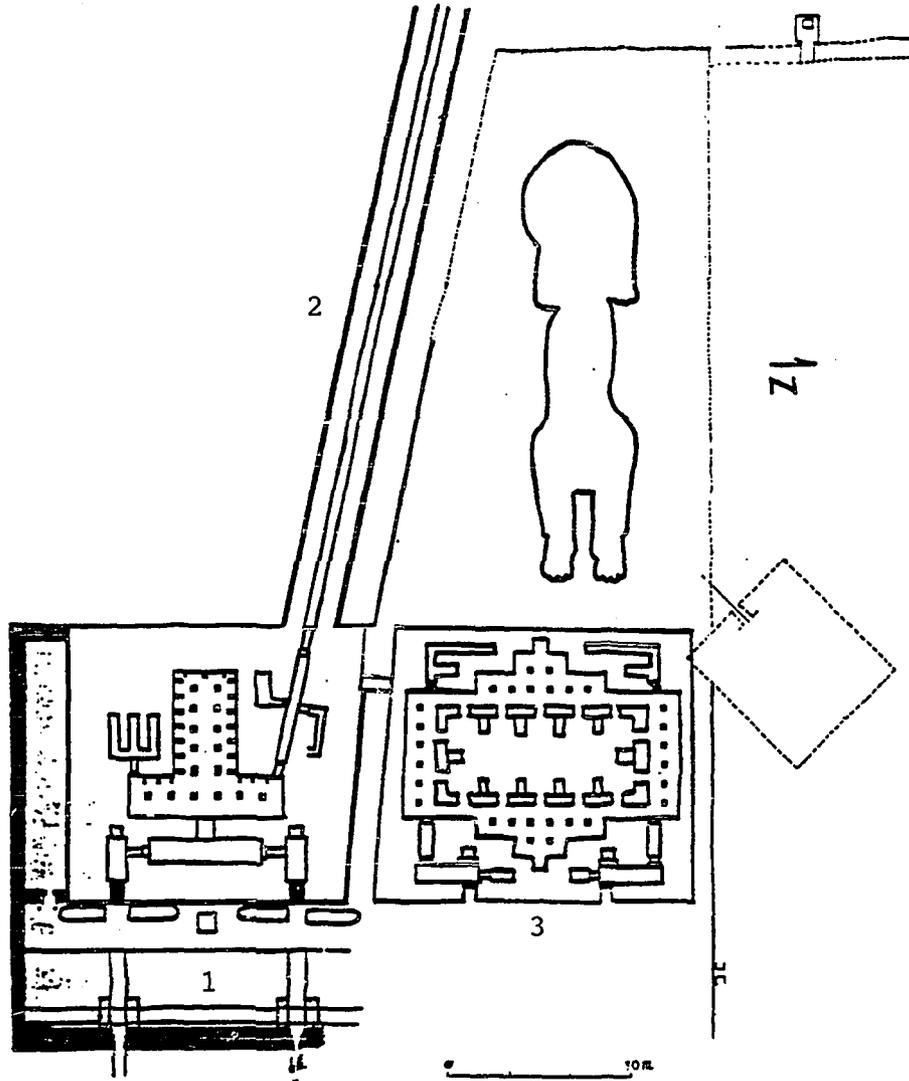
Location of Khufu's Lower temple



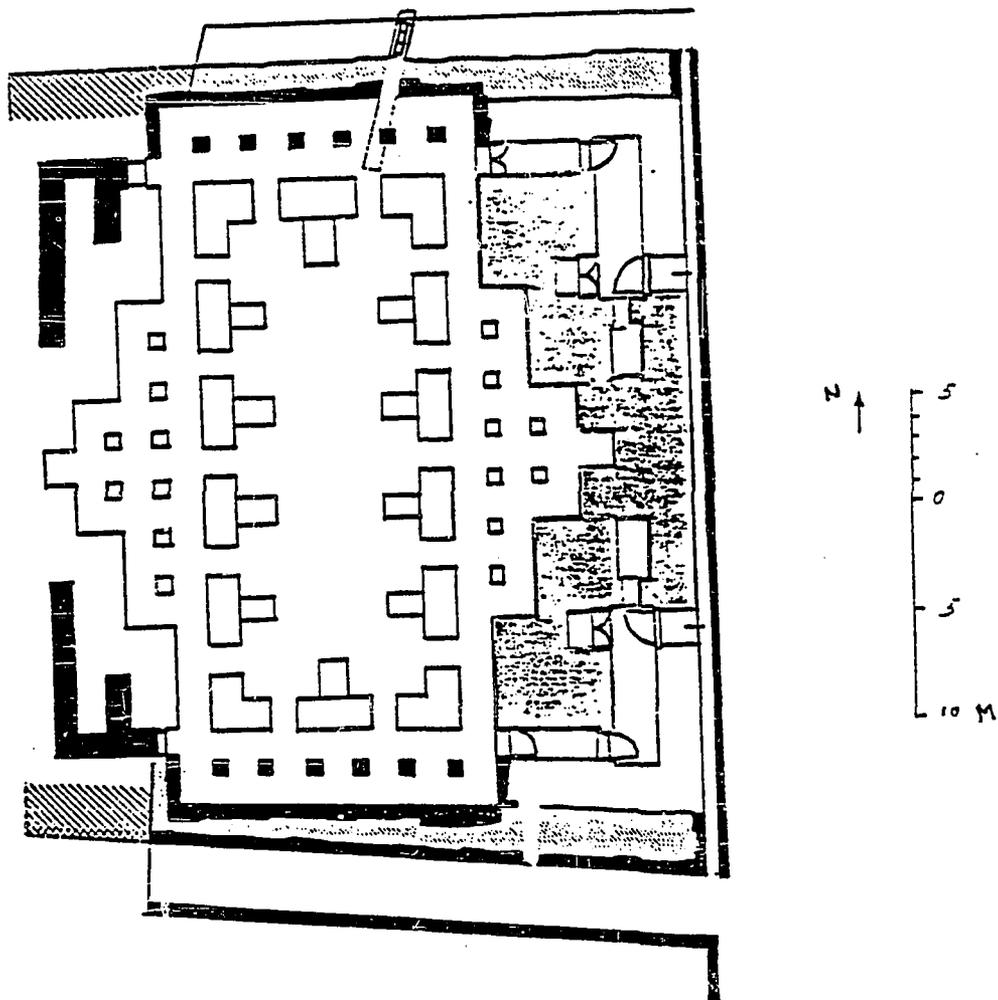
The Upper temple of Khafra



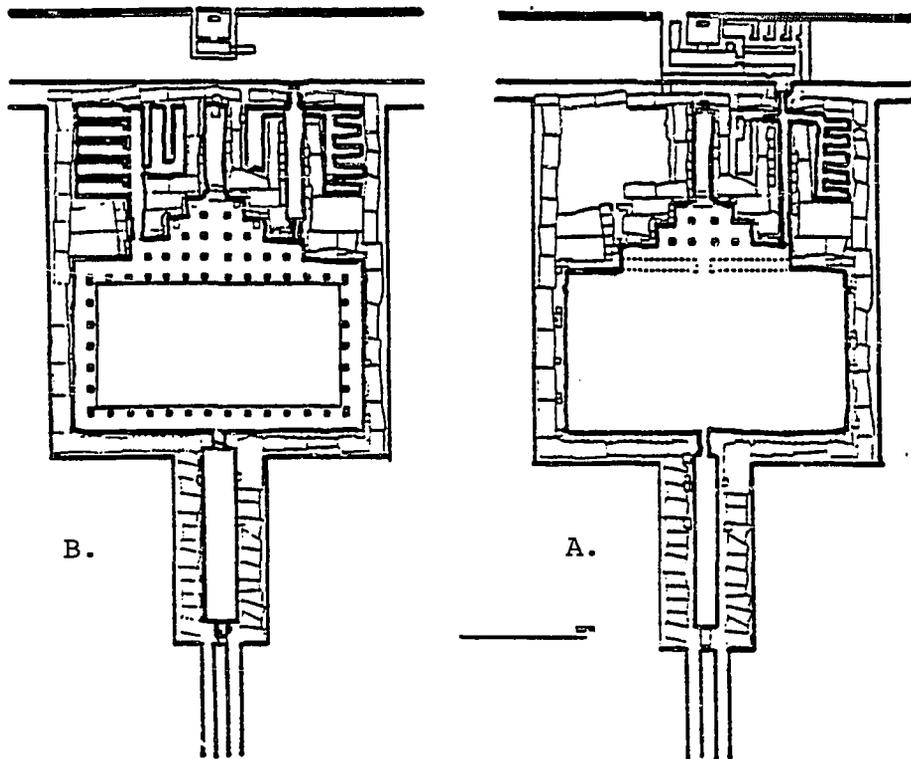
The so-called workmens barracks west of Khafra's pyramid



- 1. Lower temple of Khafra
- 2. Causeway
- 3. Sphinx temple

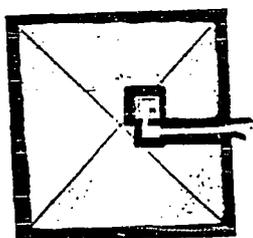
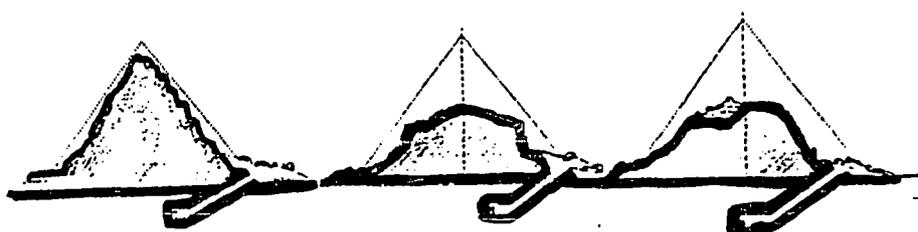


The Sphinx temple

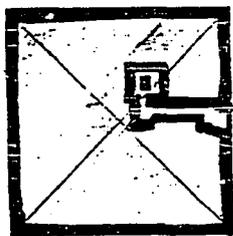


A. The Upper temple of Menkaura

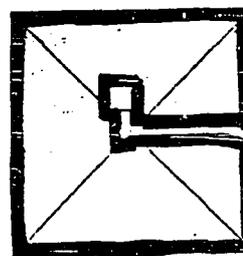
B. Reconstruction of the southern magazines;  
after Ricke



G1 c



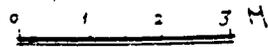
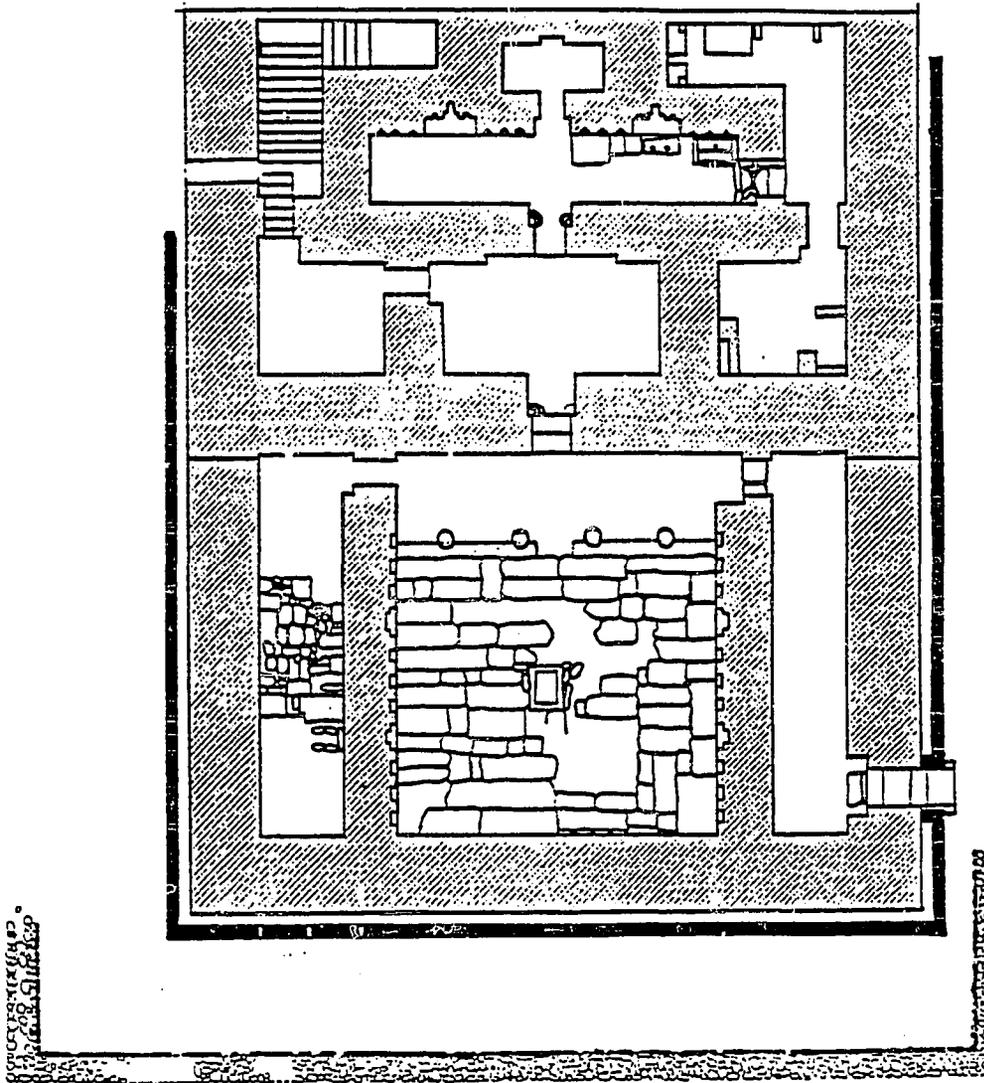
G1 b



G1 c

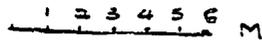
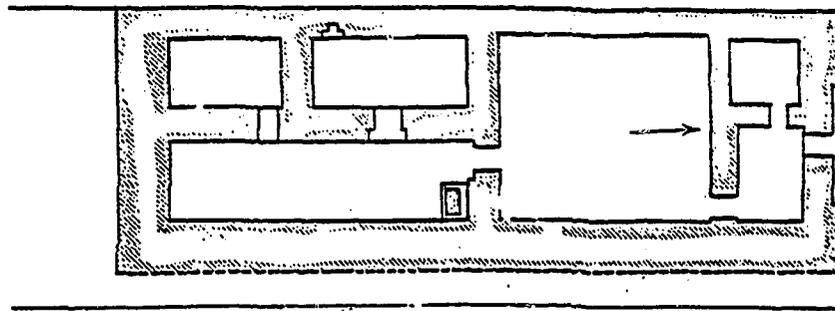
The subsidiary pyramids of Khufu; after Stadelmann

- |         |              |
|---------|--------------|
| A. G1 a | Hetepheres I |
| B. G1 b | Meritetis    |
| C. G1 c | Henutsen     |



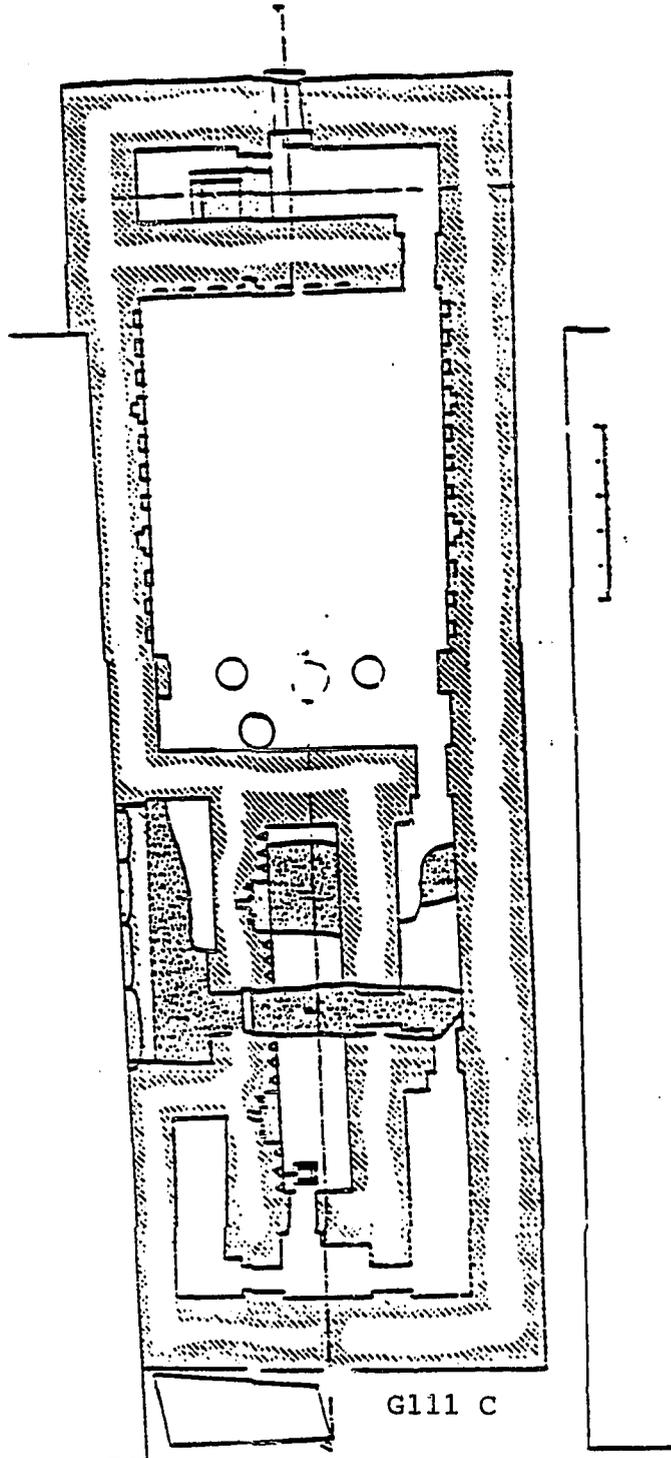
The temple of Menkaura's queen

G111 A

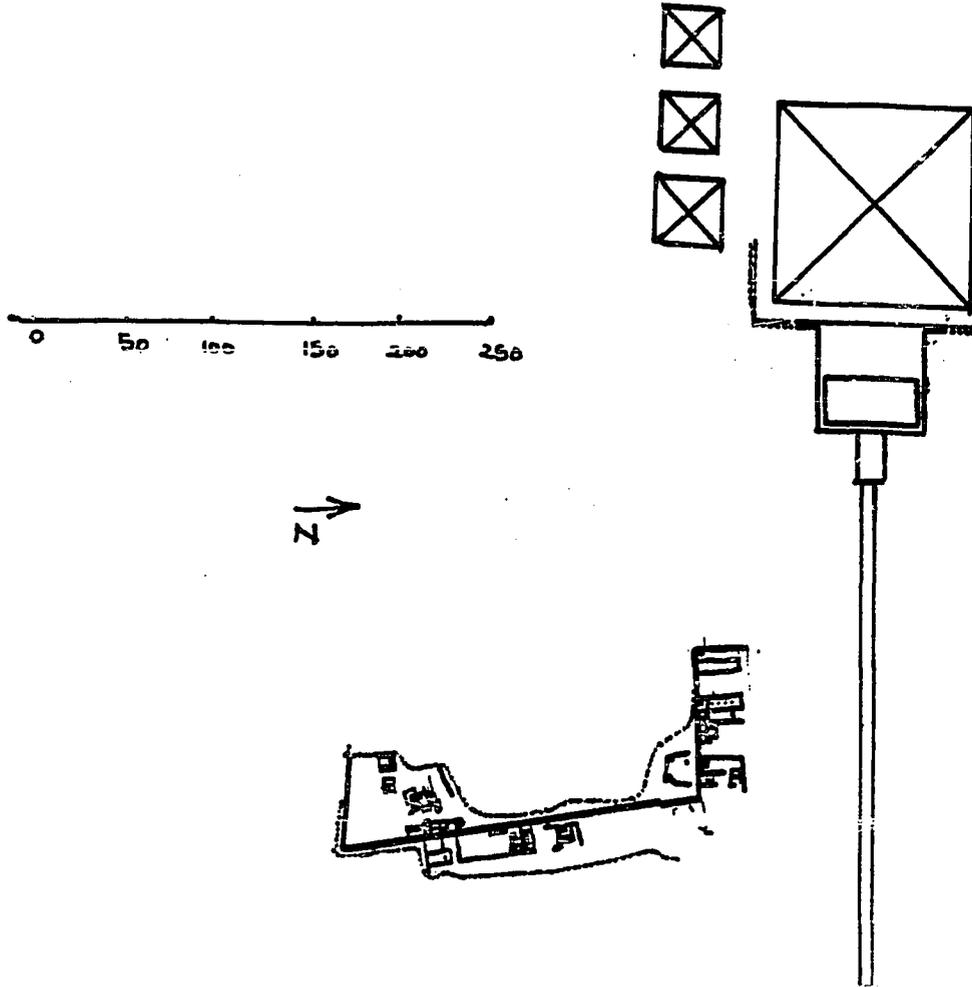


The temple of Menkaura's queen

G111 B



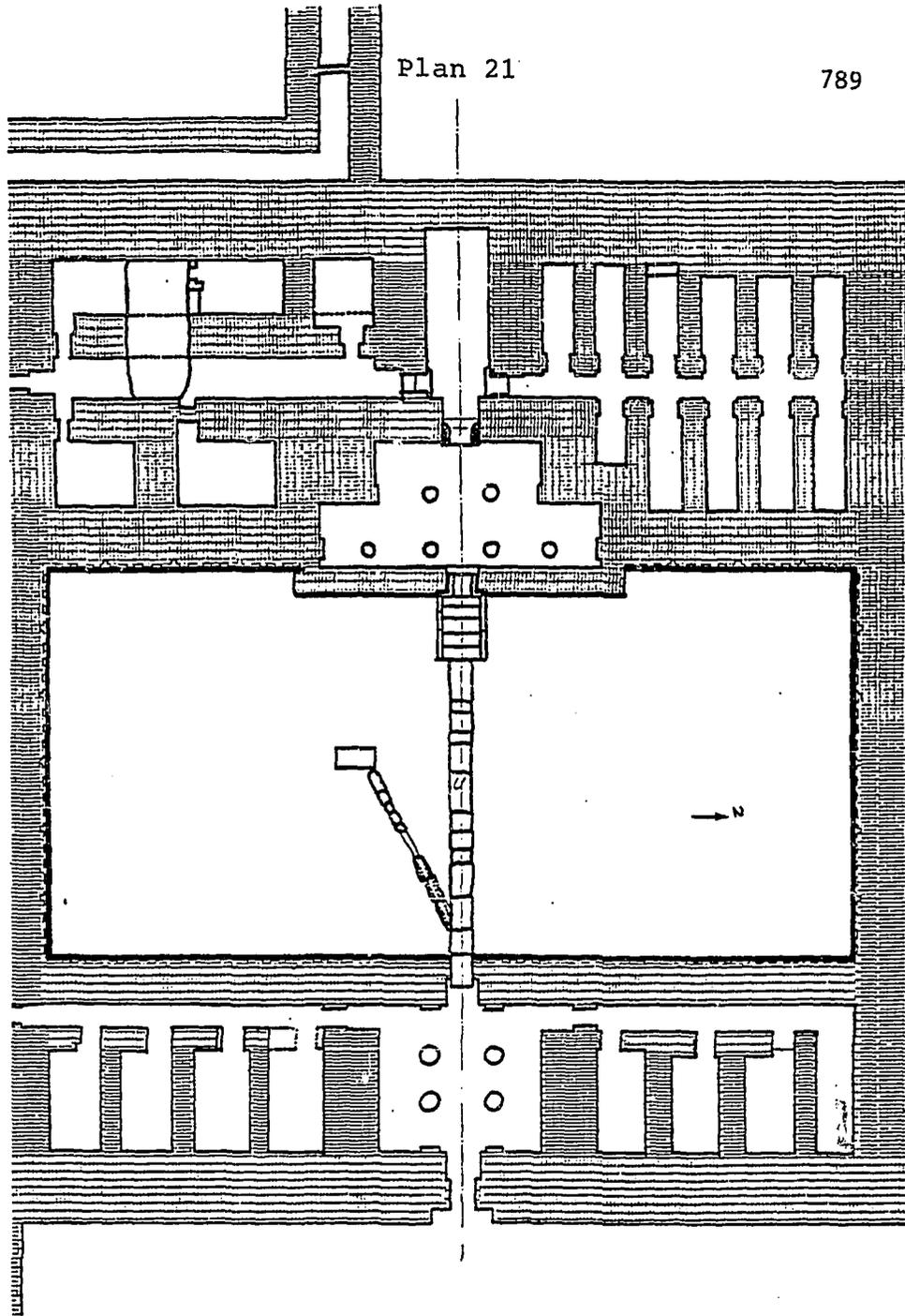
The temple of the subsidiary pyramid of Menkaura



The workshop of Menkaura

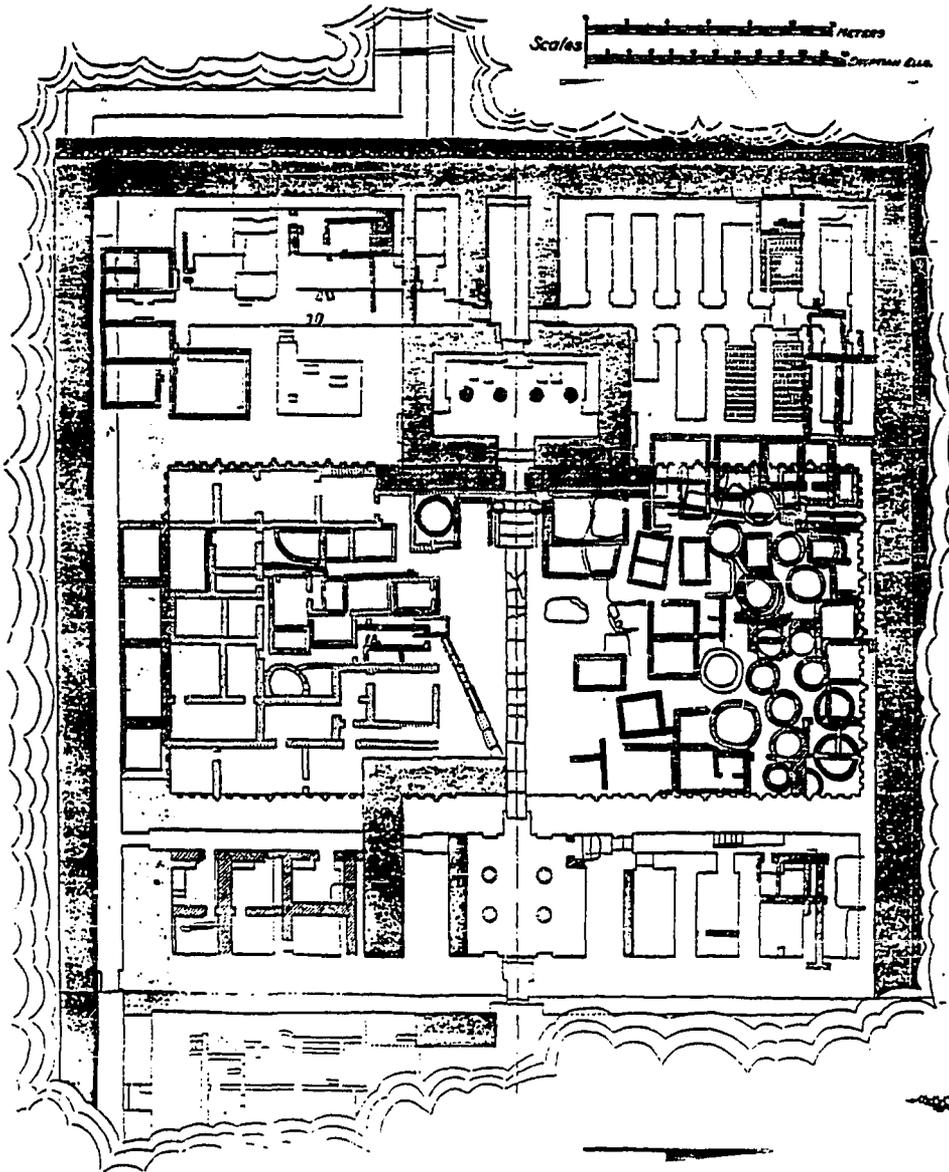
Plan 21

789



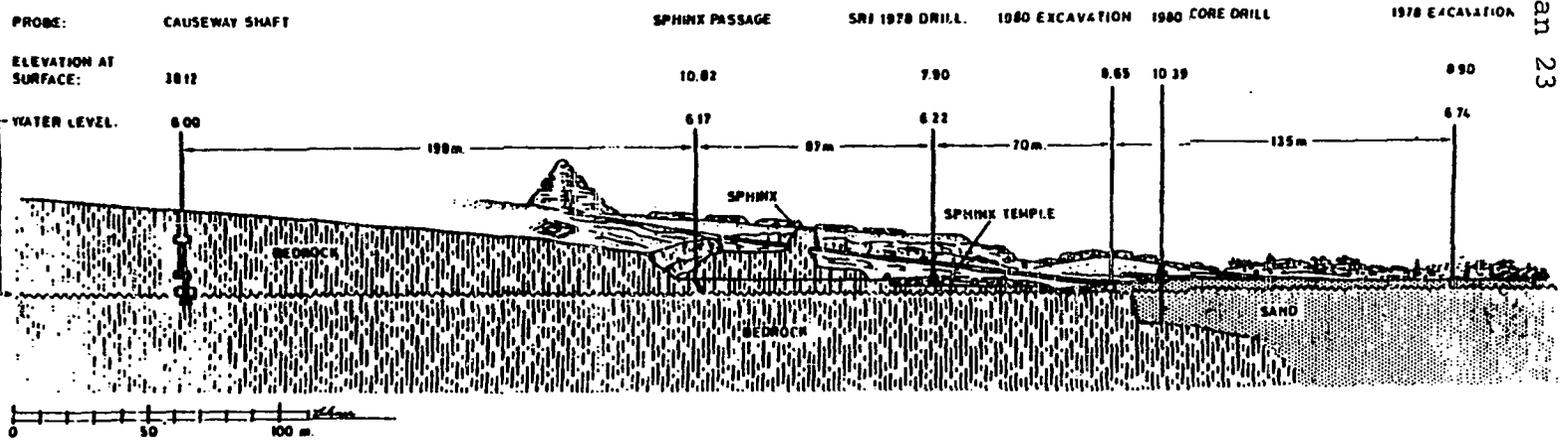
1 2 3 4 5 6 M

The Lower temple of Menkaura



The Sixth Dynasty phase of Menkaura's Lower Temple

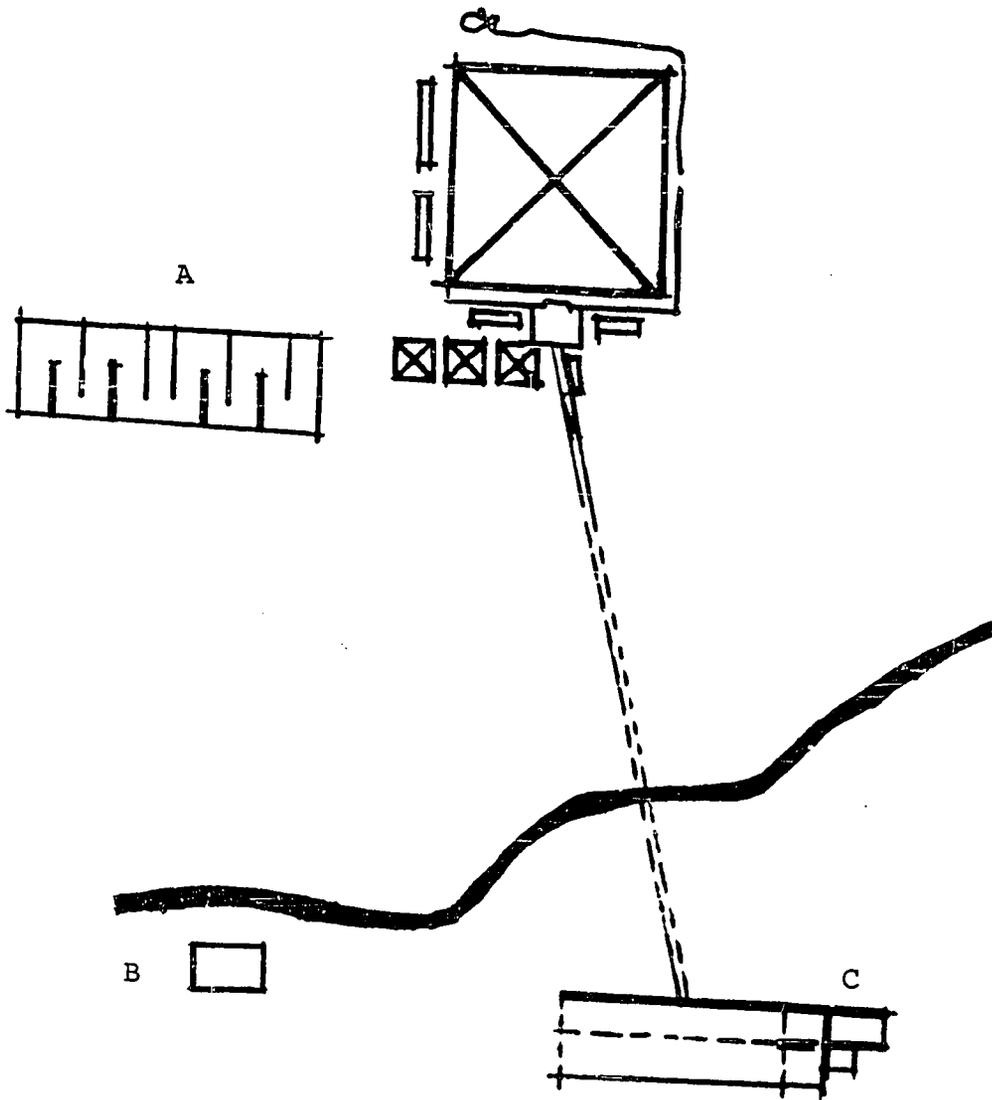
1978 excavation and the location of the harbour



Plan 23

791

- A. Workshop
- B. Resthouse
- C. Pyramid city

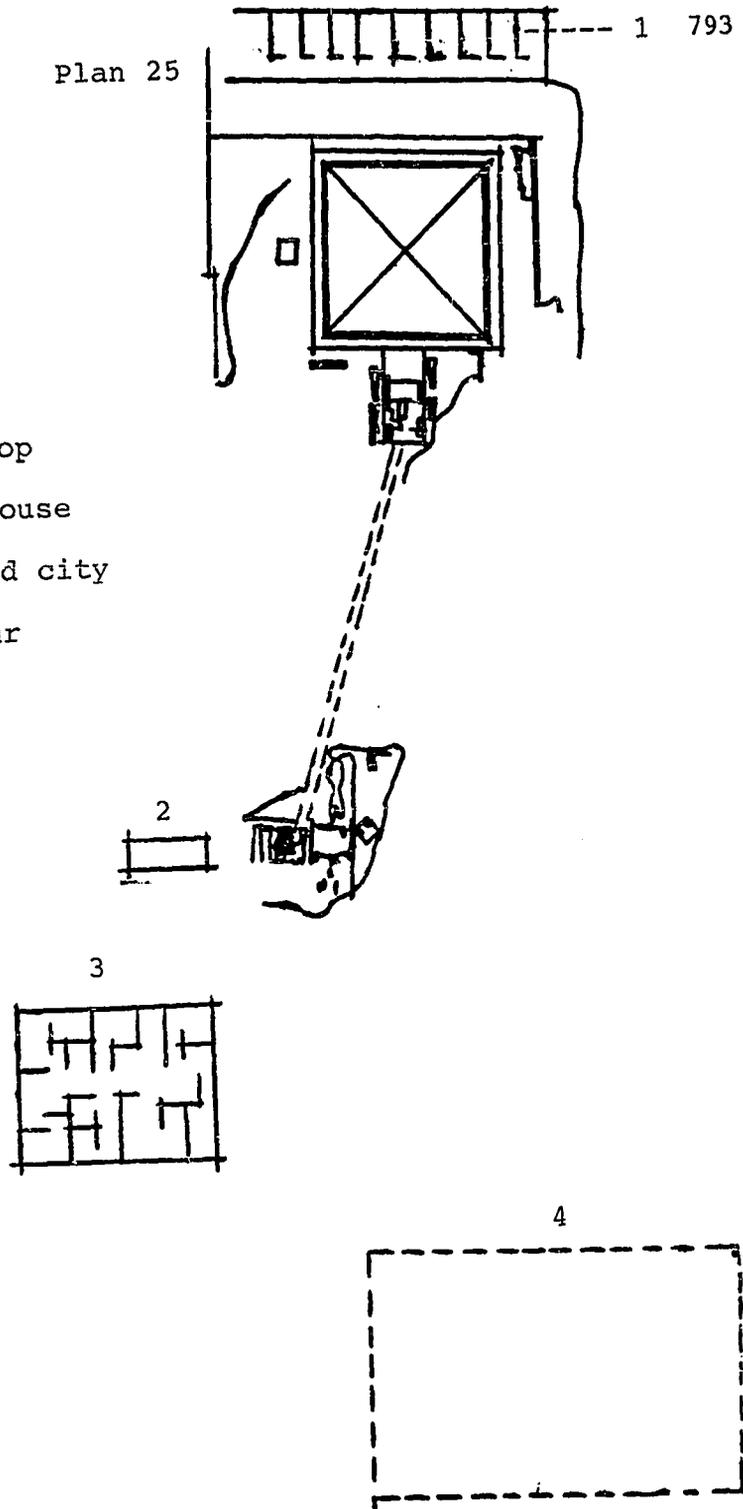


Reconstruction of the pyramid complex of Khufu

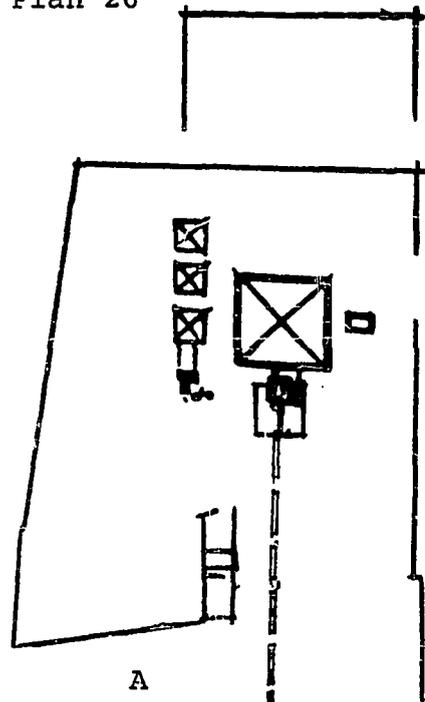
Plan 25

1 793

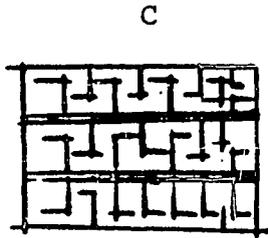
- 1. workshop
- 2. rest house
- 3. pyramid city
- 4. harbour



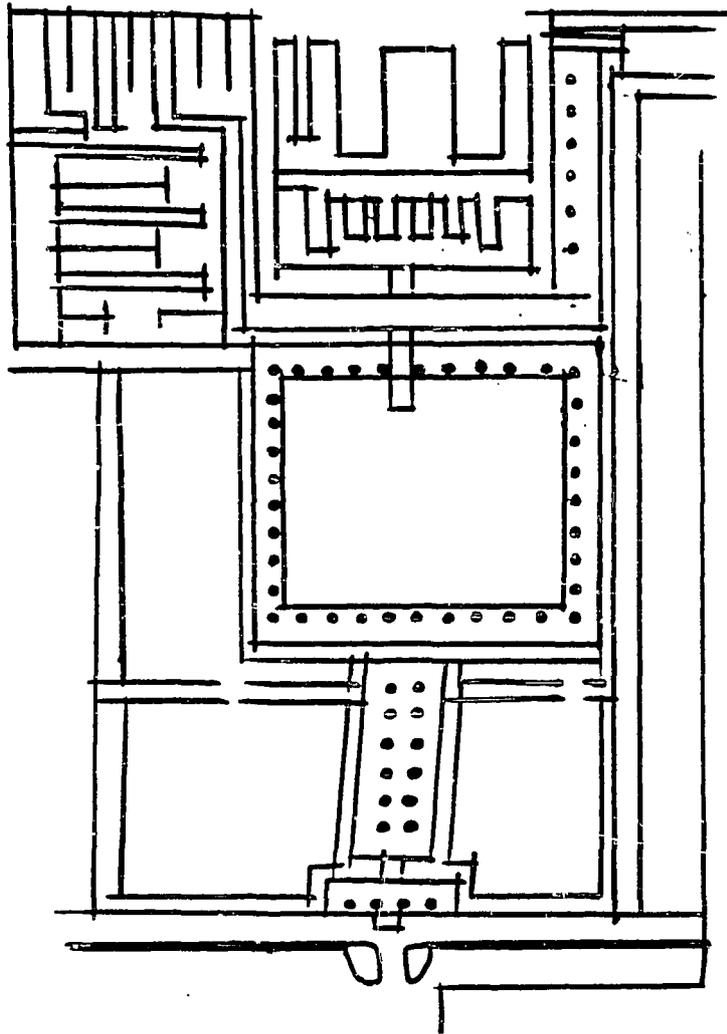
Reconstruction of the pyramid complex of Khafra



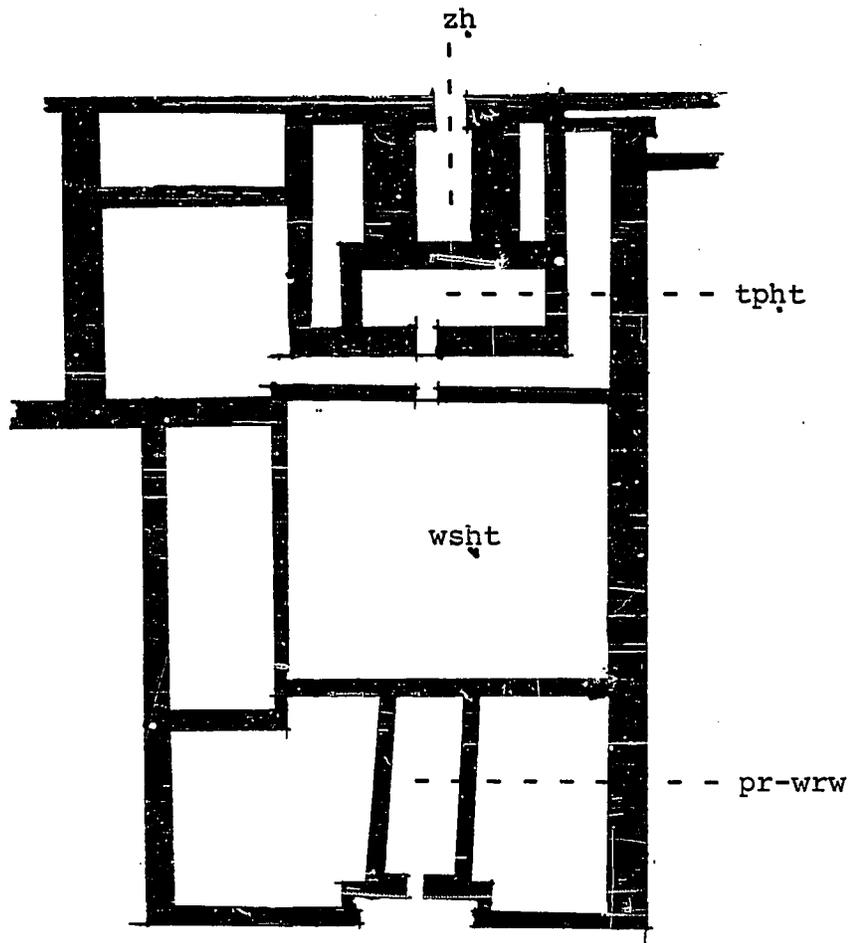
- A. Workshop
- B. Pyramid city
- C. Workmen's camp



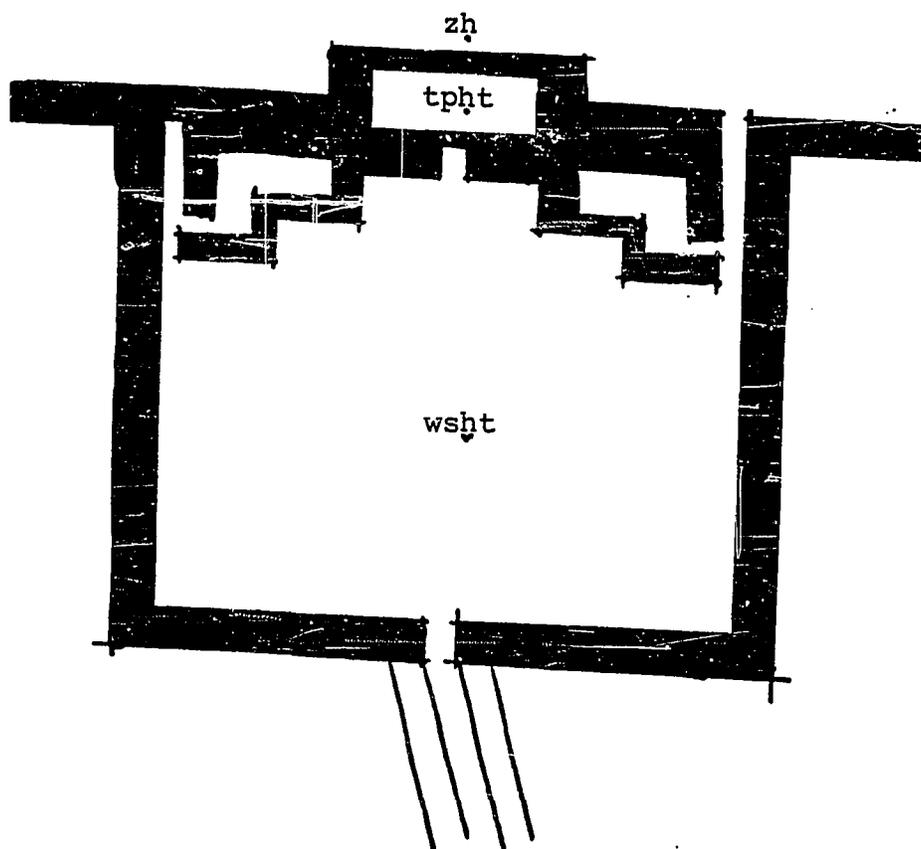
Reconstruction of the pyramid complex of Menkaura



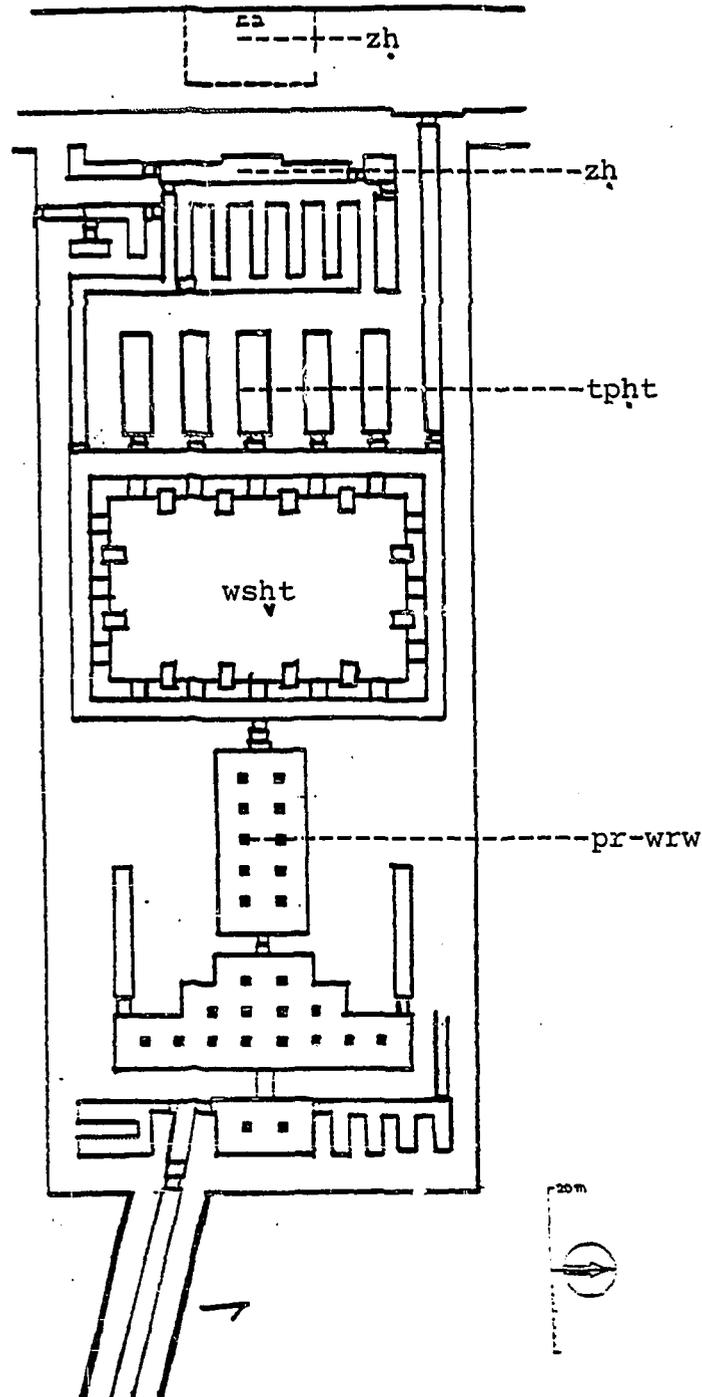
The Upper temple of Neferirkare



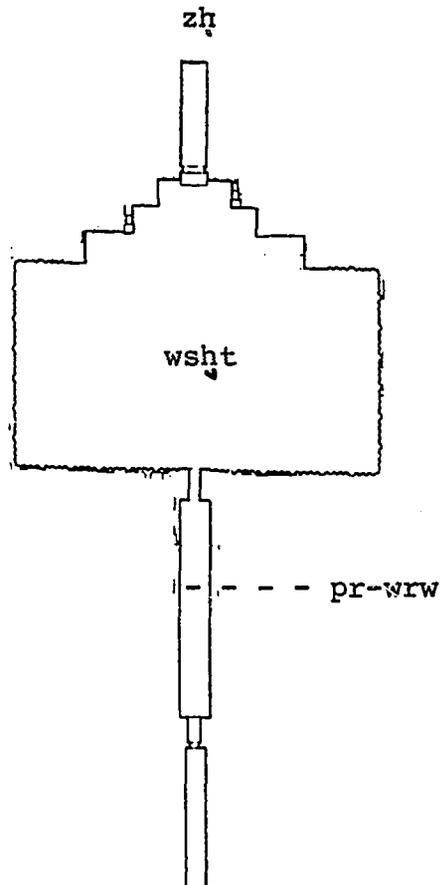
Egyptian names of the architectural elements of the temple of Neferirkare



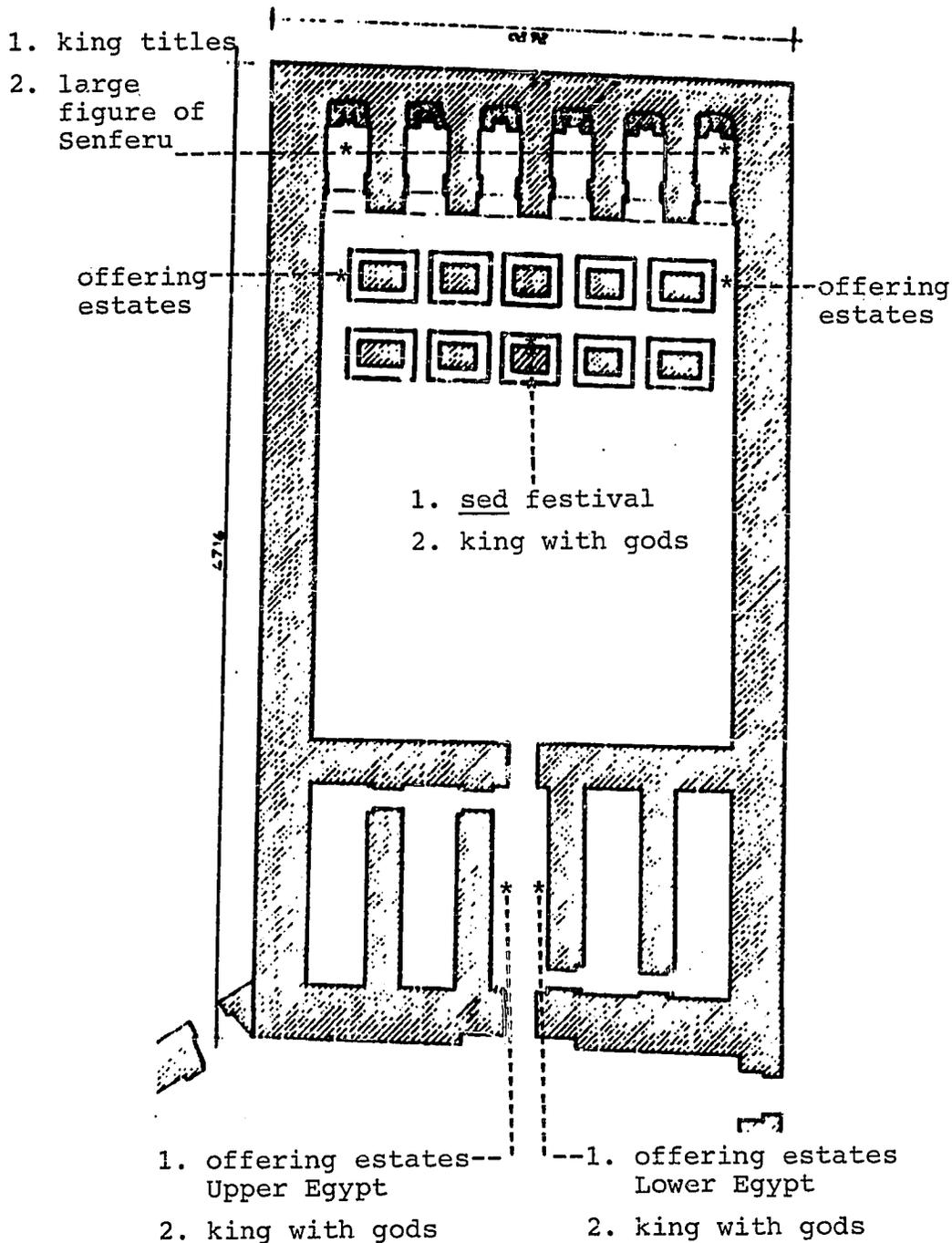
Egyptian names of the architectural elements of Khufu's upper temple



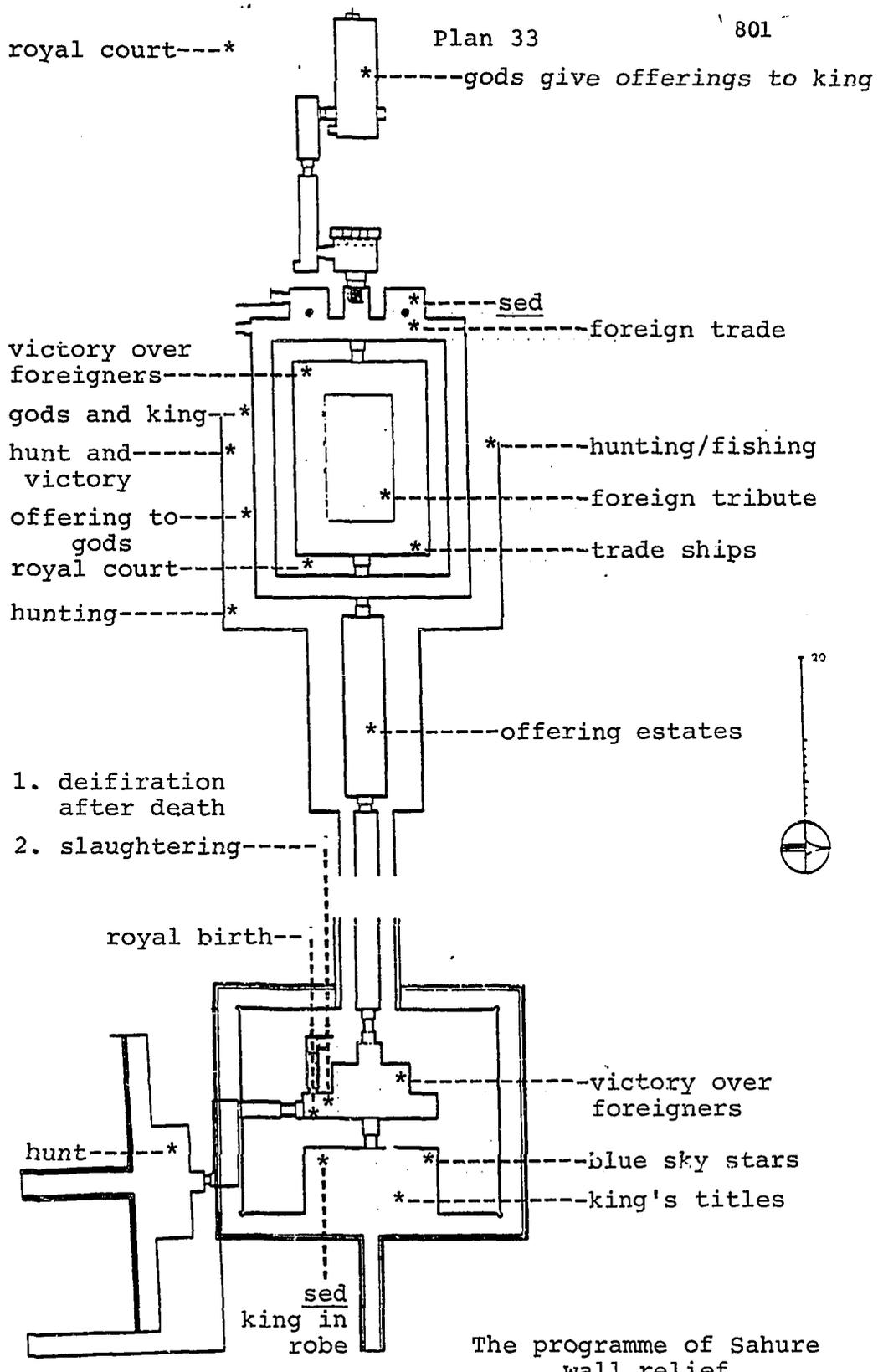
Egyptian names of the architectural elements of Khafra's Upper temple



Egyptian names of the architectural elements of Menkaura's upper temple

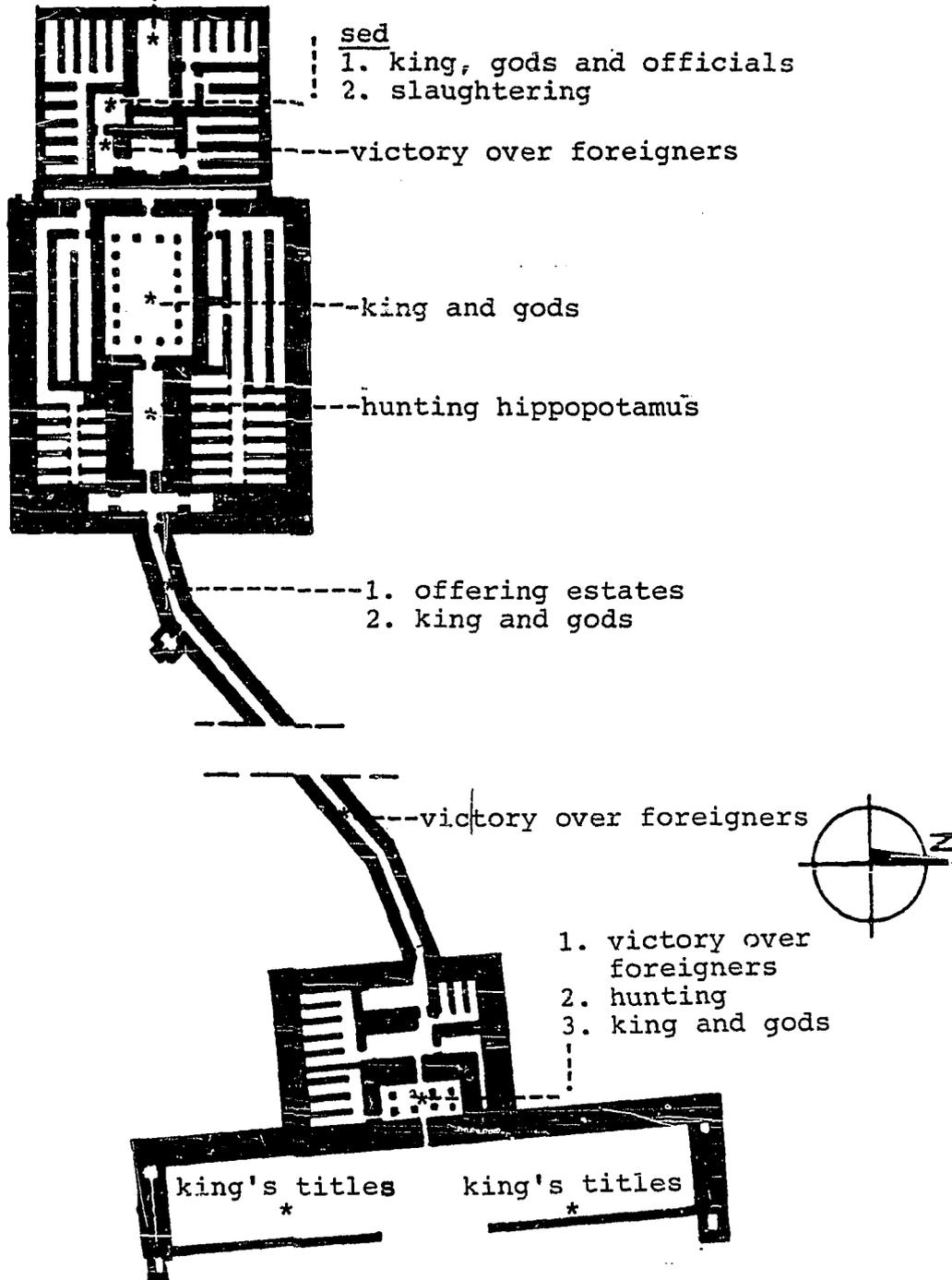


The programme of Senferu wall reliefs

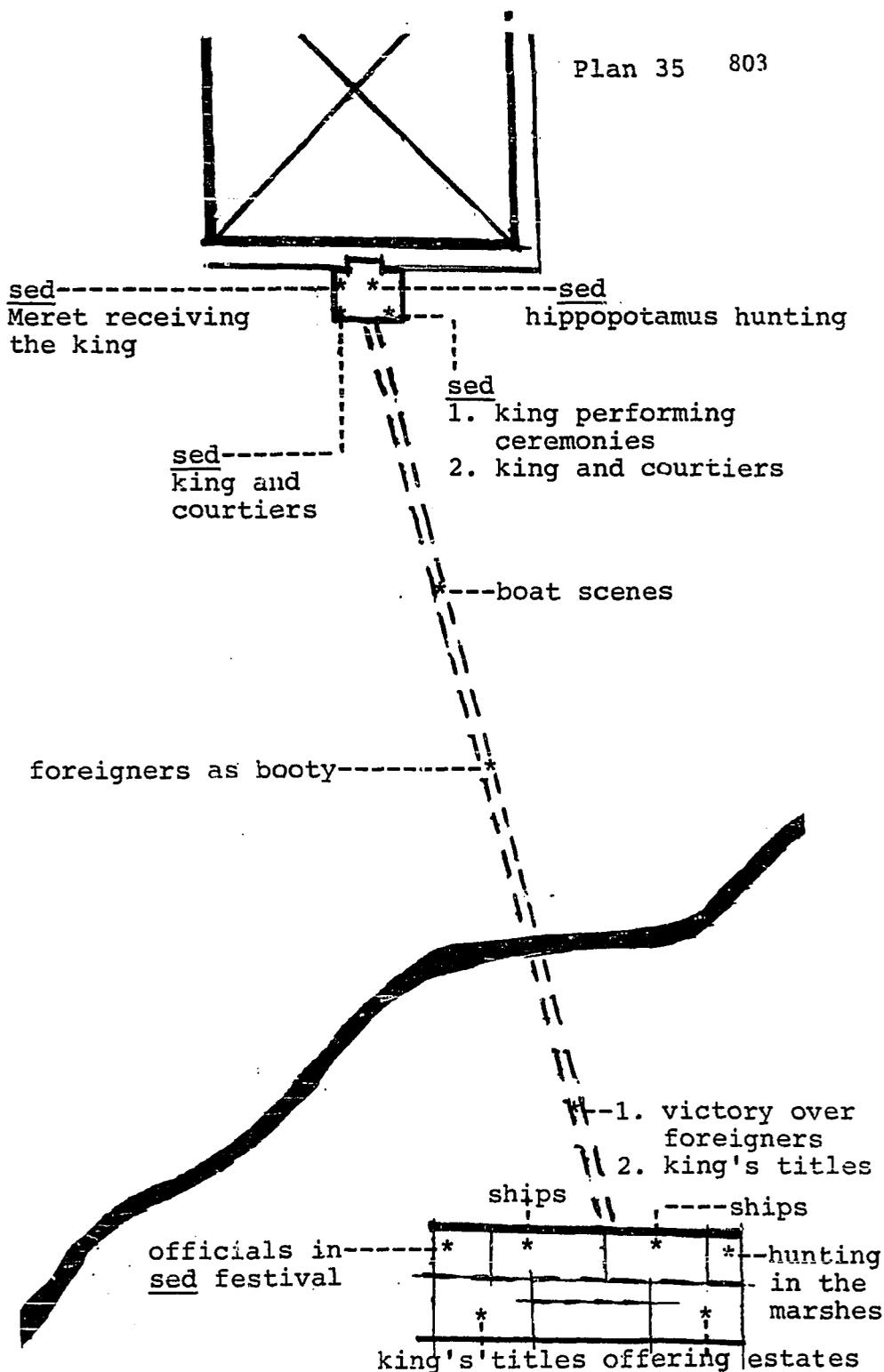


The programme of Sahure wall relief

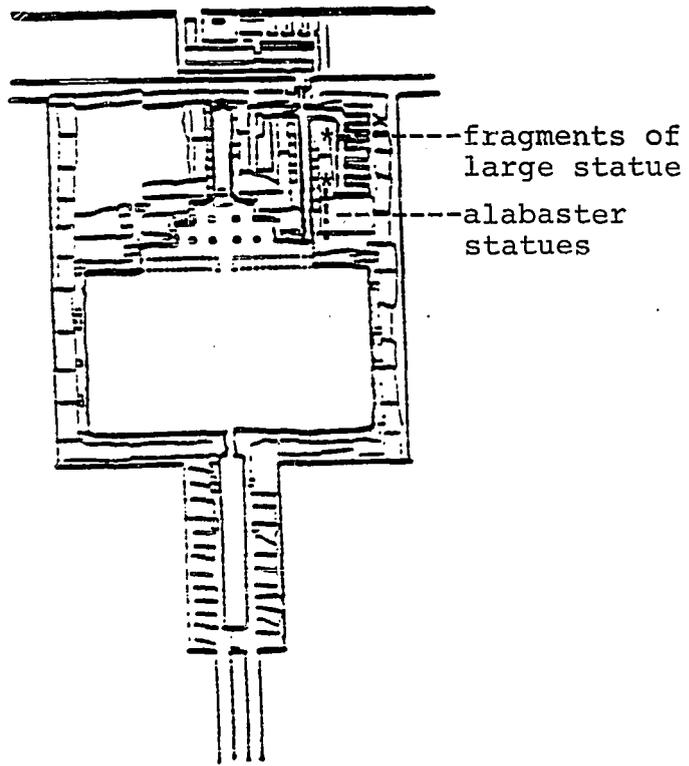
gods give offering to the king



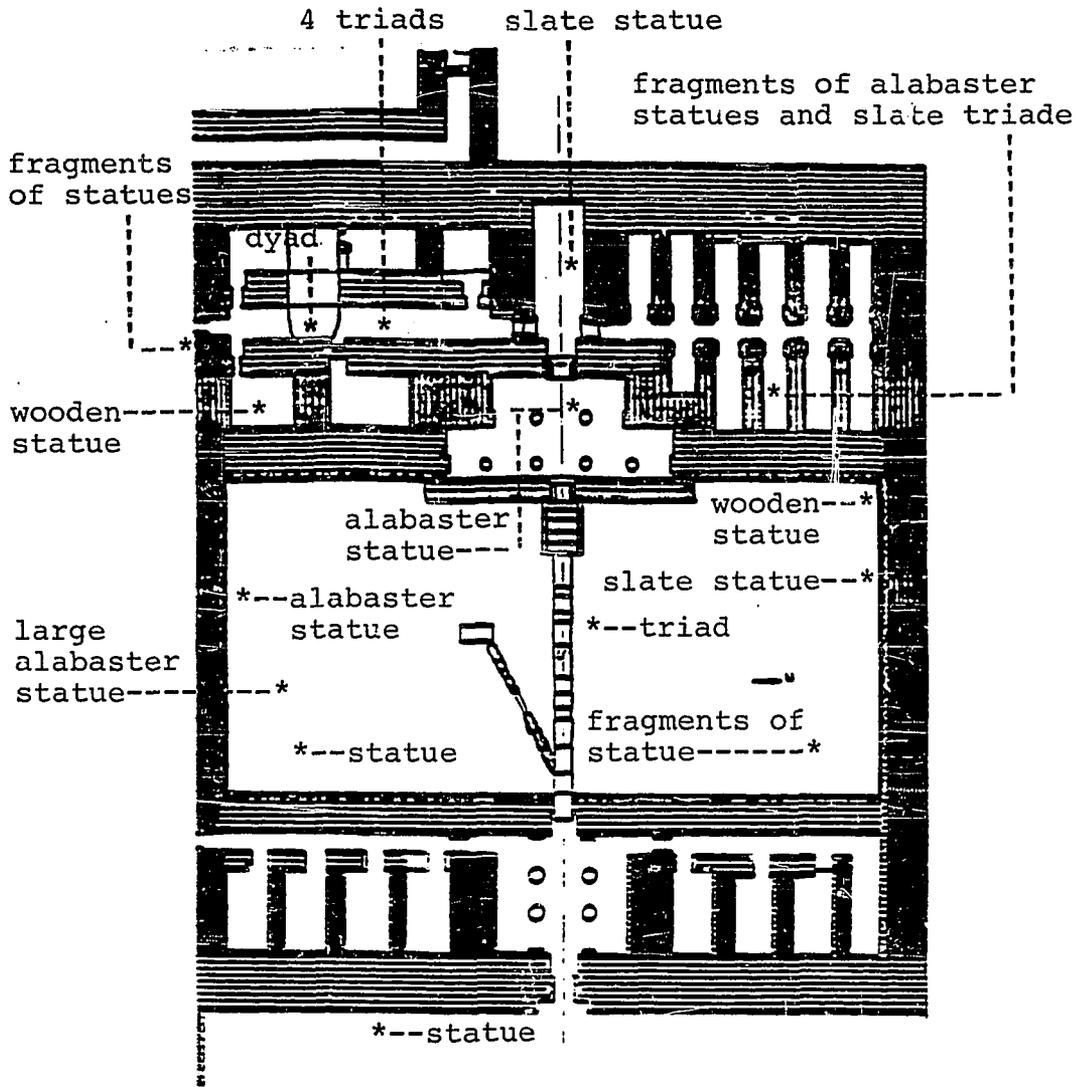
The programme of Pepi II wall reliefs



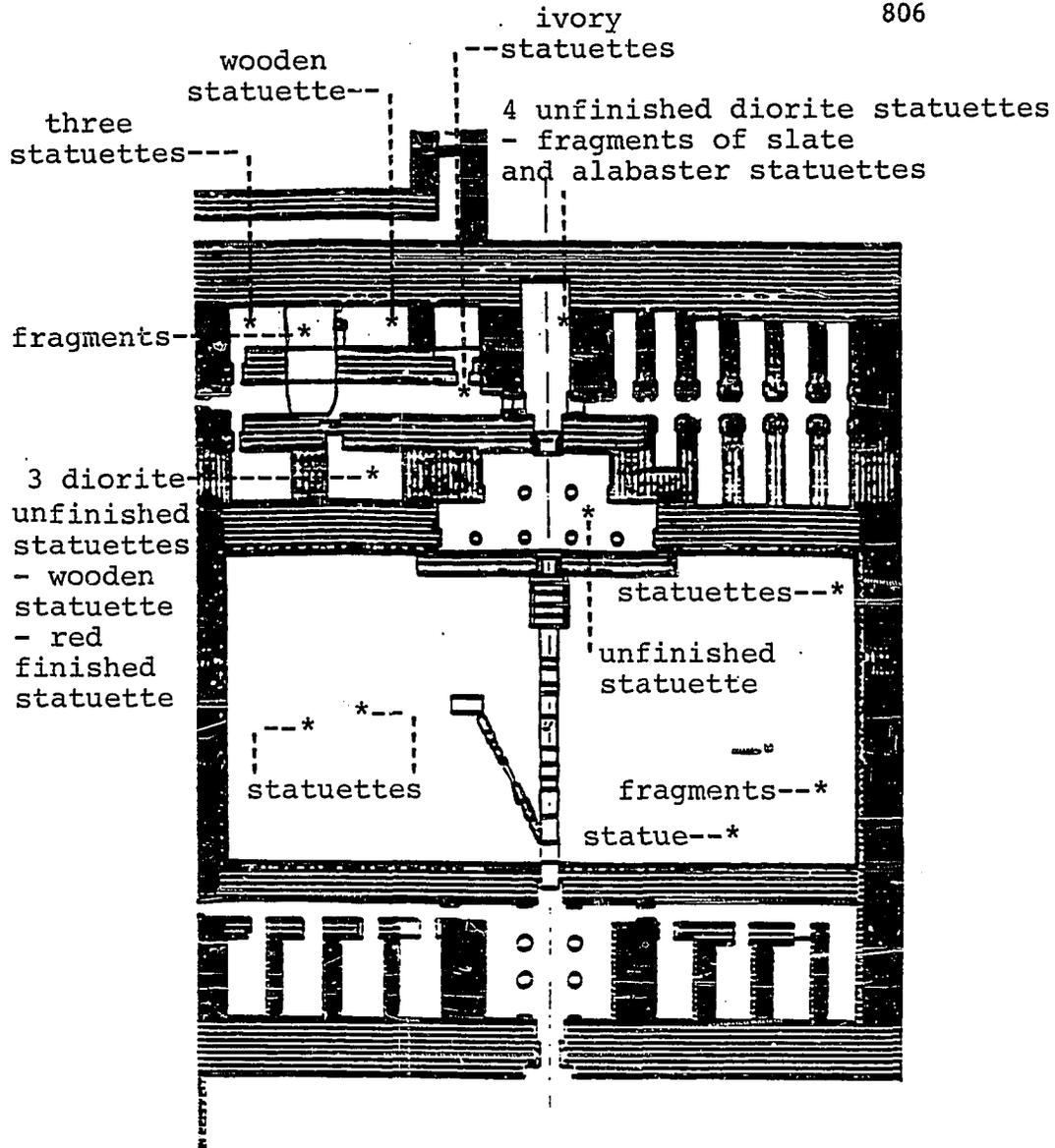
The programme of Khufu wall reliefs



Location of the statues in the  
Upper temple of Menkaura



Location of the statues in the Lower temple of Menkaura



Location of the statuettes in the  
the Lower temple of Menkaura

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## INDEX

## I. ARCHITECTURAL TERMS

- basin: 12, 137, 233, 239, 241, 262, 266, 267, 273, 277, 278, 295, 297, 298, 303, 307, 310, 311, 313, 423, 446, 447, 454, 469, 543, 548.
- funerary domain: 1, 3, 321, 323, 325, 326, 328, 330, 334, 335, 337-339, 348, 349, 352, 373, 380, 423, 544, 563, 565, 589, 600, 610, 614, 619, 620, 622, 631.
- harbor: 1, 3, 137, 191, 194, 321, 336, 373, 374, 470, 470, 471.
- Isis temple: 36, 40, 43, 219, 577.
- narrow trench: 53, 59, 81, 86, 94, 95, 98, 195, 213, 221, 233, 276, 319, 378.
- Nebenpyramid: 86-92, 121, 466.
- palace: 1, 3, 6, 16, 38, 80, 136, 321, 339, 352, 354-358, 360, 363, 365, 378, 384-389, 392, 466, 486, 498, 505, 545, 550, 551, 553, 584, 595, 600, 604, 610, 614, 622, 632, 633, 635, 636.
- purification tent: 12, 196, 303, 310, 311, 313, 448, 450, 470, 548, 636.
- pyramid city: 1, 3, 135, 184, 243, 251, 264, 292, 295, 300, 303, 305, 309, 314-316, 320-322, 326, 329, 340, 345-350, 354, 358, 361, 373-376, 379-382, 387-391, 394, 423, 566, 568-570, 572, 574, 576, 580, 582, 596, 599, 600, 605-608, 611, 620-622, 625, 631.
- serdab: 19, 91, 141, 146, 161, 168, 170, 171.
- stone rubble wall: 3, 321, 374.
- weli: 9, 14, 548.
- workmens' camp (barracks): 182, 184, 243, 257, 321, 322, 370-371, 373, 374, 392, 395, 423, 485, 600, 632 city, 330; village, 330-331.

workshop: 1, 3, 186, 320-322, 367-370, 373, 374,  
391-397, 423, 447, 448, 485, 548, 606, 607,  
622, 632, 636.

## II. GOD'S NAMES

Amon-Ra: 462, 469-471.

Anubis: 489.

Bastet: 194, 196, 427, 461, 508, 559.

Hathor: 27, 44, 66, 77, 153, 181, 195, 196, 224,  
267, 273, 286, 287, 299, 326, 426, 427, 461,  
479, 519, 527, 528-530, 532, 534-536, 552,  
555, 556, 559, 561, 562, 568, 569, 571, 574,  
589, 592, 623, 627-629, 634.

Horus: 66, 68, 72, 77-80, 131, 150, 156-158, 180,  
195, 198, 220, 224-227, 235, 241, 286, 287,  
304, 305, 363, 428, 461, 505, 534, 536, 552,  
555, 556, 559, 623, 627, 629, 634.

Isis: 35, 36, 41-44, 219.

Khnum: 503.

Maat: 361, 559, 568.

Meret: 518, 519.

Montu: 471.

Neith: 224, 267, 273, 326, 534, 535, 556, 559, 561,  
571.

Nut: 146, 212, 234, 237, 437, 439, 442.

Osiris: 22, 41, 64, 68, 153, 236, 237, 434, 438,  
444-446, 489, 568.

Seshat: 503, 506, 508, 510, 512.

Wep-wawet: 482, 518.

## III. SELECTED EGYPTIAN WORDS

(ḥ: 322, 326, 352-354, 357, 361-365, 373, 389, 390,  
498, 518, 550, 600, 604, 605, 615, 616, 632.

grgt: 322-333, 337-339, 342, 344, 348, 349, 372,  
572, 584, 615, 616, 617, 619, 620, 622, 631.

grgt mḥtj: 325, 327, 329, 331, 338, 339, 348.

ḥmwt smjt: 322, 367, 370, 632.

ḥnw: 355-358, 360, 363, 365, 597.

jbw: 448-452, 454.

njw: 324, 332, 337, 341, 342, 344, 348-350, 565,  
599, 615, 616, 618, 620-622.

pr-(3: 356-360, 365, 387, 388, 610-612, 614.

pr-ḥn(: 322, 370, 479, 480.

pr-wrw: 464, 477, 480-482, 485, 487, 504, 507, 508,  
511, 519, 556, 594.

r-ḥ: 321, 322, 333-339, 365, 373, 631.

tn: 322, 324, 326-333, 337-339, 348, 352, 353, 364,  
373, 380.

tn rsj: 324, 326, 328-331, 333, 337-339, 348, 352,  
380.

tpht: 478, 480, 481, 484, 556.

w(bt: 322, 341, 367-369, 394, 448-450, 452, 451,  
454, 606, 615, 632.

wsht: 344, 464, 477, 480, 481, 483, 504, 511, 556,  
618, 625.

zh: 479-481, 484, 486, 487, 498, 507, 508, 522, 556.

## IV. TOPOGRAPHICAL LIST

Abousir: 85, 166, 242, 266, 333, 335, 336, 338, 339,  
346, 358, 360, 362, 365, 371, 387, 465, 473,  
476, 477, 484, 480, 483, 560, 583, 590, 591,  
593.

Abu Rawwash: 40, 145, 414, 424.

Aswan: 191, 455.

Bab el Futtuh: 515.

Buto: 71, 144, 440, 442, 443, 457.

Dahshur: 21, 23, 24, 25, 27, 131, 137, 166, 335,  
340, 347, 361, 375, 376, 382, 425, 436, 456,  
484, 595, 612, 613, 620.

Hatnub: 191.

Heliopolis: 71, 286, 366, 440, 531.

Lisht: 30, 131, 133, 138, 139, 150, 157, 190, 354,  
456, 514.

Meidum: 21, 23-25, 156, 208, 340, 346, 375, 436,  
484.

Nazlet el Samman: 124, 126, 133, 134,  
293, 377-379.

Sais: 71, 72, 144, 440, 442, 443, 457.

Saqqara: 16, 66, 130, 190, 368, 369, 391, 470, 561,  
563, 566, 569.

Shiakh Said: 56.

Wadi Hammanat: 577.

Zawyet el Aryan: 436.

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